

Sustainability 2021

Material Topics

Environmental

- Materials Compliance
- Environmental Management System and Compliance
- Energy Management and Carbon Emissions

Social

- Employer Attractiveness
- Employee Health and Safety
- Responsible Supplier Standards
- Diversity, Equity and Inclusion
- Community Engagement

Governance

- Ethics and Compliance
- Trade Compliance

Economic

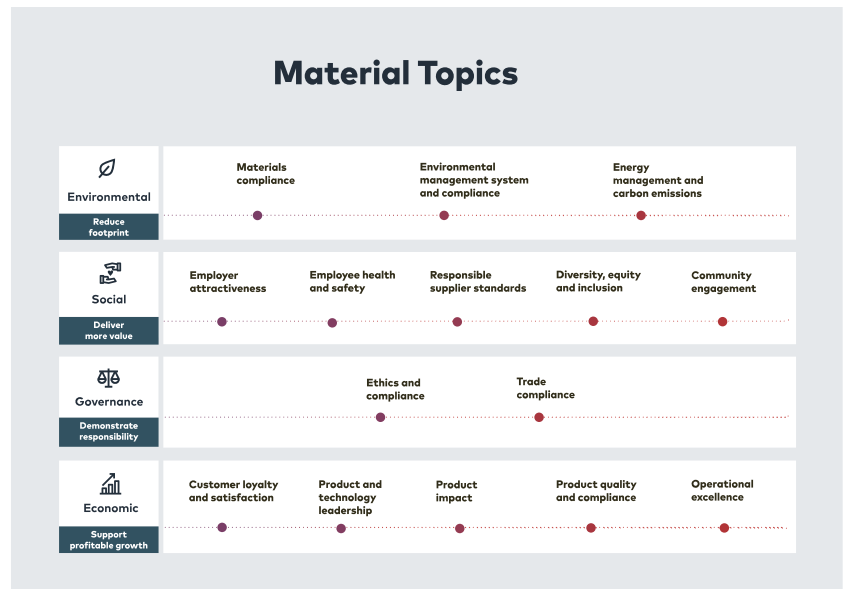
- Customer Loyalty and Satisfaction
- Product and Technology Leadership
- Product Impact
- Product Quality and Compliance
- Operational Excellence

GRI Content Index

GRI Report of the Comet Group

Materiality analysis

For fiscal year 2021, we are for the first time presenting an integrated annual report and a separate GRI report that provide information on both our financial and our non-financial performance in the reporting year. The content of the GRI report is based on an assessment, known as materiality analysis (GRI 102-46, GRI 102-47), of those issues in our value chain that have the greatest impact on the environment, society and the economy in the medium and long term.



The material topics shown above were developed in three steps. First, from a large number of topics, a shortlist of possible material issues was drawn up with the support of outside experts. This selection was made on the basis of the Comet Group's corporate profile. In the second step, a materiality analysis in accordance with GRI standards was carried out in an expanded project group. As part of this analysis, the topics were assessed in terms of their relevance to stakeholders, their impact on the sustainable development of the company and – as a third dimension – their relevance for value generation. This three-dimensional approach ensures that the results support not only corporate reporting but also strategy development. In the final step, the draft materiality matrix was discussed, adapted, and approved by the Executive Committee.

This first-ever materiality analysis was performed without the involvement of external stakeholders, but with support from recognized external experts. In order to take into account the perspective of the various stakeholders on a proxy basis, employees from all levels of the organization, from all divisions and from a variety of other functions were included in the process.

As a result of this process, the 15 topics shown above were identified as material. More information on the individual topics is provided in the relevant sections of the annual report and in the GRI report.

To improve performance on our material topics, we closely partner with Comet's stakeholders. Our key stakeholders are our employees, customers, suppliers, and shareholders (GRI 102-40). Some of these stakeholders have a direct impact on the improvement of material issues, while others are impacted by our actions (GRI 102-42). We are therefore in regular communication with those stakeholders, in some cases on a daily basis. Typical interactions include quarterly "all hands" conference calls between the CEO and CFO and the employees, interactions on the Yammer social networking platform, regular meetings and calls with customers and suppliers, investor conferences, capital markets days with financial analysts and shareholders, and the annual shareholder meeting (GRI 102-43). In 2021, interactions with stakeholders resulted in management actions such as increasing inventories to manage supply chain issues, virtual installations of x-ray systems, and the initiation of an ESG program (GRI 102-44).

