



WE IMPROVE WHAT MATTERS.

SUSTAINABILITY REPORT 2023



Down friends of HARTHA Group,

We improve what matters.

That is the core of our business model, and it is our inner conviction.

As a specialist in surface technology, we always convince by performance. By using the most modern technological processes, we enhance our customer's metallic components. This is how we protect them from wear, increase their toughness and improve their resistance.

Our core expertise and our business model thus make a significant contribution to the protection of natural resources.

Sustainability is an integral component of our value creation, and it contributes significantly to our company success. Our services make sustainability possible. For example, they get future technologies such as e-mobility off the ground, connect high-speed trains, and improve wind turbines, the most important generators of renewable energy.

At the same time, sustainability is also our inner conviction. As a group of energy-intensive companies, we are conscious of our responsibility for resources in short supply, not only for financial reasons — but rather we act out of our inner conviction. Because many employees of HÄRTHA GROUP have children and even grandchildren to whom we would like to pass on an intact planet.

The HÄRTHA GROUP is now active at eleven production locations. We have more than 400 employees, and

their physical and mental well-being is dear to our hearts, as well as being our responsibility. At all eleven locations we see ourselves as an active member of the local living space and community, and we actively participate by supporting sports clubs and social organisations. This too is our inner conviction.

We have chosen an apple as the title image for our 2023 sustainability report. Why? For us, it marks the conclusion of an initial intensive phase of transformation towards increased sustainability. In 2023, at the HÄRTHA Aldenhoven location, we commissioned a large photovoltaic (PV) installation (see image on page 11). In addition to the PV installation, a year previously we planted a fruit orchard with rare types of fruit, which we harvested for the first time this year. We expect this first harvest to be followed by many more at this location.

Enjoy reading this report!

ven Ellmo

Sven Killmer, CEO



Sven Killmer, Miloud Abdellaoui (orchard at our Aldenhoven site)

ABOUT THE HÄRTHA GROUP



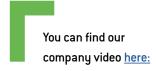


(as of 31 December 2023)

WE IMPROVE WHAT MATTERS.

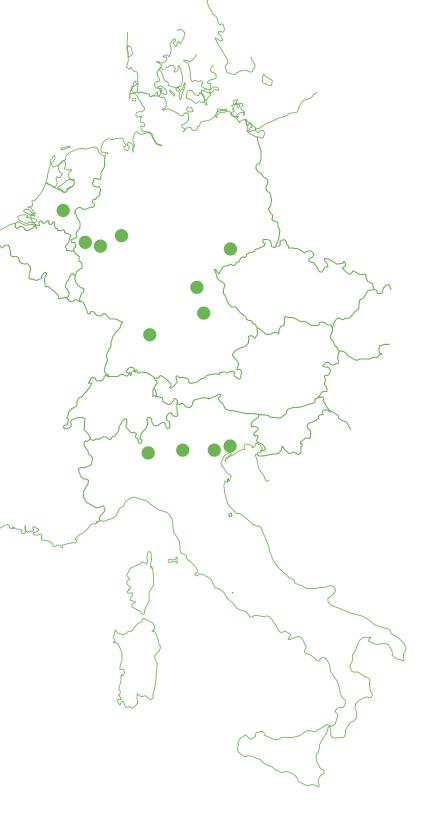
We finish components and thus make them stronger, tougher and more resilient. Perfected heat treatment processes, coating solutions and a commitment to maximum quality. These are the fundamental pillars of our successful business model.

More at: haertha.de









Germany

- → HÄRTHA ALDENHOVEN GmbH 52457 Aldenhoven
- → HÄRTHA Weißenburg GmbH, Cadolzburg Plant 90556 Cadolzburg
- → Härterei Aribert Conrad GmbH 58640 Iserlohn
- → FORTE Wärmebehandlung GmbH 09366 Stollberg
- → HÄNDLE Härterei GmbH 72070 Tübingen
- → HÄRTHA Weißenburg GmbH, Head Office 91781 Weissenburg
- → HÄRTHA GROUP GmbH, Corporate Headquarters 52477 Alsdorf

