



click on the item and go to the section that interests you

interactive

- Letter to stakeholders
- Clean Air Europe s.r.l.
- History
- Sustainability for CleanAir
 - The creation of value
 - Sustainable products and solutions
 - Corporate governance
 - Corporate sustainability policies
 - → Code of Ethics
 - Management systems and certifications
 - Agenda 2030
 - Enterprise Environment Award
- Economic dimension
 - → Main economic data
 - Innovation, research and development
- Environmental dimension
 - Environmental policy
 - The production process
 - Life Cycle Assessment
 - Energy and greenhouse gas emissions
 - → Water resources
- Social dimension
 - Human resources
 - Health and safety at work
 - Product safety
 - Local community
- Next steps
- Methodological note
- Contacts
- GRI Content Index

Letter to Stakeholders

CleanAir Europe s.r.l. is aware of the importance of operating in a sustainable and responsible way towards the environment and society. In a context of growing attention to environmental and social issues, since 2021 we have been drafting our Sustainability Report to transparently report our commitment and results in the ESG (Environmental, Social, Governance) field.

CleanAir, for many years, has been producing products that contribute to the safety and improvement of the main industrial processes. It therefore seemed natural to begin a virtuous path within ourselves too, both to document activities carried out on a daily basis, but also to set ourselves ambitious objectives and to try to improve the activities carried out within our company and which can involve different stakeholders.

Through this report, we will try to:

- Increase transparency on our sustainability performance, sharing our initiatives and results in an open and detailed way.
- Establish a more structured dialogue with our stakeholders, listening to their expectations and feedback to continuously improve our practices.
- Set ambitious goals for the future, committing to reducing our environmental impact and increasing our positive contribution to society.
- · Align ourselves with sustainability reporting best practices, adopting internationally recognized standards.

Over the next three years we would like to start embarking on a journey on some main fronts:

- Reduce the main items of pollution, through the energy efficiency of our plants and the adoption of renewable energy sources
- · Increase the use of recycled materials in our products, in some cases permanently replace them, contributing to the circular economy.
- Allocate an annual budget for sustainability and social contribution projects equal to 0.5% of the previous year's turnover.
- · Maintain and possibly further increase the share of women in the company, promoting gender equality and inclusion.

To achieve these objectives, we will undertake a virtuous path on multiple fronts through concrete actions:

- Conduct a materiality analysis to identify the most relevant environmental, social and governance issues for our company and our stakeholders, on which to define a sustainability plan.
- Implement a system for monitoring and reporting our ESG performance indicators.
- Train and raise awareness of all staff on the importance of sustainability through training programs.
- \cdot Initiate collaborations with partners and suppliers to align our value chain with sustainability objectives.
- Transparently and consistently communicate our progress through this report and other communication channels.

We are aware that the path towards sustainability is an ongoing challenge, but we are determined to do our part to contribute to a greener and more inclusive future. This report represents our concrete commitment in this direction.



Clean Air Europe



Clean Air Europe s.r.l.

CleanAir is an Italian manufacturer of cages, present on the world market since 1955. We are innovative in the field of industrial air filtration, offering a wide range of solutions to guarantee product quality and accurate service.

We design and produce steel supports for bag filters and accessories for industrial dedusting, entirely in the main factory in Bulciago (LC), where the cataphoresis oven is also available. The company has presses for the production of coil parts such as collars and bottoms, ring bending machines and automatic welding machines for metal wire. We also produce wooden crates and packaging, for our shipments or on behalf of third parties.



Research

New techniques, new technologies

CleanAir firmly believes that process innovation is the right way to produce high quality filter media. He believes that becoming innovative is the only way to create the best filter media for every type of use.



Production

Cages for filter bags

CleanAir is a world-class manufacturing company specializing in the production of cages. The company creates a variety of products that are perfectly suited to different applications and industries. Furthermore, CleanAir guarantees each customer constant product quality, deriving from internal production processes, monitoring each phase.



Service

Competence and experience

CleanAir has over forty years of experience in the field of air filtration. During this period, the company gained the necessary skills and experience. Therefore, this is why the company offers top-notch services to all customers and produces a variety of filter bag cages that suits different application uses.



Logistics

Specific packaging for every need

CleanAir ships cages to all parts of the world. Our custom packaging solutions can withstand any transportation needs.





1898 The first foundations

At the end of the nineteenth century, Rinaldo Montanelli began to deal with the trade and processing of metal wire and hardware accessories.

1937 The Ilro company is born

At the end of the 1930s, Luigi - Rinaldo's son - founded Ilro, bringing his father's business to an industrial dimension and introducing a wide range of products derived from metal wire.

1974 The Defim company is born

Defim is established, a company whose core business is the processing of metal wire for products in various sectors: bottle cages, screens, cages for livestock farms, nets for industry, cages for sleeves.

1981 The CleanAir brand is born

In the 1980s, the CleanAir brand was introduced to distinguish the family of filtration supports, better known as filter bag cages.

1985 The first electrophoresis system

The first automatic electroplating system, in anaphoresis, is created internally, introducing a new highly resistant treatment against corrosion on the market for the first time.

2003-2014 CleanAir S.r.l. grows and expands

The Clean Air Industry project was born in 2003. The commercial brand definitively separates from Defim to create a company completely dedicated to the filtration sector. CleanAir Inc. is born in the USA.

1 2015 Transfer to the Bulciago headquarters

With the move to Bulciago, the production process is managed entirely in-house, in order to have full quality control of every production phase, from straightening the wire to packaging in wooden crates.

2021 EcoAtex is born, the anti-static cage

In 2021 the first EcoAtex antistatic cage was born, the result of the accumulated experience on the EcoHpc cataphoresis process.

2022 EcoSmart, the digital cage, is born

In 2022 the Eco Smart digital cage is put on the market. Thanks to the Ecosmart Cage platform, it will now be possible to follow the cages throughout their life cycle. With EcoAtex, new performances are established for the supports, which have become safer and more eco-sustainable.

2023 EcoTurbo is born, the cage that saves energy

In 2023 the first venturi EcoTurbo is put on the market. The result of a joint study with the university, it establishes new performances in the automatic cleaning of filters.



Sustainability for CleanAir



Sustainability for CleanAir



The world is going through a phase of epochal change.

Pressures resulting from overpopulation, excessive consumption of resources, climate change and desertification require a review of lifestyles and consumption patterns. Industrial operations must also locate themselves within these new contexts, which require a deep understanding of the problems together with greater awareness and responsibility.

The company today interprets sustainability at the intersection of three different transitions: the ecological transition, with particular attention to the circular economy and saving resources; the digital transition, which sees the progressive introduction of process and product tools to enhance the ecological transition; the transition towards security, understood as better protection of people, the environment and property.

CleanAir's priority is its commitment to guiding the company growth model towards the full satisfaction of customer expectations, environmental compatibility and sustainability, while respecting the health of its employees and all stakeholders.

Environmental protection and air quality are issues that concern the entire air filtration sector. **CleanAir** helps protect the environment not only by creating media used in air filtration systems, but also by taking great care within its own manufacturing processes.