Environmental

Materials Compliance

Materials compliance is compliance with any laws, regulations and specifications that restrict or even prohibit the use of various substances and/or materials in products, including, for instance, environment-related legislation, international law, religiously motivated specifications and specifications by companies. As a manufacturer of industrial products, an indispensable requirement for doing business worldwide is compliance with regulations relevant to the environment and market access – such as Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Restriction of Hazardous Substances (RoHS), and the Toxic Substances Control Act (TSCA) – as well as with legislation driven by international law and ethics, including Conflict Minerals legislation, the Dodd-Frank Act and Regulation (EU) 2017/821.

We are committed to provide our customers with the highest-quality supply chain that meets all established product performance standards and expectations. Our purchasing department maintains these high standards by continuously evaluating the performance of our established suppliers.

Comet's Supplier Code of Conduct (Supplier CoC) is based on the Code of Conduct of the Responsible Business Alliance (RBA) and sets out the basic requirements for our suppliers and external service providers regarding their responsibility toward their stakeholders and the environment. We reserve the right to amend the requirements of our Supplier CoC to reflect changes in our compliance policies.

In addition to supplier self-declaration in the form of the signed Supplier CoC, we work with third-party supply chain specialist Assent Compliance Inc. The Assent platform collects the data required to comply with REACH, RoHS, Conflict Minerals and TSCA. This solution provides

assurance that our suppliers are compliant with all relevant laws and regulations. Suppliers who do not submit data to Assent are contacted directly by us and requested to provide the necessary documentation. When appropriate, we work together with our suppliers to identify actions to achieve improvement. However, we reserve the right to terminate the business relationship with the supplier subject to applicable laws if the supplier fails to comply with the code, and we reserve the right to take legal action against the supplier.

The responsibilities for the processes are mapped in the Comet Group management system. Essentially, the specifications for materials compliance are made at the Group level by the Vice President of Global Operational Excellence (VP GOE), who reports directly to the CEO. The VP GOE defines the compliance regulations together with the Group legal experts. The responsibility for implementation in the regions rests with the divisions, and accountability for it lies with the respective country general managers. Materials compliance activities are coordinated worldwide within the Quality & Excellence Board.

Environmental Management System and Compliance

The principle of sustainability is an integral part of Comet's corporate culture. We strive to offer our customers high-quality products and services while avoiding environmental risks and producing in a resource-conserving manner. The principles of this approach are set out in the Comet Group's Quality, Environmental and Safety Policy, with supplementary information in the Code of Conduct.

While all our production and research and development sites are certified to ISO 9001:2015, only Yxlon International (IXS division) in Hamburg has designed and implemented an environmental management system in accordance with ISO 14001:2015. Smaller entities with only sales and marketing activities are not certified. To ensure compliance with environmental regulations, however, internal audits, customer and certification audits, benchmarking and best-practice applications are conducted at regular intervals at all production sites.

Comet plans to achieve one single Group-wide ISO 9001 and ISO 14001 certification by 2023. As most of Comet's major sites will be due for recertification in 2023, that year will be a natural opportunity to unify the quality management systems and achieve single certification.

The Vice President of Global Operational Excellence (VP GOE) is responsible for the performance of the Comet quality management system, including the process framework and architecture. The VP GOE drives the definition, implementation, and improvement of Group-wide processes in close cooperation with the divisions. Among other responsibilities, the VP GOE sets minimum standards for non-financial KPIs and ensures certification and compliance with ISO standards. In this function, support comes from various boards and councils, such as the Operations Council and the Quality & Excellence Board, which includes the Q&E heads of the divisions. Accountability for environmental compliance lies with the country general manager of each country, while responsibility for this topic lies with the division country manager. In the year under review, the Comet Group did not face any ongoing or completed proceedings for non-compliance with environmental laws or regulations. Likewise, no fines were imposed on the company.



Successful recertification of IXS

Two external auditors audited the management system of IXS in a total of 36 hours of audit meetings. IXS achieved recertification to ISO 9001:2015 and ISO 14001:2015. The certification has great importance for the division, as customers prefer to work with reliable partners who both operate according to a standardized management system such as ISO 9001 and are exemplary in terms of sustainability, compliance with environmental regulations, and resource-efficient systems and services (ISO 14001).