Netherlands

→ SABO BOXTEL BV 5281 PK Boxtel

Italy

- → HAERTHA VERDELLO S.R.L., Verona Plant 37036 San Martino Buon Albergo (VR)
- → HAERTHA COATING S.R.L. 37036 San Martino Buon Albergo (VR)
- → VACUUM S.P.A. 20090 Trezzano sul Naviglio (MI)
- → HAERTHA VERDELLO S.R.L., Head Office 24049 Verdello (BG)



















VERY MODERN LOCATIONS WITH

SUSTAINABLE CUTTING-EDGE TECHNOLOGY

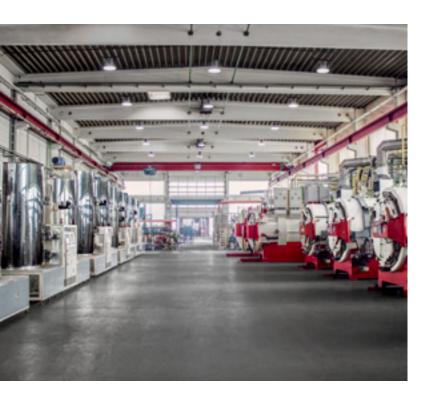
Making the state of the art our standard — this claim makes us one of the leading providers of heat treatment processes and coating solutions in Europe.

For our processes, we rely on cutting-edge technologies such as plasma nitriding, vacuum hardening, low pressure carburising and inductive hardening.

We attach primary importance to reproducible quality.

We know: Every component that leaves our furnaces must hold up in critical situations.

This is why we tailor each process individually to the needs of our customers. Our team of experts advises you on the treatment process from start to finish. Together we choose the process that fits your requirements best.



Our processes at a glance:

\rightarrow Nitriding

Oxidising, gas nitriding, salt bath nitriding, nitrocarburising, nitrocarburising with post-oxidation (NIOX and ALDOX), plasma nitriding

→ Hardening & tempering

Bainitising, quenching and tempering, tempering, salt bath hardening, bright hardening, vacuum hardening

→Edge layer hardening

Inductive hardening, carbonitriding, edge layer hardening, case hardening, low pressure hardening (LPC)

→Annealing

Soft annealing, stress-free annealing, precipitation hardening, normal annealing, solution annealing, intermediate annealing

→Coating

PVD coating, DLC coating, phosphating

→Additional services

Straightening of steel, deep cryogenic treatment, magnetic powder crack testing, blast cleaning, material analysis, hardness testing, metallography





We continue to invest in resource-saving cutting-edge technology.

Low pressure carburising (LPC) is an alternative process for case hardening under protective gas.

The steel is heated in a carburising atmosphere to a temperature between 900 °C and 1,000 °C. This leads to an enrichment of the edge layer with carbon. This enrichment increases the hardness of the component surface, while keeping the core malleable. This is usually followed by processes for hardening and tempering.

The combination of the acetylene carrier gas and the vacuum furnace makes low pressure carburising emission-free in terms of CO2, and is thus particularly environmentally friendly.

Advantages:

- →Uniform case hardening depths even on components with complex geometries
- → Very clean component surface, so no need for subsequent abrasive blast cleaning
- →Increased hardness under the surface and faster than alternative carburising methods
- →Little warping
- →Environmentally friendly

VISION AND STRATEGY

By means of our technologies, we make products more resistant, longer lasting, and therefore more sustainable.

We enable key technologies, for example in wind power, medical engineering and electromobility, and thus, day by day, we improve the life of our fellow humans. At the same time, we achieve resource-saving use of raw materials by increasing the time that they can be used. With this in our DNA, we are right now making a sustainable world possible, plus a future worth living for coming generations.

Because we have a duty to future generations, we want to drive forward transformative change. The sustainability strategy of the HÄRTHA GROUP is closely connected to the 17 Sustainable Development Goals [SDG] of the United Nations.

In order to maximise our contribution, we concentrate on specific fields of activity, such as sustainable energy provision and energy efficiency. We have set ourselves specific goals in all areas, and we use measurable indicators, in order to track progress and to include all stakeholders.

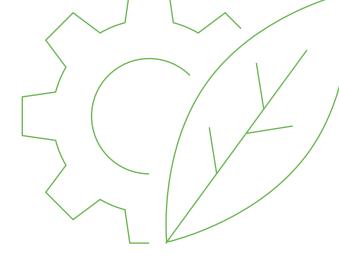
Our commitment to, and our obligation in, the worldwide Science Based Target Initiative (SBTi) for the reduction of CO2 emissions are important to us.