In the recent past, an excellent result, not only in terms of performance of the finished product but also respect for the environment, was achieved with EcoHpc plus, a low-impact cataphoresis treatment, developed entirely and exclusively by **CleanAir Europe S.r.l.**, completed in line and created to obtain significant results in the reduction of liquids and gaseous effluents deriving from the process.

Furthermore, the company invests in research and development in order to reduce the energy consumption necessary for filtration operations through eco-design projects.

The company, with considerable effort, has strategically brought this belief into reality in 2021 with the creation of more sustainable and safe products, such as EcoAtex, but also with the introduction and subsequent implementation during 2022 of intelligent digital devices to assist to monitoring such as EcoSmart, allowing the useful life of the bins to be tracked and extended, through adequate maintenance policies, in full compliance with the concepts of life cycle and waste reduction.

With this spirit, which saw the company win the First Prize for the most sustainable product in February 2022 during the most prestigious national environmental competition, we intend to face the challenges for a more sustainable future.

This 2023 sustainability report, now in its third edition, reaffirms the company's intention of a path towards excellence and the assumption of precise environmental and social responsibilities.



The creation of value



The supply chain where **CleanAir Europe S.r.l.** mainly operates it is the large primary and secondary industry. In fact, where a combustion or transformation process impacts with potential emissions into the air, the presence of dust collectors and filters in general ensures the containment of harmful emissions.

From steel to cement, from energy production to waste-to-energy processing, from the mining industry to the chemistry of oxides and fertilizers, from flours to pharmaceuticals. End customers are often large companies who are already designing responses to the challenges of sustainability and look upstream, to suppliers, to ensure the containment of the carbon footprint and environmental impact of their products.

The exchange is therefore reciprocal, in a relationship that sees the company choose the most sustainable supply sources, returning eco-sustainable products to these same suppliers.

For this reason, **CleanAir** is concentrating its efforts to minimize the consumption of resources necessary for the production of cages.

Not only the choice of suppliers with particular guarantees of quality and sustainability, but also direct investments aimed at reducing waste and managing by-products, as in the case of the new vacuum evaporation system for the cataphoresis oven (a process with low environmental impact compared to epoxy powder coatings), which separates the solid residue of the pigment from the water, which is then distilled and recovered in industrial processes. Or like the investment in ultrafiltration, aimed at improving the quality of the product and therefore the durability of the filtration support, with a selection and separation of the waste in production.

CleanAir's objective is to provide a range of products with low environmental impact along the primary industry supply chain, an ideal compendium of new generation textile filters. The challenge then shifts to the product, understood as a set of activities that define it in all aspects and along its life cycle in its ecosustainable inventory.



Sustainable products and solutions

The ability of CleanAir Europe S.r.l. transforming the strategic lines of the sustainability path into concrete products and solutions for the market is one of the company's strengths.

In fact, how can we not mention the award-winning **EcoAtex**, the first antistatic cage presented on the market capable of conferring a distinctive surface resistivity character suitable for defusing dangerous potentials of electrostatic energy. The launch of this product, which took place in 2021, aims to configure a new class of devices on the market compliant with the ATEX community directive, introducing safer devices onto the market. The risk of explosions and fires in combustible dust collectors requires, in fact, not only a response in terms of mitigation, but rather a proactive one of prevention.



Furthermore, **EcoAtex** is obtained through a process with low environmental impact, in terms of resources used and therefore carbon footprint. The character of sustainability combines in the product with a better safety feature for goods, for the environment and for people. During 2022, **EcoAtex** has progressively replaced the previous brand in sales on the market.

For **CleanAir**, attention to safety is not expressed only with product hardware solutions, but also with attention to communication and software procedures, so much so that in 2021 it has started a path towards the digitalisation of products.



The **EcoSmart** digital project provides for the provision of a specific tag for each batch of filtration media. The tag, readable through an appropriate software application from tablets and phones, allows access to the exclusive data stored in the company platform. The data, in addition to providing support for the qualitative traceability of the products, allowing the viewing of the documents associated with them, introduces the possibility of carrying out scheduled maintenance using instructions and digital media, such as videos, checklists and operating instructions. In the future, the **EcoSmart** platform will provide the appropriate statistics to profile markets, products and their uses, in a logic of continuous improvement. In 2022, the project became operational and the first cages equipped with the digital beacon were delivered.



Sustainable products and solutions



The result of collaboration with the Polytechnic University of Milan, the **ECO TURBO IDF** research (advanced ecological filtration media with differentiated flows) is looming for the future as a new generation of cages for sleeve filters, which intercepts the primary need to limit emissions by resorting at the lowest possible energy balance. Ecodesign tool for the redesign of the filter support in an ecosustainable logic, its validation requires a computerized fluid dynamics analysis as a proven conceptual basis (CFD).

During 2022, the study led to the definition of a path towards a series of products (for example the Venturi EcoTurbo) based on new innovative construction solutions, which were then the subject of a patent application in February 2023.

The company's attention towards the product does not end with the characteristics relating to the product itself, but goes further, considering the impact that the product packaging can have on the environment.



In 2022, **CaePack** is consolidated, the company division which, in addition to researching eco-sustainable packaging solutions - mainly based on wood - for the products sold by the company, proposes itself, in a logic of zero km proximity, as a partner for the production of wooden crates and packaging for third parties. Sales continued with the creation of customized ISPM15 certified packaging, for the protection of industrial and durable goods during transport.



Corporate governance

Corporate sustainability policies



Corporate sustainability policies are placed at the center of attention of the company's governance activities and of the management board. In **CleanAir** the process is underway to strengthen its sustainability governance and to equip itself with an ESG (Environment - Social - Governance) plan for the next corporate financial year, in order to align itself with the latest community indications, which provide for an intensification of use of these management and reporting tools. Furthermore, the company is dedicating itself to the identification and quantification of adequate impact indices, which we can already see for the first time in this report and which will be included to a large extent in the next sustainability report.

Code of Ethics



The code of ethics of CleanAir Europe S.r.l. is published on the company website. Our code is based on the main corporate values summarized in impartiality, competence, credibility, excellence, safety, social and environmental responsibility. Our code regulates the moments of life of the company, regulating aspects such as conflicts of interest, gifts and compliments, antitrust legislation, transparency of accounting operations, protection of company assets, protection of information. Particular attention is paid to staff for compliance with work rules and regulations, development and training, and the protection of physical and moral integrity. The GDPR criteria ensure compliance with the privacy rules in the code. Institutional relationships are also regulated by the code; in particular, the methods of communication and relationships with customers and suppliers, relationships with users and with local communities are regulated. Finally, a separate chapter is reserved for relations with trade unions, chambers and trade associations. The code provides for possible sanctions in case of transgression.



Management systems and certifications



The quality system of **CleanAir Europe S.r.l.** it is certified by TÜV SUD according to the UNI EN ISO 9001:2015 standard. At the moment, the company does not have system environmental certifications, despite having an undocumented management system operating according to some of the directives of the standard. A path towards system certification has been started and is expected in the coming years.

The company uses voluntary product certifications according to **UNI EN ISO 14021** (EcoHpc, EcoAtex, EcoSmart, EcoTurbo). The use of a community Ecolabel (to be defined) following UNI EN ISO 14025 certification is expected over the three-year period. Further product certifications, in particular with reference to the ATEX (anti-explosion) community directive, have been planned for the near future.