ISO certification of new production site in Penang, Malaysia

Comet has established a manufacturing operation for the PCT division in Penang, Malaysia, which was successfully certified under ISO 9001:2015 in September 2021.

Energy Management and Carbon Emissions

All steps of the Comet value chain involve energy consumption and associated greenhouse gas emissions. Electricity consumption dominates in the production and use phases of the products. Energy consumption and emissions in the upstream chain are also significant, especially in the production and transport of raw materials and semi-finished products.

Thus far, Comet has focused on energy management in its production and has adopted a decentralized approach, setting division- and site-specific environmental targets, providing the appropriate resources and structures, and regularly reviewing target achievement. With this annual report 2021, Comet has consolidated and reported Group-wide environmental KPIs for its production (Scope 1 and 2) for the first time.

Certificate of the Swiss Private Sector Energy Agency
Voluntary Climate Protection and Energy Efficiency



Environmental metrics ¹⁾		2020
Energy consumption (total)	MWh	15,787
Electricity (total)	MWh	11,571
of which renewable	MWh	8,283
Heating (total)²⁾	MWh	3,637
Natural gas	MWh	2,535
LPG/propane	MWh	1,102
Fuels (total)	MWh	579
Diesel	MWh	467
Petrol	MWh	112
Greenhouse gas emissions (total)³⁾	tCO₂e	2,923
Greenhouse gas emissions (total)		
Scope 1 (total)	tCO₂e	927
Heating	tCO ₂ e	774
Fuels	tCO ₂ e	153
Scope 2 (total)	tCO₂e	1,996
Electricity ⁴⁾	tCO ₂ e	1,996
Resource efficiency metrics ¹⁾		2020
Waste (total)	t	513
Water consumption	m³	21,151

¹⁾ Scope covers all of Comet's companies excluding Comet Solutions Taiwan Ltd., Comet Technologies

²⁾ Japan KK, Comet Technologies Korea Co. Ltd., and Object Research Systems (ORS) Inc.

³⁾ Does not include Comet Technologies USA, Inc., Shelton, and Yxlon X-Ray Equipment Trading Co. Ltd., Beijing.

⁴⁾ Calculations in accordance with the WRI/WBCSD Greenhouse Gas Protocol guidelines. Scope 1: GHG emissions from own sources, e.g., boilers and fuels. Scope 2: GHG emissions stemming from the production of electricity and district heating. Sources for emission factors: Defra & IEA.

⁵⁾ With the exception of Flamatt, greenhouse gas emissions associated with the production of electricity were accounted for in accordance with the 'location-based approach' under the Greenhouse Gas Protocol Scope 2 standard. No emissions stem from electricity consumption in Flamatt, as the site runs entirely on renewable electricity.

We are fully committed to developing a roadmap for our Group-wide production to become more energy-efficient and increase the share of green electricity in our energy mix. In a broader context, we also started to further refine the Group's approach to energy management and emission reduction.

For energy management and carbon emissions, the same management approach with the same roles and responsibilities is followed as described in the section on the material topic of "environmental management systems and compliance".

In order to achieve sustainable ongoing improvements in our electricity consumption and thus our environmental performance, we launch several projects each year to increase our energy efficiency.



Read more [about our efforts to use energy more efficiently](#)

Innovative HVAC design at Comet's Swiss headquarters

In November 2021, Comet and external project manager Alain Escher of Eicher+Pauli AG were announced as winners of the "4th Building Award", organized by the Swiss foundation for the promotion of young engineers in civil engineering, in the "Young Professionals" category. The award recognizes outstanding engineering achievements in the construction industry. As part of the 2018 expansion of the Flamatt site by the addition of a second building with an area of 18,000 square meters, a holistic, forward-thinking, cross-site HVAC energy concept for heating, ventilation and air conditioning was developed. As a result, Comet achieved greater flexibility of utilization, increased use of renewable energy and exhaust heat, and thus an all-round economical solution.



Beyond an overall reduction of 350 MWh in electricity consumption per year, Comet gained improved production reliability and better redundancies to ensure security of process cooling. In addition to the environmental benefits of the project, Comet supported a young building process engineer in the person of Alain Escher who is highly motivated to contribute to achieving the energy targets set by the Swiss government.