Responsibility for implementing the sustainability strategy is an important core task for all managers. For this task, we have created an organisation which we have equipped in terms of personnel, finance and expertise. In order to emphasise the key importance of this subject to all employees, we have internally developed and implemented a targeted communication strategy, combined with training sessions at all locations, with all employees.



"As CEO I am the top person responsible for sustainability in the HÄRTHA GROUP. I am shaping the transformation to increased sustainability out of complete conviction — for my son and for all subsequent generations. Commercial thinking and responsibility for our planet must go hand in hand for this."

Sven Killmer, CEO



Sustainability as an opportunity.

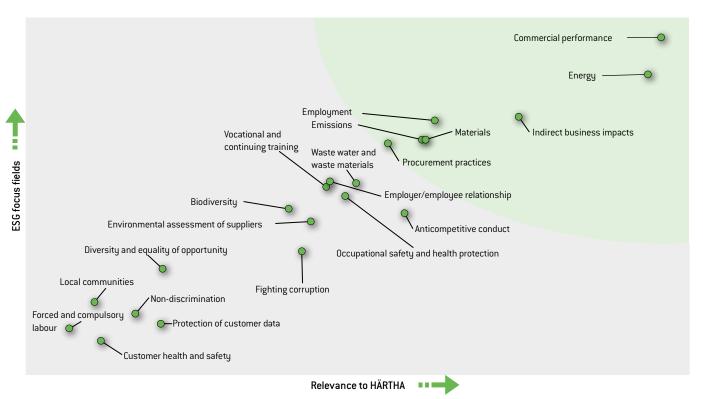
In order to identify and assess the topics relevant to the HÄRTHA GROUP, we have performed a materiality analysis. Its objective was to identify the areas in which our group of companies has the greatest leverage. This enabled us to merge major ESG requirements, stakeholder expectations and legal requirements with our group strategy.

In order to make sustainability performance measurable, transparent and comparable, the HÄRTHA GROUP orients itself on internationally established frameworks, such as the Global Reporting Initiative (GRI), law on implementation of Corporate Social Responsibility directives (CSR-RUG), various ESG sustainability ratings, and stakeholder expectations.

We consider that our reporting is an opportunity to identify our strengths and weaknesses, define improvement potentials, and encourage dialogue as well as concrete activities with all stakeholders.

In the course of the materiality analysis 55 stakeholders, both internal and external, were polled; in-depth personal interviews were conducted with some of them. The results of this extensive survey are shown in the materiality matrix below. The topics which are particularly relevant have a green background.

HÄRTHA GROUP materiality matrix



SUSTAINABLE ENERGY SUPPLY

Climate change is increasingly becoming a reality.

Rapid, decisive action is necessary for the 1.5 degree target of the Paris Climate Protection Accord still to be achieved. As a group of energy-intensive companies, it is a particular requirement that we reduce our CO2 footprint.

We are facing up to this responsibility.

In order to create a cleaner and more sustainable environment for future generations, we are speedily transforming the energy provision for the HÄRTHA GROUP towards renewable energies.

As a result of these and other measures from renewable sources, in 2023 the proportion of green energy in Germany was at approximately 80 %, tending upwards.

In order to demonstrate our sincerity about the sustainable transformation, we have joined the worldwide Science Based Target Initiative (SBTi).

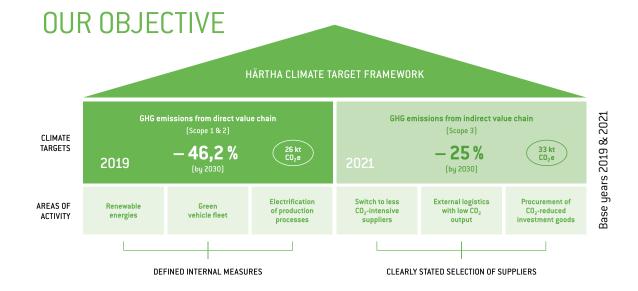
Through the energy procurement measures which

we have defined and the energy efficiency measures which we are ongoingly implementing, in Scopes 1 and 2 we will reduce our CO2 emissions by at least 46 % by 2030.