Agenda 2030



With reference to the objectives defined by the **UN 2030 Agenda**, the seventeen Sustainable Development Goals, CleanAir has identified in the points listed below the most relevant contributions it can make to the achievement of sustainable development, in relation to its industrial and commercial activity:

- **7. Affordable and Clean energy** with particular reference to paragraph 7.3 relating to energy efficiency
- **8. Decent work and economic growth** with particular reference to paragraphs 8.4 and 8.8 for the use of resources and safety at work
- **9. Industry, innovation & infrastructure** with particular reference to paragraph 9.4 clean technologies with low environmental impact
- **11. Sustainable cities & communities** with reference to paragraphs 11.5,11.6,11.7 relating to air quality, population health, community environmental policies
- **12. Responsable consumption & production** with reference to paragraphs 12.4 and 12.5 for waste recovery
- **13. Climate action**, paragraphs 13.2 and 13.3, planning of environmental strategies and diffusion of environmental culture
- **17. Partnership for the goals**, paragraph 17.7 relating to the diffusion of advanced environmental technologies throughout the world



Premio Impresa Ambiente



It is significant to remember the awarding of the Enterprise Environment Award in February 2022, organized by the Venice-Rovigo Chamber of Commerce, sponsored by Unioncamere and the Ministry of Ecological Transition, for the EcoAtex IDF cage in the most sustainable product/service category

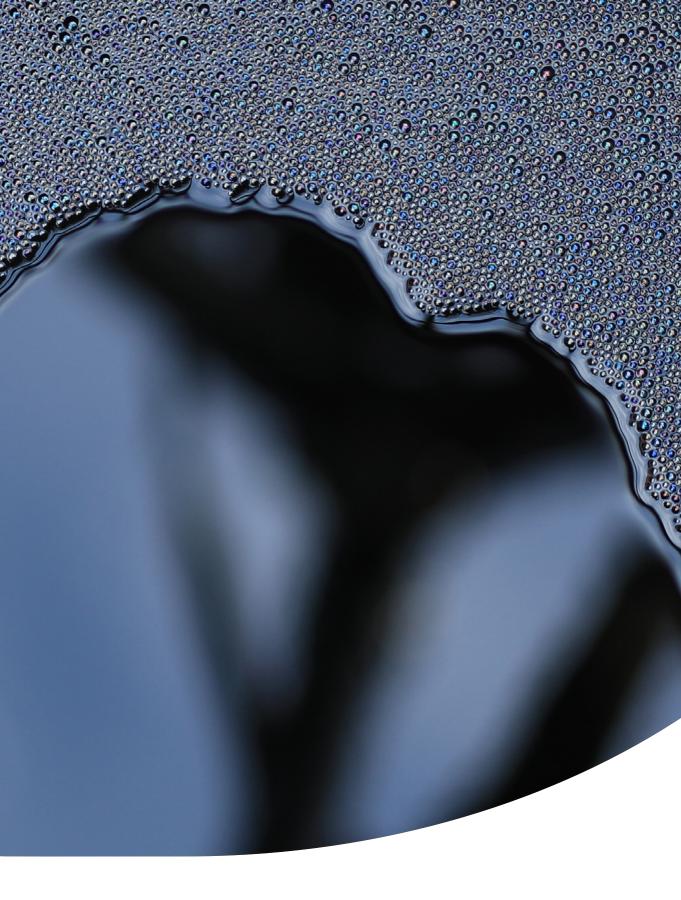
The same product was then presented during 2022 at the Circular Economy Supply Chain Call promoted by the Lombardy Region. The project, positively evaluated and classified, was admitted to financing in December 2022.

With reference to the Enterprise Environment Award, we quote the jury's motivation verbatim:



CleanAir Europe S.r.l., a company active for decades in the sector of filtration and industrial fume abatement, has introduced an important innovation in the production of filter sleeve cages, which equip the fume treatment plants of most industrial supply chains. Thanks to innovative design and treatment, the cages acquire better safety conditions (for example an antistatic characteristic), a longer duration of use, as well as requiring fewer resources during the production phase and consequently reducing the production of waste.





Economic dimension

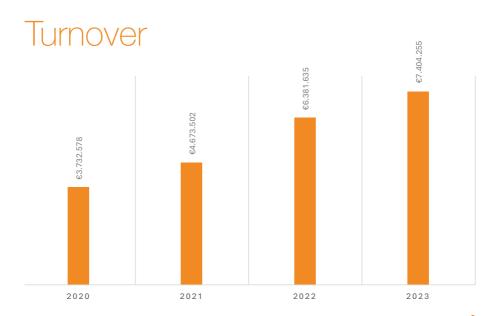


Main economic data

The economic performance is for CleanAir Europe S.r.l. the main criterion for evaluating business success.

The company policy is clearly oriented towards maintaining corporate integrity, through an efficient and effective use of financial resources, in order to guarantee sustainable development in the long term. The results are periodically analyzed at management level, with the aim of determining alignment with the set objectives and identifying any corrective actions in case of misalignment.

CleanAir Europe S.r.l. has experienced a continuous growth trend in recent years characterized by positive results, confirmed also in 2023 with a further increase in turnover, with the aim of improving also in 2024 (*Graph 1*).



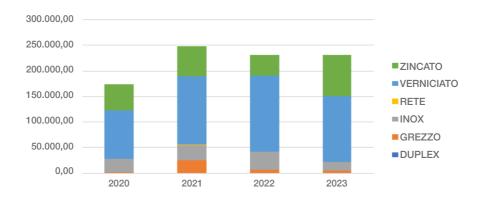
Graph 1 - CAE turnover in the last four years, in euros



Another relevant data to consider is the production capacity of the plant.

2020 was a year of low production, due to the Covid epidemic and related restrictive policies, which led to the closure of production companies globally for months.

In the following years, CleanAir was able to restart, producing between 230,000 and 250,000 filter cages per year in different finishes (*Graph* 2).



Graph 2 - Pieces produced in the last four years, divided by finish

A further very important fact is represented by our constantly evolving customer and supplier base. In the calendar year 2023, we sold our products to 104 customers, divided quite evenly between 58 Italians (56%) and 46 foreigners (44%): of these, 39 are new customers, a symptom of the continuous evolution of the customer portfolio CleanAir (*Chart 3*).

In the same period, there were 258 suppliers, of which over 90% were Italian and 73 were added in the reference year (*Graph 4*).



Graph 3 - Breakdown of the number of customers based on geographical origin

Graph 4 - Breakdown of the number of suppliers based on geographical origin



Innovation, research and development

New generation filtration media today acquire distinctive Ecodesign characteristics, with references to all the themes expressed by the new ecological transitions.

From digital to energy recovery, from reducing the carbon footprint to the safety of the environment, goods and people. All these aspects today characterize to some extent the commercial offer of CleanAir Europe S.r.l.

This great planning effort cannot in turn ignore collaborations: those of a more scientific nature with universities and research institutes and those of an institutional nature such as the Chambers of Commerce or the relevant state entities.



The collaboration project begun with the **Polytechnic of Milan** continued throughout 2022 and 2023, aimed at obtaining new geometries of filter media, capable of reducing the energy consumption of dust collectors.