Certified renewable energy

In Flamatt, Switzerland, we have decided to rely exclusively on electric power from renewable sources. In 2020, we received a certificate from our electricity supplier, Group E AG, stating that it sources 100% renewable energy from European hydropower plants. The certificate is valid for the years 2020 to 2022. With this decision, we contribute to the conservation of natural resources and set a concrete example of a conscious approach to the environment.

Social

Employer Attractiveness

People are our most important asset. In view of the shortage of skilled personnel, particularly of research and development experts and engineers, we are expanding activities that support our visibility and attractiveness as an employer. Networking, attracting and retaining talented young people early on, during their studies, is therefore high on the agenda, along with identifying and developing diverse talents within the company and ensuring an attractive, flexible and inclusive work environment. We thus initiated a partnership with the University of Illinois Urbana-Champaign in 2021 to support students, invested in a workshop facility for training apprentices at the Swiss site in Flamatt and supported a research project at the Swiss Federal Institute of Technology (ETH) in Zurich. Since 2021, Comet also has a new program for the continuous and systematic identification and development of in-house talents. The general terms of employment were enhanced. In Switzerland in summer 2021, Comet received the Fair-ON-Pay+ certificate for gender pay equity.

The retention and engagement of our employees and their loyalty to the company play just as important a role as hiring new talents. We therefore periodically conduct market benchmarking and perform employee pulse surveys to monitor the level of satisfaction and engagement of our employees, and, when needed, initiate measures to strengthen it. In order to recruit new talents, we conduct needs analysis and regularly review policies and regulations, adjusting them as appropriate.

We also value the employee retirement experience. Our Human Resources team focuses on successful transitions, whether the employee is retiring or leaving the company voluntarily or involuntarily.



In 2019 and again in 2021, we conducted a worldwide engagement survey. This "pulse check" confirmed the good progress made toward becoming a higher-performing organization. The message from it was that we should continue on our chosen path and improve organizational development and, where necessary, improve organizational development and excellence in appropriate ways. For example, it was recommended to:

1. Continue to leverage go-to-market initiatives, such as a common Group framework for sales processes and the introduction of global sales training with one integrated, state-of-the-art training program
2. Focus on integrated talent management, improving talent acquisition in a very competitive market for top talents, developing and retaining our top talents and providing diverse career opportunities within the Group.

To address the latter thrusts, we implemented initiatives to develop talent, train apprentices in our own apprentice workshops, and offer progressive social benefits as an important part of our culture.

With respect to training, we provide our employees at all levels with regular vocational training in subjects such as quality and excellence, health and safety, product and sales, management and leadership. For example, 90% of our employees have completed at least one corporate compliance eLearning module. At the senior management level, we worked with the IMD business school to further develop as one company and one global team. A key focus was to strengthen and refine our culture, our values and our behaviors. We deepened our common values of trustful collaboration, of customer orientation and of challenging and empowering. Those values were then conveyed and reinforced in dedicated training sessions for 240 team leaders and, subsequently, by each of these leaders to their teams in workshops. In addition, Comet enabled sales training for 75 employees and provided corporate governance-related training for all staff. Comet also launched a new program in 2021 to systematically identify and develop talents already present in the Group.

Composition of the workforce	2021	
	Male	Female
Workforce by employment contract	1,191	380
Permanent	1,057	317
Temporary	134	63
Workforce by employment type ¹⁾	1,057	317
Full-time	958	250
Part-time	99	67

¹⁾ permanent staff only

Workforce by category ¹⁾	2021	
	Male	Female
Total	1,057	317
Production-related	577	134
Marketing and sales	150	64
General and administration	86	94
Research and development	244	25

¹⁾ permanent staff only

Turnover by gender ¹⁾	2021	
	Entries	Departures
Total	241	183
Male	179	145
Female	62	38

¹⁾ permanent staff only

Employee Health and Safety

Both our products and our manufacturing processes require appropriate attention and compliance with health and safety standards. The basic principles for this are set out in the Quality, Environmental and Health & Safety policy.

Occupational safety is ensured, practiced and documented in our management system, which covers all employees, without exception, including external/temporary service providers, i.e., anyone working on our sites and in our buildings. Depending on the location, the organization of health and safety is tailored to the size of the unit and the potential hazards. In all locations, the local laws and regulations are reflected in how we safeguard health and safety. In Germany, for example, these include the Occupational Safety and Health Act ("Arbeitsschutzgesetz") and the rules and regulations of the Social Accident Insurance system ("Deutsche Gesetzliche Unfallversicherung"), while in Switzerland, key norms are the ten points of the Federal Coordination Commission for Accident Safety ("Eidgenössische Koordinationskommission für Arbeitssicherheit", or EKAS).