On the basis of our progress so far and the experience we have gained, we remain positive that we will achieve this ambitious objective.

Concrete measures in the last 12 months:

- → Development of our own photovoltaic installations at the Aldenhoven, Iserlohn, Boxtel and Verona locations, annual output 3.15 GWh
- Conclusion of a long-term PPA in Germany (photovoltaic energy), annual quantity approx. 10 GWh
- ightarrowPurchase of wind energy, annual quantity 8 GWh







hardening processes, heat recovery, increased building efficiency, optimisation of burner technologies at the various furnaces, improved insulation of heating plant, etc.

The assessment and prioritisation of the implementation of reduction measures is based on clearly defined ecological, financial and strategic decision criteria.

Measures so far:

- →Workshops at all locations
- → Conversion to energy-efficient burner technologies
- →Investments in recovery of heat and waste heat
- → Optimisation of load management
- →Upgrade in building technology



Workshop, SABO BOXTEL B.V. (NL)

ENERGY EFFICIENCY

The level of energy consumption has a significant effect on the financial results of the HÄRTHA GROUP.

The implementation of energy efficiency measures therefore has both ecological as well as financial benefits. Decarbonisation measures go hand-in-hand with the exploitation of potential efficiencies.

In order to uncover these potentials, workshops took place in 2023 at all locations. For this, we relied on the people who know the situation best: our colleagues onsite. They are the real experts who, thanks to their experience and ideas, are able to recognise potential energy savings and to implement measures.

The measures identified include optimised washing and

BIODIVERSITY

The topic closest to our heart.

In 2021 we started to create a natural biotope at the Aldenhoven location. In addition to 20 rare types of fruit, 300,000 bees made their new home on the company grounds.

In 2023 we were able to harvest fruit from our own trees for the first time.



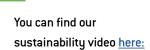
And our bees are happy here too, and say thank you by industriously producing tasty $H\ddot{A}RTHA$ honey.



Examples of our sustainability awards:

- →EURAZEO Gold status 2023
- →BENCIS ESG award 2023
- \rightarrow CVC ESG recognition 2023
- →MJ Hudson ESG 2023
- → Bavarian environmental agreement

















SUSTAINABILITY, COMMITTED TO FUTURE GENERATIONS.





EMPLOYEES

A part of the HÄRTHA success story. It is our dedicated employees who make all the difference.

They are the ones who use their experience and knowhow to advise our customers in the best possible way and face-to-face. They extend our technological and innovative lead in the field of heat treatment and coating processes.

They are decisively responsible for the high quality of HÄRTHA's products. It is for them that we at HÄRTHA wish to create the best possible working environment. An environment that offers attractive development and career opportunities for people with the most diverse qualifications and backgrounds.

Corporate culture. Better together.





We attach great importance to a corporate culture that is both appreciative and constructive. A pleasant working atmosphere and strong teams are major contributors to our success.

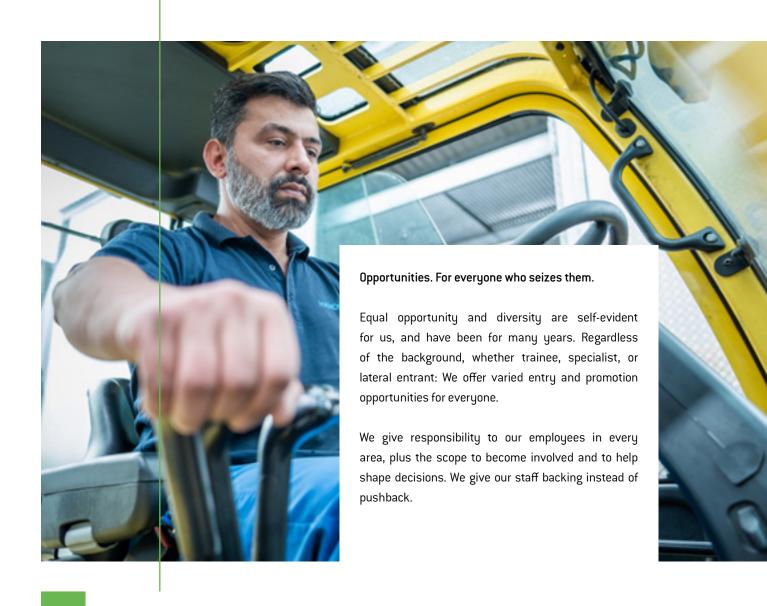
The fact that our locations experience only minor employee turnover is indicative of this sense of community that is alive and well.