A path that was consolidated in 2023 with the presentation of the solutions identified through a "call of paper" at the most important European industrial filtration fair. Call that will be repeated during 2024 with data from the experimental validation, carried out at a strategic partner.

In 2023, the company therefore continued this two-year project of cooperation with the world of universities. In particular, a second agreement is concluded with the Polytechnic University of Milan, aimed at studying the fluid dynamics operation of filtration media with simulation models, to hypothesize the evolution of the product also from a design point of view over the next five years.

With an eye on sustainability and digital, the technological integration path contains various ecodesian ideas.

On the other hand, the desire to present itself on the market with advanced products has led the company to participate in tenders and competitions in order to seize, where present, the incentive opportunities offered on the basis of the presentation of reliable, concrete and measurable projects. In this sense we highlight the collaborations with the local Chamber of Commerce and with Unioncamere in general.



Environmental dimension



Environmental dimension



Environmental protection is simply in the heart of the **CleanAir Europe S.r.l.** company. The company, in fact, produces devices that help limit the polluting impact of fine dust, sulfur and nitrogen oxides, responsible for the phenomenon of acid rain, through filtration in dust collectors and in general in gas filters.

The reduction of the content of these pollutants is carried out today mainly through the use of Pulse Jet technology with the coupling of cages, manufactured by the company, and filtering textile sleeves.

This technology is now recognized as BAT (Best Available Technology) for the fight against pollution. Thanks to this technology, today it is possible to limit emissions to values lower than 10 micrograms/m3, with current compliance values prescribed by law at PM2.5 (25 micrograms/m3).



It therefore seems reasonable to assert that CleanAir is an active contributor to the fight against air pollution and in general to the protection of the planet.

Environmental policy



The industrial supply chain of **CleanAir Europe S.r.l.** is particularly sensitive to issues related to emissions into the atmosphere and the containment of the greenhouse effect, with particular reference to the carbon footprint. The company management therefore pursues policies aimed at reducing waste and increasing the efficiency of energy consumption along the inventory relating to the manufacturing of cages. For this purpose, for example, we mention the launch of the investment of the new ultrafiltration and evaporation plant for cataphoresis, whose primary objective is the separation of aqueous paint waste into the two by-products of distilled water and paint concentrate.

The company's strategic plans include the calculation of the carbon footprint for all products manufactured in the company, with particular attention to the possibility of recycling as a useful tool for reducing environmental impact.



The production process

Attention to the environment was also reflected in the production process itself of making the cage, in particular with the attention to the cataphoresis process, which saw a further investment in 2021 aimed at obtaining by-products from waste.



The company has in fact invested in an evaporator capable of separating the concentrated pigment waste - to be disposed of - from the distilled water, recovered in the production cycle for further uses.

Furthermore, the company has invested in an ultrafiltration system, which allows for better efficiency and less contamination of the plant bath, ensuring better pigment adhesion and therefore a longer and more sustainable product life over time.

All this has opened a path within the company aimed at calculating, controlling and progressively reducing the carbon footprint of company products. As part of the preparation of the tender document for the circular economy promoted by the Lombardy Region in collaboration with the Chambers of Commerce, a first value of the carbon footprint associated with cataphoresis has already been estimated.

The company is considering equipping itself with adequate software in the next few years, in order to determine and monitor over time the carbon footprint of the main products manufactured at the Bulciago headquarters.

During the year, contacts were made with software companies for determining the LCA (Life Cycle Analysis) and the Carbon footprint.

The company's objective for 2024 also remains to identify alternative solutions in packaging to the use of plastics (albeit recyclable). In fact, plastics are currently used as covers for wooden crates for protection from atmospheric events and corrosion.





Life Cycle Assessment

Summary of the Simplified Life Cycle Assessment (LCA) Analysis Report on Greenhouse Gas Emissions

1. Introduction

The report analyzes the greenhouse gas emissions, in the production cycle, of four types of filter bag holders produced by CleanAir. Following the UNI EN ISO 14040:2021 and 14044:2021 standards, the LCA methodology evaluates the environmental footprint of products from the raw materials reception phase to the packaging of the finished product ("gate to gate" approach). The impact category considered is the 100-year Global Warming Potential (GWP-100), expressing emissions in CO₂ equivalent (CO_{2ea}).

2. Description of the organization and activities being studied

The study focuses on four types of cages:

- Stainless steel
- Galvanized steel
- Raw steel with cataphoresis painting
- Raw steel

The ${\rm CO}_2$ emission of steel cages painted with epoxy powders was also evaluated, based on bibliographic data.

3. Objective and purpose of the study

The objective is the comparative evaluation of the CO2 emissions of the different types of cages, with a "gate to gate" approach using the SimaPro v.9.3 software.

Functional unit

The functional unit is a medium cage with specifications defined by the company:

- Average diameter: 150mm
- Average length: 3,500mm
- Average weight: 3.6 kg

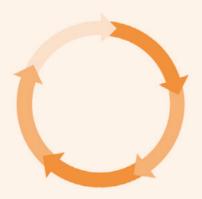
System boundaries

The analysis covers from the reception of raw materials to the packaging of the finished product. The only transport considered is for stainless steel cages sent to third parties for accessory processing.

Data quality and time boundaries of the study

The data used is mainly primary, collected directly on the production site, with some secondary data derived from bibliographic sources and technical databases. The reference year is 2022.





Life Cycle Assessment

Summary of the Simplified Life Cycle Assessment (LCA) Analysis Report on Greenhouse Gas Emissions

4. Inventory analysis

The tables provide a summary of the quantities of materials used and associated emissions for each type of cage. For example, for stainless steel cages, the total CO_{2ea} emissions are 706.32 tonnes, with an average of 19.66 kgCO_{2ea} per cage.

5. Impact assessment

The results of the analysis show the CO_{2eq} emissions for each type of cage.

Considering the quantities produced in the reference year, the emissions associated with the production of cataphoresis painted cages are the highest (1,558 tCO_{2eq} total), followed by those associated with the production of stainless steel cages (706.32 tCO_{2eq}), steel galvanized (521.38 tCO_{2eq}) and raw steel (43.69 tCO_{2eq}).

Comparing the emissions to the single cage, the calculations show that the stainless steel cages have the highest emissions (19.66 kgCO_{2eq} per cage), while the cataphoresis has the best performance after the untreated cage, which however in perspective life cycle – will have a shorter duration.

Possible developments of the analysis

An interesting perspective would, in fact, be to evaluate emissions in relation to the useful life of the product, which could reduce annual emissions for cages with a longer life. For example, a stainless steel cage could have lower annual emissions than a galvanized steel one, if its lifespan was significantly longer.



Energy and greenhouse gas emissions

The main energy sources used in company activities are electricity (49.1% of the total requirement), used for the production process, heating, lighting and partly for transport, and natural gas (50, 4%), used as fuel inside the painting oven. Diesel fuel is used only to a marginal extent (0.5%). The energy requirement is covered by purchasing from external suppliers (see Table 1 and Graph 5).