Very importantly, besides these legal and regulatory requirements and the business continuity aspect, we also have an ethical and moral obligation to our employees. We have no higher priority than to protect the safety and health of those who work for us, and we strive to reduce the number of accidents to an absolute minimum. As notable examples,

the use of lasers and chemicals as well as the emission of ionizing radiation in our production processes require corresponding measures to protect our employees from exposure to those potentially dangerous sources.

Our management cares about the well-being of our employees and customers. The organizational units of our company and all employees are responsible for safety and health at work. We are committed to comply with the appropriate laws and safety standards and conduct annual audits, depending on location and exposure. Beyond this, we report deficiencies or violations immediately so that they can be remedied as quickly as possible or avoided in the future, and strive for improvements in safety at work.

Preventive measures are essential to us. Occupational health and safety are regularly addressed in training or development. Each employee should feel physically and mentally comfortable at work and in the work environment.

The achievement of and improvement in occupational health and safety objectives is ensured by continuous process monitoring and review of the effectiveness of these processes. Policies and guidelines are reviewed at regular intervals to ensure that the management system is up to date and effective. If necessary, they are amended. Such reviews are also and especially triggered by changes in customer requirements.

The responsibilities for health and safety are mapped in the Comet Group management system. Essentially, the country general manager ensures and is accountable for compliance with the local health and safety standards and procedures. Their implementation is the responsibility of the country division general managers.

Thanks to the deeply entrenched awareness of occupational health and safety in our Group, we had no fatalities in our factories in the year under review.



Occupational health and safety management in practice

Identifying work-related hazards and assessing related risks is of the utmost importance in reducing the number of accidents. In Switzerland, for example, a risk assessment is carried out by occupational physicians and other occupational safety specialists (“ASA specialists”). The risks are then classified according to the risk portfolio. To ensure the quality of these processes, a systematic revision of the portfolio is performed, and new jobs are integrated. The results then feed into the EKAS ten-point system for occupational health and safety management.

Should a work-related hazard or a hazardous situation still occur, employees and workers can report by means of the two-part “Safer card”. The first part is filled out by the employee or worker with his or her assessment, so that the hazard is immediately signposted. The second part is used by the manager to record a hazard report. The hazard must be eliminated within 24 hours. In addition, an employee may refuse to work if the situation is too dangerous for him or her, as Comet is committed to the safety charter of Suva, the Swiss Accident Insurance Agency (“Schweizerische Unfallversicherungsanstalt”).

If a work-related incident occurs, an investigation is carried out. When appropriate, a root cause analysis is performed with the involvement of external specialists.

Comet has issued and integrated into its management system a comprehensive portfolio of policies and guidelines for all types of hazards, notable examples being the Comet AG Safety Regulations, the guideline for external companies/contractors, and the guideline for dealing with non-ionizing radiation (NIR) and noise sources. Employees and workers are involved in the development, implementation and evaluation of the occupational health and safety management system through the application of element 8 of the ten-point EKAS, which deals with the inclusion of employees. The employees are included in the planning of measures, especially important when purchasing personal protective equipment. Upon joining the company, continual in-depth safety training is provided depending on the employee’s role. In addition, occupational health and safety is regularly addressed in training and development.

Occupational health and safety metrics ¹⁾	2021
Injuries ²⁾	35
Lost workdays due to work-related injuries	120
Lost workdays due to illness	6,739

¹⁾ Scope covers all of Comet’s companies excluding Comet Solutions Taiwan Ltd., Comet Technologies

²⁾ Japan KK, Comet Technologies Korea Co. Ltd., and Object Research Systems (ORS) Inc.

Injury arising out of, or in the course of work. Definition of injury according to local labour law (if applicable), otherwise according to internal organizational provision: recordable injuries only.

Responsible Supplier Standards

We are committed to provide our customers the highest quality supply chain that meets all established product performance standards and expectations. Our purchasing department maintains these high standards by continuously evaluating the performance of our established suppliers.