This matters to us:

- → Occupational safety
- → Health is a valuable asset
- → Career and development opportunities
- →Team spirit
- → Identification with company and occupation

We live diversity. These are some the countries that our employees come from:

Albania, Armenia, Belgium, Bulgaria, Chile, Columbia, Croatia, Germany, Ghana, Georgia, Greece, Iraq, Italy, Kosovo, Montenegro, Morocco, the Netherlands, North Macedonia, Pakistan, Poland, Russia, Serbia, Türkiye...



You can find our employer branding video here:





You can find our
Code of Conduct here:



A selection of our employee benefits:

- ightarrow Monthly prepaid benefits card
- ightarrow Bicycle leasing with employer contribution
- → Employees obtain employee bonuses
- ightarrow Capital-forming benefits
- ightarrowCompany pension
- \rightarrow 30 days annual holiday
- → High-quality work clothing, free of charge

VOCATIONAL AND CONTINUING TRAINING









"I appreciate the opportunities for promotion at HÄRTHA. I started out as a trainee, but I'm now responsible for two locations."

Mario Neuwerth, authorised signatory and works manager



Training. Launch into your career.

We offer young people a selection of qualified training positions. In particular, our training aims to recruit young people as long-term team members. This effort has been recognised. This is evident, for instance, in the multiple Chamber of Industry and Commerce awards won by our companies, HÄRTHA in Weissenburg and FORTE in Stollberg, for being "exemplary training companies".

Continuing training. Keep learning throughout your career.

Trainees are not the only people who learn continuously with us. We also invest heavily in internal and external training measures for our existing staff members. To this end, we have our own well-equipped training facilities on site. We follow the motto: Knowledge grows when it is shared.



RESPONSIBLE COMPANY MANAGEMENT AND COMPLIANCE

At HÄRTHA governance and compliance are not viewed just as a hygiene factor; rather we understand both areas to be prerequisites for sustainable company success.

Responsible management processes, compliance with various legal requirements and cultural conventions ensure our long-term future. Everything we do is based on our company's five core values, which we continuously communicate to all HÄRTHA employees:

CUSTOMER FOCUS: Our customers decide the success of our company.

ENTREPRENEURIAL SPIRIT: Our culture is marked by entrepreneurial spirit.

LONG-TERM VISION: We strive to achieve long-term success.

INTEGRITY: We keep our word. Our partners and everyone in our team can rely on this. We commit ourselves to fair competition, and perform our business activities solely within the framework of the statutory regulations, and with integrity.

Speed: To maintain our advantage, we operate with short lines of communication and simple processes.

The Code of Conduct bindingly anchors our core values in the company's working life for all employees. The code includes detailed topics such as corruption, competition law, human rights, employment and social standards, conflicts of interests, trade control and data protection.

A major element in fulfilling the compliance guidelines is regular mandatory training for all employees.

The assessment and the effectiveness of our compliance structures and processes are continuously verified through internal and external audits.

We are active in the Industrieverband Härtetechnik (IHT) [hardening technology industry association], Arbeitsgemeinschaft Wärmebehandlung (AWT) [heat treatment working group] and in the Senat der Wirtschaft [economic senate].



"Our guiding principle: We want to be an honest merchant."

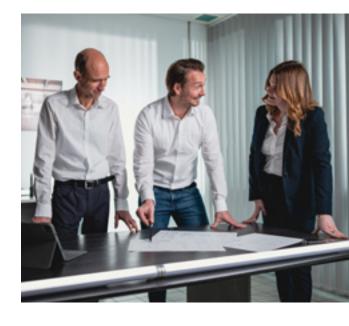
Timo Röskes, CFO

Transparency and ethics: External hotline allows anonymous reporting worldwide in the event of rule violations.