Energy consumption	2021	2022	2023
Electricity purchased (kWh) for on-site activities	720.942	809.372	724.685
of which used for company electric cars (kWh)			4.268
Electricity purchased (kWh) for charging electric cars, off-site			1.348
Methane gas (Smc)	79.494	101.796	67.919
Automotive diesel	351,29	561,89	720,14

Table 1 - Total energy consumption of CAE in the last three years divided by source

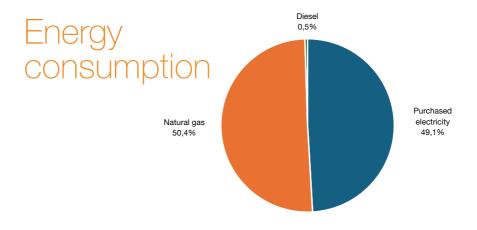


The company has been paying attention to energy choices for several years, ever since it was equipped with a new lighting system for the work environments. **CleanAir** sought to contribute by creating a new electrical system, integrating new technology and replacing existing lighting with new low-energy LED fixtures.

This type of lighting guarantees high energy efficiency, achieving a reduction of up to 90% in consumption compared to traditional incandescent bulbs. LED bulbs are produced with non-toxic materials, unlike traditional or fluorescent bulbs, which contain mercury, sodium vapor and metal halides and are potentially harmful to the environment. Furthermore, they are 95% recyclable.

A collaboration with the Department of Civil and Environmental Engineering of the Polytechnic of Milan continued during the 2023 financial year, aimed at the analysis using CFD (Computational Fluid Dynamics) techniques of the air flows in the filtration media during operation. This study is preparatory to the creation of a venturi-cage assembly, capable of producing energy savings during use in machine filters. The study was included and financed within the 2022 Circular Economy call, promoted by the Lombardy Region and sponsored by the Lombardy Chambers of Commerce.

The reduction of energy consumption in dust collectors will allow them to reduce their carbon footprint, having a substantial impact with a reduction in OPEX operating costs.



Graph 5 - Percentage distribution of energy sources used by CAE in the year 2023

Total energy consumption in MJ ¹	Head office	%
MJ derived from automotive diesel consumption	25.925,04	0,5%
MJ derived from methane gas consumption	2.686.196,45	50,4%
MJ from electricity purchased	2.613.718,80	49,1%
Total energy consumption in MJ	5.325.840,29	100%

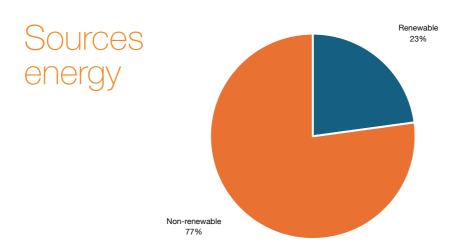
Table 2 - Total energy consumption in MJ, divided by source, and percentage distribution

By adopting a location-based approach (i.e. considering the national energy mix), overall **CleanAir Europe s.r.l.** 23% of its energy is generated from renewable sources (*Graph* 6).²

¹ The equivalence factors MJ/liters of fuel are taken from Legislative Decree 8 November 2021 n.199, implementing Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018, on the promotion of the use of energy from renewable sources, and the related Decree of the Ministry of the Environment and Energy Security of 16 March 2023 n. 107. To convert the cubic meters of natural gas consumed into MJ, reference was made to the higher calorific value (PCS) defined by the supplier in the bill (39.55 MJ/scm).

² To calculate the percentages of electricity generated from renewable and non-renewable sources, we used the composition of the initial national mix used for the production of electricity injected into the Italian electricity system in 2023 (Source GSE; preliminary data): renewable sources 46.31%, natural gas 42.99%, coal 5.27%, petroleum products 0.90%, other sources 4.53%. To these percentages, the quantities of energy consumed by CleanAir in the form of natural gas and diesel (non-renewable sources) were added.





Graph 6 - Percentage distribution of energy sources, divided between renewable and non-renewable

The internal emissions of greenhouse gases deriving from the production activities of **CleanAir Europe srl** can be distinguished between direct and indirect.

Our direct emissions (Scope 1, according to the GHG Protocol) are those that derive from combustion by machinery owned or controlled by the company (boilers, burners, company means of transport). On the other hand, those which derive from the production of electricity imported and consumed by the company are indirect (Scope 2).

Following these definitions, direct emissions were calculated and converted into tonnes of CO_2 equivalent, tCO_{2eq} , using the GHG Protocol tools, for the combustion of natural gas and the consumption of automotive fuels, while the estimate of indirect emissions given from thermoelectric production was carried out on the basis of the most recent ISPRA coefficients and the latest available data relating to energy mixes. Indirect emissions now represent 54% of total internal greenhouse gas emissions (Table 3).

Estimated greenhouse gas emissions	tCO _{2eq}	%
Direct GHG emissions (Scope 1)	130,08	46%
Indirect GHG emissions from energy consumption (Scope 2 – location based)	151,80	54%
Total	281,88	100%

Table 3 - Estimated greenhouse gas emissions, expressed in tonnes of CO2 equivalent, divided into direct emissions (Scope 1 according to the GHG Protocol) and indirect emissions from energy consumption (Scope 2) for the year 2023

³ Sources: • World Resources Institute (2015). GHG Protocol tool for stationary combustion. Version 4.1 • World Resources Institute (2015). GHG Protocol tool for mobile combustion. Version 2.6 • Efficiency and decarbonisation indicators of the national energy system and the electricity sector. ISPRA Report 363/2022. Carbon dioxide emission factors from gross thermoelectric production by fuel (2021 update and preliminary estimates for 2022). SINAnet, ISPRA • Composition of the initial national mix used for the production of electricity injected into the Italian electricity system in 2022 (final balance) and 2023 (pre-final balance). GSE.

Water resources



Figure 1 - ultrafiltration and distillation plant in operation in CleanAir Europe Srl



Figure 2 - Condoremi unit (distillation)

CleanAir Europe s.r.l. places primary importance on the efficient use of natural resources, in particular water, a scarce and precious resource, shared with the ecosystem and the surrounding community, for which it becomes necessary to implement every solution to optimize its use and reduce waste, especially in a context where climate change makes drought episodes more frequent and the prediction of water stress situations more difficult.





Although the Aqueduct Water Risk Atlas indicates the Bulciago area as having low-medium water risk, CleanAir considered it essential to do what the best technologies allowed to reduce its water consumption.

The water used in the **CleanAir** processes is taken from the municipal aqueduct and used for civil uses (toilets, refreshment services, cleaning, irrigation) and, for industrial uses, exclusively in the painting process. The gray water deriving from civil uses is conveyed into the sewer and sent to the Nibionno (LC) purification plant. Downstream of the industrial painting process, a by-product is generated, consisting of water contaminated by pigment, which was eliminated as special waste.

Starting from 2022, the company, in response to an important investment, has equipped its painting plant with an evaporator, capable of separating, starting from the by-product, a concentrated solution of pigment, disposed of as special waste, from the distilled water, then recovered in the production cycle for further uses.