The Supplier Code of Conduct (Supplier CoC), which has been in force since January 1, 2021, is based on the Code of Conduct of the Responsible Business Alliance and sets out the basic principles and requirements for Comet suppliers and external service providers regarding their responsibility towards their stakeholders and the environment. The Supplier CoC covers the following topics:

- Compliance with the law
- Prohibition of corruption and bribery
- Fair competition conditions, antitrust laws and intellectual property rights
- Conflicts of interest
- Respect of the fundamental human rights of workers
- Prohibition of child labor
- Health and safety of employees
- Environmental protection
- Supply chain
- Materials compliance

By signing the Supplier CoC, our suppliers agree to abide by the principles and requirements of this Code in addition to their obligations under other contracts with us. We reserve the right to amend the requirements of the Supplier CoC to reflect changes in our compliance policies.

In general, we do not operate in business sectors or regions that pose significant risks, including risks related to child labor or to the respect for the fundamental human rights of employees. Concerning child labor, our suppliers certify that they do not hire workers who are less than 15 years of age (in accordance with ILO Convention 138) and that they comply with the domestic standards for the protection of children. Regarding forced or compulsory labor, our suppliers certify that they respect the fundamental human rights of workers, such as, among other aspects, refusing to hire or allow someone to work against their will.

To minimize the risk of violations of the Supplier CoC, we strive for long-term partnerships with reliable suppliers. However, if a supplier has knowledge of abusive behavior by the supplier or one of our employees, or if the supplier suspects such behavior, the supplier must inform us immediately. In addition, suppliers agree that we, the Comet Group, including our subsidiaries or designated agents (which includes third parties), may verify compliance with the Supplier CoC, including through audits, on-site inspections of facilities or the review of books and records. In case of a nonconformance, we follow the procedure set out in the ISO 9001 standard. When appropriate, we work together with our suppliers to identify measures to resolve issues. However, we reserve the right to terminate the business relationship with suppliers (subject to applicable laws) if they fail to comply with

the Supplier CoC. We also reserve the right to take legal action against them.

Other important elements of the Supplier CoC are social and environmental aspects. By signing the code, suppliers promise, for example, to:

- Promote equal opportunity and equal rights for employees regardless of color, ethnicity, national origin, social background, disabilities, sexual orientation, political or religious beliefs, gender or age
- Not tolerate any unacceptable treatment of workers, such as psychological violence, sexual harassment or discrimination, and
- Act in accordance with applicable legal requirements and international standards regarding environmental protection.

Diversity, Equity and Inclusion



Read more about how we encourage diversity of perspectives and develop talents

We see diversity, equity, and inclusion (DEI principles) and the belonging of all people as key to our business success. We believe that by embracing diversity, we are more successful in recruiting talent, better aligning ourselves with customers, increasing employee satisfaction, and providing a better, broader foundation for decision-making. Evidence shows that companies which cultivate diversity, equity and inclusion are more successful in the long term.

Our Code of Conduct as well as our equal opportunity employer guideline state that no employee may be discriminated against by the company or by other employees. We are strongly committed to providing equal opportunity in every aspect of employment. Discrimination against employees by the company or by other employees based on nationality, ethnic origin, religion, sex, age, sexual orientation or of any other protected characteristic is strictly prohibited. Two minor incidents of discrimination occurred in the year under review. In accordance with Comet's zero tolerance policy, the HR department discussed the incident with the persons concerned and issued warnings. In the event of a repeat incident, the employment relationship may be terminated.

All job applicants are treated fairly and judged solely on their merits. We strive to maintain a recruitment process that is open, honest and fair and to build a team that represents a variety of backgrounds, perspectives and expertise. Our recruitment choices are based on objective criteria such as skills, qualifications, experience and other capabilities relevant to the job. The more inclusive we are, the better our work will be.



Fair-ON-Pay + certificate

In 2020, Comet Technologies USA, Inc., as a frontrunner in the Group, created a Diversity, Equity & Inclusion Board with the goal of driving public awareness highlighting Comet Technologies USA, Inc. as a diverse, equitable, and inclusive employer recognized by top talent, as a go-to place for exciting career opportunities and growth potential.

Comet Technologies USA will focus its DEI efforts on organizational structure, role definition, advancement, communication, and instructor-led seminars. We believe the conscious pursuit of DEI and belonging will provide benefits in business growth (top- and bottom-line), innovation, time to market, employee and customer satisfaction, and attracting and retaining top talent.