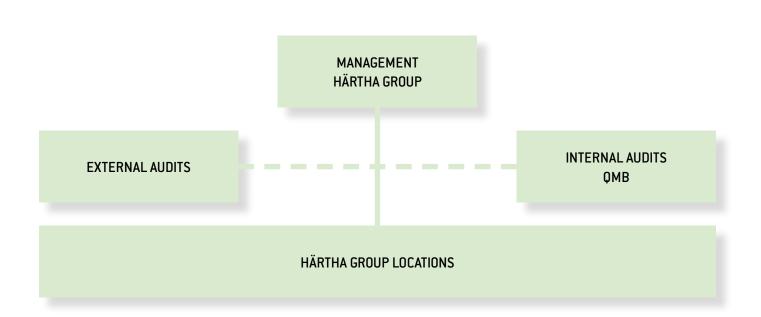
A hotline is available to all employees, as well as to third parties, for reporting violations of the law or breaches of our Code of Conduct. This service is operated by an independent external provider, is available worldwide, and also allows anonymous reporting.

Direct responsibility: Corporate Audit management monitors business risks in the Group.

As well as external audits (e.g. performed by financial auditors or even state bodies) the corporate body also performs corporate audits. The Corporate Audit management (quality management representatives (QMB) of the corporate body) reports directly to the Group's executive board.



These regular audits monitor business risks at our production and administration locations. They are an important tool for identifying risks and potential improvements.



SOCIAL RESPONSIBILITY

Our social commitment does not stop at the factory gates.

As part of a supporting and responsible society, we also engage actively in our local communities by sponsoring social organisations and sports clubs.

In order to encourage future generations at an early stage, our Weissenburg location has cooperated, together with the University of Bayreuth, for a number of years with the "Elefant Racing e.V." club, in which students build their own formula racing car, and are thus able to develop their engineering skills.



The organisations which we support include:

Kinderschicksale Mittelfranken e. V., Elterninitiative krebskranker Kinder e. V., VFL Treuchtlingen e. V., Ortsfeuerwehren Stollberg, Freiwillige Feuerwehr Jahnsdorf, Tierrettung Chemnitz e. V., Grundschule Jahnsdorf, Verein "groß & klein" e. V. Stollberg, Gartenbauverein "Grüner Winkel", Sächsiche Jugenstiftung (genial Sozial), FC Stollberg e. V. & MC Grünhain e. V., Jugendhilfeeinrichtung Königshof, Jülicher Tafel e. V., Katholische Kita Mariäheimsuchung, Freiwillige Feuerwehr Aldenhoven, Narrenzunft Hirschau e. V., and many more.

"The HÄRTHA GROUP practises social responsibility well beyond the factory gates. Active participation in our local communities, whether through sponsoring social organisations or sports clubs is very important to my colleagues and me."

Thomas Jahn, HR manager







REDUCING CO2 EMISSIONS AND CO2 DRIVERS

We are active in achieving the 1.5 degree target of the Paris climate accord.

We have formalised this inner conviction by joining the worldwide Science Based Target Initiative (SBTi). So that we can derive concrete, science-based emission reduction targets, as a first step we have analysed our global energy consumptions and emissions.

The results were summarised in Scope 1 (direct emissions) and Scope 2 (emissions from purchased energy).

On this basis, we have derived measurable targets for the reduction of our CO2 footprint, and have defined concrete measures for reaching these targets.

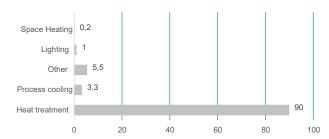
Our aspiration: DO IT! Real reduction! Through sustainable energy supply and maximum energy efficiency.

Reduction potential

Electricity and gas consumption:

75,655 MWh energy supply, of which **7,765 MWh** for infrastructure and **68,090 MWh** for production

The largest proportion of energy consumption is:



→ Production with 90 %

→Infrastructure follows with 10%

Production is principally operated using natural gas and electricity.