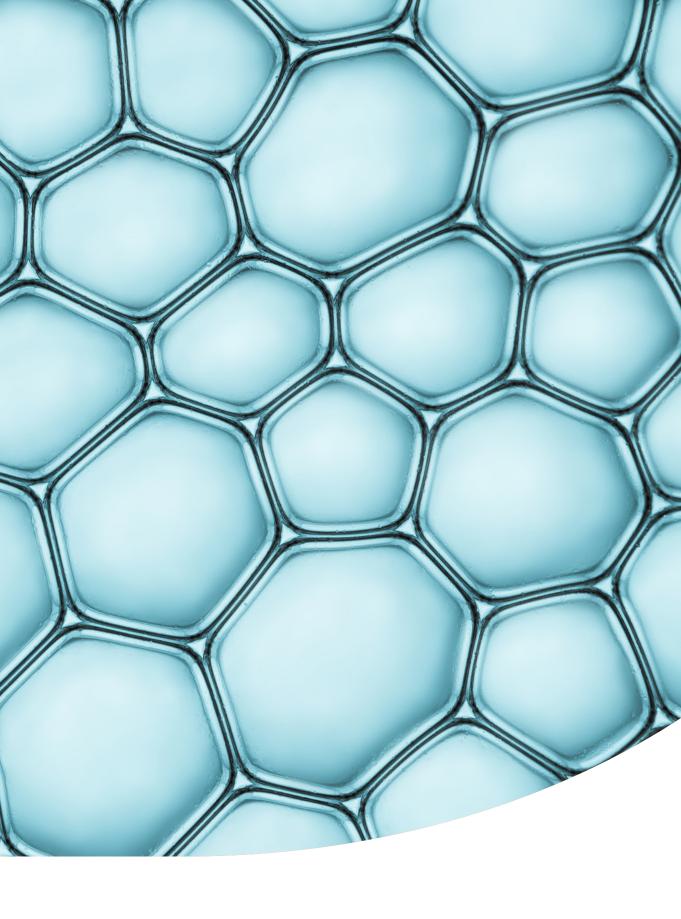
This made it possible to significantly limit the waste of aqueous solutions, with a 20% reduction in the hourly withdrawal of water by the filtration system, compared to the situation before installation (Table 4).

At the same time, a sharp decline was also observed in the quantity sent for disposal of aqueous solution waste, going from 184,700 kg in 2021 to 42,480 kg in 2023, but the data is partly flawed by the fact that some waste was collected in January 2021 of 2020, accumulated on site due to the blockade caused by the Covid pandemic.

in the painting oven	2021	2022	2023
Water withdrawal (m3)	55.885	63.577	52,908
Hours of use of the filtration system (h)	1240	1652	1467
Filtration system withdrawal per hour (m3)	45,1	38,5	36,1
Waste aqueous solutions sent for disposal (kg)	184.700	62.860	42.480

Table 4 - Detail relating to the use of water resources in the painting plant in the last three years

⁴ https://www.wri.org/applications/aqueduct/water-risk-atlas/ Ultima consultazione 02/10/2024



Social dimension



Human resources



CleanAir Europe S.r.l. employs 24 men and 7 women, all beneficiaries of collective bargaining agreements (CCNL Metalmeccanica Industria); of these, 29 are hired directly by the company with permanent contracts, while 2 are temporary workers. All contracts are full-time (*Graph 7*).

All the women present in the company hold positions of responsibility; four are shift managers: they are the ones who dictate the time of the production machine; one instead is a former line manager who, after years of experience, was promoted to quality control assistant; one is our reference sales representative and the last deals with company treasury, shipping and active invoicing.

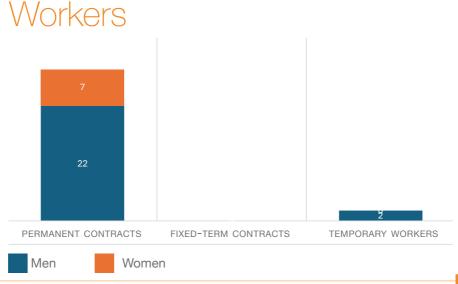


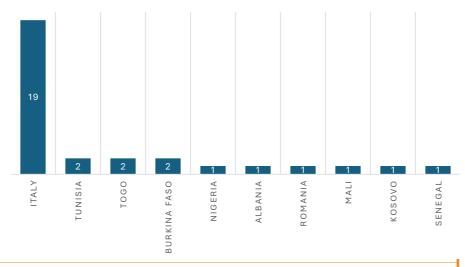
Chart 7 - Total number of male and female workers by type of contract as of 12/31/2023





The company does not discriminate in any way based on gender, nationality, age, origin, religion, but makes diversity an element of strength and corporate heritage. CleanAir believes that multiculturalism is its added value and is very proud to count, among its collaborators, twelve foreigners (almost 40% of the total), mainly originating from African countries (Graph 8).

Number of employees divided by country of origin



Graph 8 - Number of employees divided by country of origin



Human resources



Employee knowledge is considered a fundamental value in the company: **CleanAir Europe S.r.l.** believes in the importance of adequate training and the personal and professional growth of its collaborators, enhancing their skills. With specific reference to each person, professional development plans and training courses are developed and subject to constant review.

The training activities in the company concern topics relating to health and safety, training and updating of staff in relation to quality procedures, technical-scientific training and soft skills. The courses are continuously offered throughout the year in the company, in the form of seminars and lessons by internal staff, experts or university professors, or through participation in training courses, fairs, conventions and off-site conferences, field activities, through coaching or in the classroom.

In terms of health and safety, in addition to the legal requirements, during 2023 the company organized firefighting, first aid and AED operator courses. Furthermore, training was provided during the year for the use of the Imballicad software, the program that allows you to design industrial wooden packaging and automatically derive perspective drawings, executive drawings in DWG format, and lists in Excel format. Finally, there were refresher courses for the employees of the painting and cage production departments.

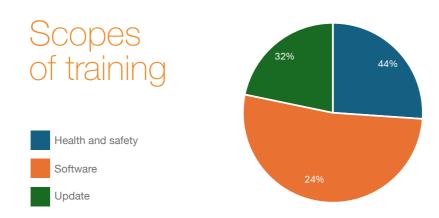


Chart 9 - Distribution of training hours provided in 2023 by area



Human resources



Attention to employees and company welfare

Attention and respect for the person is central to the **CleanAir Europe S.r.l.** family. In fact, this common spirit, favored by the proximity of work in the office and in the factory, characterizes the company's working climate.

People, within the limits of the objectives set by management, enjoy a certain freedom in organizing their work, for example being able to count on flexible hours for employees, depending on family needs. If requested, the company evaluates and grants, when possible, forms of remote working (smart working).

Salaries are consistent with sector averages. Fringe benefits and production or quality bonuses are present and are subject to periodic updates based on company merit. Convivial moments of meeting and gatherings between colleagues and employees are not only permitted, but are promoted by the management on the occasion of parties and birthdays, sometimes even with initiatives outside the company premises. The company recognizes a small gift for its employees during the Christmas holidays.

Policies relating to any shifts in the factory are managed in full agreement and scheduled in advance. Holidays and company closures, communicated well in advance, are often discussed together. In general, the company practices coordination policies with trade associations and trade unions, also in the management of any conflicts, in order to resolve problems with a satisfactory agreement between the parties.

Supplementary insurance is made available to employees to cover unexpected medical expenses and is part of the company's contractual provision.

The attention to the team and the valorisation of the staff of CleanAir Europe S.r.l. it also passes through social and media communication, via the company website, of individual initiatives, roles and people.

To facilitate the mobility of employees and visitors, free parking is available to everyone within the assigned areas of the company. Furthermore, during the year, new interventions on the square delimited the parking areas reserved for visitors. Two electric charging stations are available for charging hybrid and electric vehicles.



Health and safety at work



The protection and protection of the health and safety of workers in the workplace are essential elements in all company activities and decisions.

Every decision regarding health and safety is taken in compliance with the principles and general protection measures provided for by the laws in force, in particular by Legislative Decree 81/08 ("Consolidated Law" on health and safety at work), having as primary objective is to protect the psychophysical integrity of the staff.

The company organization regarding health and safety includes a hierarchical structure at the top of which resides the DL (Employer), who makes use of Supervisors for implementation and supervision. He is also supported by the RSPP (Prevention and Protection Service Manager), to whom he entrusts the coordination function of the prevention and protection service. Other specialized consultants are appointed to ensure constant updating of the regulatory requirements.

Consultation of workers is guaranteed by the presence of an RLS (Workers' Safety Representative), elected by them. The DL also appoints the Competent Doctor for the health surveillance of workers. Finally, there are teams made up of firefighting, evacuation and emergency and first aid workers.

The monitoring and evaluation of the risks present in the company, for their minimization and control, as well as the training of workers, are carried out in accordance with the provisions of the law, making use of qualified external personnel. The Risk Assessment Document (DVR) contains a detailed and systematic analysis of the potential dangers present in the workplace and the prevention and protection measures to be adopted to mitigate them. This assessment is carried out taking into account various factors, such as the activities carried out, the characteristics of the work environments, the tools used and potential exposures to dangerous substances, through direct observation of the workplace, the analysis of safety data, consulting experts or gathering information from reliable sources.

The company believes in accident prevention and promotes attitudes aimed at improving the working conditions of its employees. Examples of expression of this company policy were the establishment of adequate canteen and changing rooms, the supply of company clothing beyond the normal PPE requirements, the performance of cleaning services of the premises by qualified external personnel.

The company management also believes in the need to provide adequate attention to the comfort of employees in the factory during the changing seasons. Heat, cold and the presence of correct lighting are aspects that have recently seen improvements such as the introduction of new electric heating lamps to ensure protection from the cold in winter. A series of LED lights ensures low electrical consumption and adequate lighting of the work environment. Adequate lighting, heating and cooling conditions, with ergonomic workstations, also characterize the **CleanAir** offices.

At **CleanAir**, the number of accidents and injuries at work is constantly monitored and managed in order to reduce accident rates as much as possible. From the monitoring of "near misses" and the investigation of incidents, the most suitable solutions are put into practice to prevent them from occurring again in the future. For this purpose, in 2023, to deal with a temporary increase in accident rates, ad hoc training was carried out for the workers involved.

Accident incidence	2021	2022	2023
No. of injuries	0	1	4
Days of absence	0	11	57
Hours worked INAIL	45.302	45.133	48.051

Table 5 - Main numerical indicators of health and safety at work for the last three years

Product safety

The theme of safety is central to the activities of CleanAir Europe S.r.l., both within the company and externally, when the products sold must be installed and become operational. Strategically, the company management intended to invest in making the products safer; in this case, improving the construction characteristics of the products (for example through the introduction of anti-explosive features in potentially dangerous environments as already mentioned for EcoAtex), but also by providing the appropriate communication tools to support maintenance and first installation activities in complete safety.



To this end, we recall, for example, the launch of the digital project called **EcoSmart Cage which guides staff in maintenance and installation activities**, with particular attention to equipment and safety procedures, now always available on site thanks to the digital support mounted on the products and accessible via smartphone.



Local community



The CleanAir Europe S.r.l. company has supported various solidarity initiatives for several years.

-I Make-A- Wish® Italia – Annual donation

CleanAir supports the initiatives of the organizer **Make-A- Wish® Italia**, a non-profit organization that realizes the wishes of children and young people aged between 3 and 17, suffering from serious pathologies, to bring them joy, strength and hope.

Make-A-Wish® Italia, operational since 2004 with headquarters in Genoa and an office in Milan, is present throughout the national territory, through a network of over two hundred and fifty volunteers and receives reports from the most important pediatric hospitals in our country.

Belonging to a global organization, such as that of Make-A-Wish® Foundation International, allows maximum efficiency even for the most complex wishes and in all countries of the world.

CleanAir is a recurring donor to **Make-A-Wish Italia** and, also in 2023, the "dreams" of two boys were adopted.

⊢ La Nostra Famiglia

CleanAir Europe S.r.l. has also contributed, in the last two years, with a donation to the activities of **La Nostra Famiglia** di Bosisio Parini.

The **La Nostra Famiglia** Association is dedicated to the care and rehabilitation of people with disabilities, especially in developmental age.

It has a vast network of rehabilitation facilities: it is present in six Italian regions and collaborates with the Volunteer Organization for International Cooperation (OVCI) in five countries around the world; takes care of children and young people, both with extremely serious pathological conditions, such as vegetative states and multiple impairments, and with less serious situations, at psychopathological risk or social disadvantage.

La Nostra Famiglia deals with: scientific research and study of the medical, psychological and psychoeducational problems of various disabilities, through the activity of the "Eugenio Medea" Scientific Institute; reception of children with serious family problems awaiting foster care or adoption, children and adolescents alone or with socio-environmental problems in small communities or family-type units; management of day and residential centers for adults with disabilities; professional and university training of people service operators; raising awareness and promoting the culture of social inclusion.



Lecco Community Foundation

For 25 years, the **Lecco Community Foundation** has been committed to enhancing the natural and cultural beauties of the area and supporting projects of social relevance.

Every year it financially supports dozens of entities, including associations, cooperatives, parishes and municipalities, pursuing the improvement of the quality of life and the strengthening of bonds of solidarity and social responsibility among all those who live and work in the provincial territory.

In 2023, **CleanAir** renewed its participation in the Con-vivium project, which it had already joined in 2021, and which involves the creation of personalized diaries in which twelve recipes of typical Lombard dishes are included, one for each month, revisited by famous chefs . The project collects donations to support Caritas Ambrosiana – Casa delle Carità and the canteen service it offers, contributing to the purchase of the food necessary for preparing meals.

I La Carovana del Sorriso

La Carovana del Sorriso is a non-profit organization based in Lecco, founded in 2009 from the meeting of some operators in the healthcare field. Its aim is to bring dental and surgical care into reality and to people who normally would not have had easy access to it, in Italy and around the world. It currently also deals with long-distance adoptions, job placement and food, housing and educational support in vulnerable populations.

CleanAir contributed to the fundraising of La Carovana del Sorriso to allow it to be able to operate preventively on children with heart malformations.

I Treedom

At **CleanAir** we believe that a greener world is a better world, which is why we are committed to planting as many trees as we can, thanks also to the loyalty of our customers.

Recently, we collaborated with **Treedom** (www.treedom.net), purchasing two hundred trees which, for each order received, we assigned to our customers, as a not only symbolic gesture towards a greener planet. **CleanAir**, with this initiative, further confirms its commitment to sustainability. Together with Treedom we created the **CleanAir** Forest in Colombia, Ecuador, Haiti, Madagascar and Tanzania.