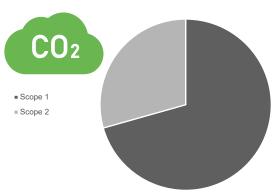
Energy sources: Electricity and gas Plants included: Top 5 emission generators in the group of companies

OVERVIEW OF EMISSIONS, SCOPES 1 & 2

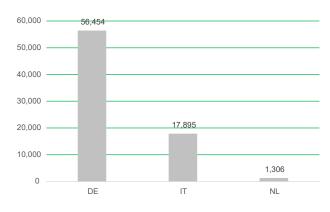
OVERALL CONSUMPTION: 75,655 MWh



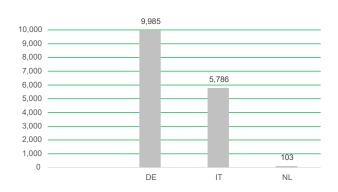
OVERALL: 15,874 TONNES



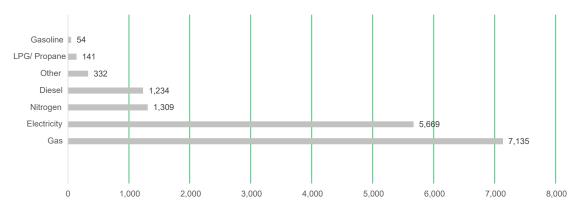
ENERGY REQUIREMENT PER COUNTRY IN MWH



CO2 EMISSIONS PER COUNTRY IN TONNES



CO2 EMISSIONS PER ENERGY SOURCE IN TONNES



THE FOUR LEVERS FOR REDUCING CO2, AND THEIR THEORETICAL POTENTIALS



The HÄRTHA GROUP is banking on renewable energy: PV installations at 5 locations have joint peak power of approx. 3,500 kwp. A PV PPA in Massbach delivers an additional 10 GWh, and a wind PPA with 8,33 GWh

covers 21 % of the overall requirement. Sustainable energy for a green future.



Energy efficiency measures have the potential to reduce consumption by approx. 9 %. Of this, waste heat utilisation (40 %) and optimised heat supply (34 %) are promising medium-term measures for reducing

consumption. In the short term, an enhancement of the measurement infrastructure is recommended. This would allow identification of energy efficiency measures, such as shutdown management.

For implementing the energy efficiency measures, we use the methodical PDCA approach to continuous control and improvement of the measures implemented. Coordinated by the Central Sustainability Manager, a lively exchange of information between the locations takes place, and so a "best practice" culture is created.

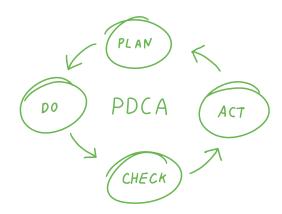


Changing over to genuine green electricity for the rest of the locations will reduce the CO2 balance by 41 %. This will create additional costs > € 330,000 per year for the HÄRTHA GROUP.



As a last resort, **compensation** of unavoidable emissions, using so-called carbon credits, can open the path to CO2 neutrality. At present the HÄRTHA GROUP is not pursuing this option; instead it is concentrating all

its efforts on the first two options. Real reduction and real ACTION.





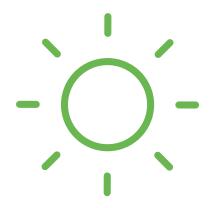
"We at HÄRTHA don't just talk, we LIVE sustainability. I promise my children to continue along this path."

Miloud Abdellaoui, Sustainability Manager

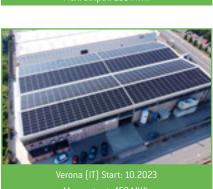
INSTALLATION OF PHOTOVOLTAIC CAPACITIES

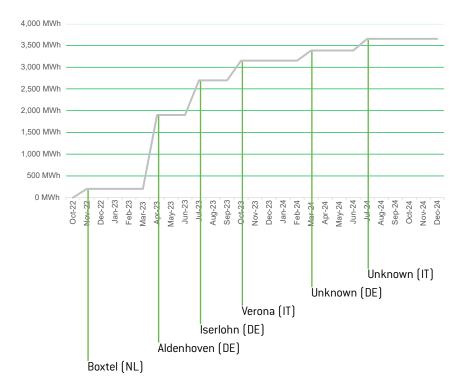
PREPARED FOR A GREAT FUTURE!

