We believe that reforestation can contribute in an important way to safeguarding our planet. Trees help clean the air by removing carbon and releasing oxygen, cool the air through evaporation, prevent erosion, save water, and more.



Next steps





The growing attention to sustainability at a national and community level places the migration towards a system of values that consider the ESG (Environment, Social and Governance) dimensions of the company at the center of the company's attention. This translates into a process aimed at gradually introducing impact indicators, adequate to represent the reality of CleanAir Europe S.r.l.

During 2023, the company has selected consultancy partners capable of following a corporate sustainability certification path in the near future. From this perspective, the community requirements on the topic of the green taxonomy and more generally on the Green Deal are carefully monitored.

The application of this interest to manufactured products has in fact led the company to also imagine a certification process for its **Ecolabels**. **EcoAtex**, **EcoHpc**, **EcoSmart**, **EcoTurbo** are currently voluntary Ecolabels that follow the dictates and requirements of the ISO 14021 standard. The company is evaluating the possible adhesion to community environmental certification labels according to ISO 14025 (type III)

The **EcoTurbo IDF** project is part of these strategic initiatives: not just a product created in ecodesign, but a substantial turning point, where the dictates of sustainable design are integrated into the product design process for the first time. Not only a functional, relatively economical and reliable product, but also a durable product, which allows energy savings and resource recovery throughout the life cycle. The project is a bridge towards a broader collaboration with the university and a concrete basis for a technological transfer, which will see the in-depth study of new design themes over the next three years, aimed at considering the impacts on the environment.

The recent collaboration for the production and distribution of the new **Waveline** filter (agreement with an Austrian strategic partner) is strengthened during the second half of the year with joint participation in the Filtech 2023 edition of the fair, also scheduled for autumn 2024. **Waveline** shares the common goal of energy efficiency with the project (EcoTurbo)

This central theme of air purification, which in short represents the company's mission, could also be at the center of awareness initiatives on the topic of atmospheric emissions. In particular, the phenomenon of fine dust emissions is sadly known in Lombardy, which regularly disregards the legal reference values in the area.

CleanAir Europe S.r.I. for this reason it has imagined a project to raise awareness on the issue of air and intends to involve, in a supply chain logic, also institutional players present on the market; not only businesses, but also local institutions, schools, hospitals and universities, in order to spread the culture of preventing respiratory diseases linked to pollution. The project will be defined over the next two years with the first concrete initiatives starting from 2025.



Methodological note

CleanAir publishes its third sustainability report, with the aim of communicating its environmental, social and governance performance in full transparency towards all its stakeholders, describing the initiatives undertaken, the results achieved and future objectives.

The reporting perimeter of this document is that of **CleanAir Europe s.r.l.**, within the financial year 01.01.2023 – 31.12.2023. Within the document, it is also referred to as **CleanAir** or **CAE**.

This report was drawn up in reference to the GRI Standards of the Global Reporting Initiative, the most widely used voluntary sustainability reporting standards globally; the list of information reported in this document is reported in the GRI Content Index, which can be consulted at the end of the same.

This report also contains some numerical indicators taken from the Voluntary ESRS for non-listed Small and Medium Enterprises (VSME ESRS) in the Exposure Draft January 2024 version, available at the time of writing this document.

The publication frequency of the sustainability report is maintained annually. The drafting of the 2023 Budget was personally handled by the General Management, supported by external consultants.



Contacts



We are at your disposal, contact us!

CleanAir Europe s.r.l.
Via Roma 84
23892 Bulciago (LC)
Italia
Tel: + +39. 031 4153551
Email info@cleanairworld.it
PEC cleanair@legalmail.com



GRI Content Index

Declaration of use	CleanAir Europe s.r.l. has reported the information cited in this GRI content index for the period 01.01.2023 – 31.12.2023 with reference to the GRI Standards.
Used GRI1	GRI 1: Fundamental Principles 2021

GRI STANDARD	Information	Location
	2-1 Organizational details	Clean Air Europe s.r.l. Contacts
GRI2: General information 2021	2-2 Entities included in the organisation's sustainability reporting	Methodological note
	2-3 Reporting period, frequency and point of contact	Methodological note Contacts
	2-6 Activities, value chain and other business relationships	The creation of value
	2-7 Employees	Employees
	2-8 Non-employee workers	Human Resources
	2-14 Role of the highest governance body in sustainability reporting	Methodological note
	2-22 Statement on sustainable development strategy	Letter to stakeholders
GRI201: Economic performance 2016	3-3 Management of material topics	Main economic data
	201-1 Direct economic value generated e distributed	Main economic data
GRI204: Procurement practices 2016	204-1 Proportion of spending on local suppliers	Main economic data
GRI302: Energy 2016	3-3 Management of material topics	Environmental policy The production process Energy and greenhouse gas emissions
	302-1 Energy consumption within the organization	Energy and greenhouse gas emissions
	302-4 Reduction of energy consumption	Energy and greenhouse gas emissions
	302-5 Reductions in energy requirements of products and services	Energy and greenhouse gas emissions Sustainable products and solutions

Location



GRI Content Index

Information

GRI STANDARD

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GRI303: Water and effluents 2018	3-3 Management of material topics	Environmental policy The production process Water resources
	303-1 Interaction with water as a shared resource	Water resources
	303-2 Management of impacts related to water discharge	Water resources
	303-3 Water withdrawal	Water resources
	303-5 Water consumption	Water resources
GRI305: Emissions 2016	3-3 Management of material topics	Environmental policy The production process Energy and greenhouse gas emissions Life Cycle Assessment
	305-1 Direct GHG emissions (Scope 1)	Energy and greenhouse gas emissions Life Cycle Assessment
	305-2 Indirect GHG emissions from energy consumption (Scope 2)	Energy and greenhouse gas emissions Life Cycle Assessment
	305-4 Intensity of greenhouse gas (GHG) emissions	Life Cycle Assessment
GRI403: Occupational health and safety 2018	3-3 Management of material topics	Health and safety at work
	403-1 Occupational health and safety management system	Health and safety at work
	403-2 Hazard identification, risk assessment and incident investigation	Health and safety at work
	403-3 Occupational health services	Health and safety at work
	403-4 Worker participation, consultation, and communication on occupational health and safety	Health and safety at work
	403-5 Worker training on occupational health and safety	Health and safety at work
	403-6 Promotion of workers' health	Health and safety at work
	403-9 Work-related injuries	Health and safety at work



GRI Content Index

GRI STANDARD	Information	Location
GRI404: Training and education 2016	3-3 Management of material topics	Human resources
	404-2 Programs for upgrading employee skills and transition assistance programs	Human resources
GRI405: Diversity and equal opportunities 2016	3-3 Management of material topics	Human resources
	405-1 Diversity in governance bodies and among employees	Human resources
GRI406: Non-discrimination 2016	3-3 Management of material issues	Human resources
GRI413: Local communities 2016	3-3 Management of material topics	Local community
	413-1 Operations with local community engagement, impact assessments, and development programs	Local community



Document drawn up with the support of **Dr. Eleonora Castelli** – Sustainability consultancy Certified GRI Sustainability Professional

Graphic rework Francesca Marcon

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