<u>APPENDIX</u>

OVERALL DATA SUMMARY OF THE CORPORATE CARBON FOOTPRINT (CDP-COMPLIANT)

Total t CO2e	Scope 1	Scope 2	Total energy requirement MWh	Renewable energy generation MWh	Green electricitų supply MWh
15,874	10,205	5,669	82,349	1,621	21,891
Countries	Locations	Employees	Incoming orders	Intensity of t CO2e/FTE	Intensity of t CO2e/M€
3	12	411	€ 60 mill.	39	265
Country	Total t CO2e	Scope 1	Scope 2	Demand MWh	
DE	8,562	8,561	1	61,664	-
IT	5,786	1,541	4,245	19,196	-
NL	103	103	0	1,489	

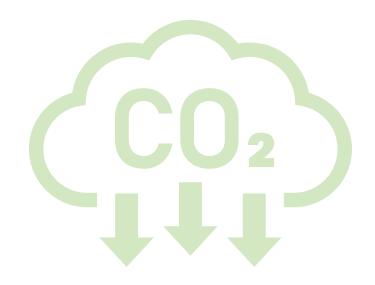
5,669

82,349

10,205

15,874

Total



Hardening	14,324	10,163	5,584	43
Coating Headquarters	101 26	17 25	84	20 2,5
Total	15,874	10,205	5.669	2,3 39 (average)

Energy	Demand MWh	t CO2
Electricity	40,157	5,669
Natural gas	35,498	7,135
Diesel	4,645	1,234
LPG/ Propane	628	141
Gasoline	197	54
Nitrogen	278	1,309
Other	946	318
Total	82,349	15,860

Other GHGs	t CO2e
CH4	1
CO2	13
Total	14

This sustainability report of the HÄRTHA GROUP for 2023 was created with reference to the Consolidated Standards 2021 of the Global Reporting Initiative (GRI). The report appears once per year and covers the complete calendar year (from 1 January to 31 December).

GRI-2	General details	
	1. The organisation and its reporting practices	
GRI 2-1	Organisational profile	3,4
GRI 2-2	Entities included in the organisation's sustainability reporting	3,4
GRI 2-3	Reporting period, frequency, and point of contact	30,32
	2. Activities and employees	
GRI 2-6	Activities, value creation chain, and other business relationships	3, 4, 5, 6, 7
GRI 2-7	Employees	16, 17, 18,
		19
	3. Governance	
GRI 2-9	Management structure and composition	8, 9, 20
GRI 2-11	Head of the highest supervisory body	3
GRI 2-14	Role of the highest supervisory body in sustainability reporting	3
	4. Strategy, guidelines and practices	
GRI 2-22	Applicability statement for the strategy for sustainable development	8.9
GRI 2-26	Process for obtaining proposals and reporting concerns	9, 20, 21
GRI 2-27	Compliance with laws and regulations	20.21
GRI 2-28	Membership of associations and interest groups	20
	5. Involvement of stakeholders	
GRI 2-29	Approach to involvement of stakeholders	8, 9
GRI 2-3	Key topics	
GRI 3-1	Process for deciding key topics	6, 7
	List of key topics	3, 4
GRI 200	Financial performance	
GRI 201-1	Directly generated and paid out financial value	4
0 2011	Shooting Boulous and Fore car manoth raise	·
GRI 300	Environment	
GRI 302-1	Environment Energy consumption within the organisation	10 24 25
	Energy consumption within the organisation	10, 24, 25
GRI 302-4	Reduction of energy consumption	8, 9, 10, 12, 14
		15, 24, 26,
		27
GRI 304	Biodiversity	
GRI 304-1	Company's own, rented, and administered operating locations located in or adjacent to	13
	protected areas and areas with a high level of biodiversity outside of protected areas	

GRI 305	Emissions	
GRI 305-1	Direct GHG emissions (Scope 1)	24, 25
GRI 305-2	Indirect energy-related GHG emissions (Scope 2)	28, 29
GRI 305-5	Reduction in GHG emissions	8, 9, 10, 12, 14, 15, 24, 26, 27
GRI 2-400	Social commitment	22, 23
GRI 401	Employment	
GRI 401-1	Newly engaged employees and fluctuation in employees	19
GRI 403	Occupational safety and health	
GRI 403-5	Employee training in occupational safety and health protection	9, 16
GRI 403-6	Promotion of employee health	16
GRI 404	Vocational and continuing training	
GRI 404-1	Average number of vocational and continuing training hours per year and employee	19