Comet received the "Fair-ON-Pay +" certification for gender pay equity for the Flamatt, Switzerland, site in 2021. We are on the right track and are committed to do more in the area of diversity, equity and inclusion in order to realize our full potential as the Comet Group.

Diversity of governance bodies (gender) [%]	Male	Female	
Board of Directors	80	20	
Executive Committee	80	20	
Diversity of governance bodies (age) [%]	<30	30–50	>50
Board of Directors	0	20	80
Executive Committee	0	40	60

Community Engagement

Our innovative power is one of our success factors. By entering into targeted and meaningful collaborations, we let society share in our ideas, know-how and technological developments.

We believe that technology can improve education. But we also believe that, conversely, fair access to education improves technology, which provides sustainable progress, security and quality of life for all of us. This forms the basis of our commitment to acting in a socially and environmentally responsible manner.

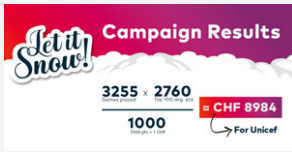
Our approach to community engagement is twofold:



Read more about our engagement for the local community

1. At the level of the Group: As a learning organization and a company with a long tradition of staff training and development, we pave the way to success for dozens of apprentices, interns and young professionals at any one time. Moreover, we support institutions that are committed to a similar mission in technology and education on a local and global basis. We also launch Group-wide initiatives such as our traditional fundraising before the New Year holiday season to support UNICEF in its educational program.

2. Our regional teams and sites involve themselves opportunistically at the local level in social issues such as the distribution of food during the pandemic, school projects, and support for flood victims. The impetus often comes from committed employees who are encouraged and supported in their activities by the local management.



UNICEF fundraising campaign

At the end of 2021 we launched the "Let it snow" campaign. The aim was to engage with all our stakeholders for a common cause: fair access to education for every child.

We invited our partners, suppliers, employees and social media followers to take a little time over the holiday season to play our online mini game. For every 1,000 points scored, we donated 1 Swiss franc to UNICEF to help improve education conditions worldwide. The game was played over 3,000 times and generated a sum of nearly CHF 9,000 donated to UNICEF.

Governance

Ethics and Compliance

Our Code of Conduct requires all employees to comply with all laws and ethical standards.

As part of the risk management process for which the Board of Directors is responsible, Group risks are assessed twice a year in the Audit Committee. The most important points are then also reported to the Board of Directors and discussed as part of the general business risks. Material risks are systematically identified and recorded in a risk matrix.

At Group level, policies, processes, training, monitoring and continuous improvement measures are in place to maintain the highest level of ethics and compliance awareness among the workforce. Currently, Comet focuses on the following areas: (i) data protection, (ii) code of conduct, (iii) anti-corruption, and (iv) anti-trust.

Accountability for the implementation of these topics lies with the country general managers, while responsibility for it rests with the divisions. Compliance officers report to the country general manager and support the divisions and sites in implementing the compliance requirements. Where necessary, adjustments are made in accordance with legal requirements. The responsibility for issuing rules and guidelines for other compliance topics such as health protection and occupational safety lies with the respective country general manager, and these are implemented by the country GM of the division to which the site is assigned.

These structures and efforts are reflected in the fact that, in the year under review, we were not involved in legal proceedings nor were issued significant fines resulting from non-compliance with any laws or regulations.

Trade Compliance

When selling our products worldwide, we comply with a wide range of foreign trade laws and regulations. Under no circumstances may exports, brokering, transit or transfer by persons acting on behalf of the Company violate those trade laws and regulations. To ensure this, Comet has set up and implemented a Trade Compliance Policy which is integrated in the company's management system, lists the essential requirements and defines the roles and responsibilities within the global organization. In addition, it is intended not only to promote and protect personal and corporate interests, but also to ensure compliance with regard to the various supply chains.

Under our management system, the country general manager is responsible for ensuring that trade in his or her country or region is conducted in accordance with Comet's Trade Compliance Policy and applicable regulations. The organizational design and implementation are the responsibility of the country general manager. In order to meet the specific trade compliance requirements, a trade compliance officer is appointed for each country. This officer is responsible for trade compliance and is supported by trade specialists. The trade specialists and the trade compliance officer have the authority to stop transactions. We reinforce trade compliance through annual training for the appropriate employees.

In 2021, we were not defendants in legal proceedings nor were issued any significant fines for non-compliance with trade-related laws and regulations.

Economic

Customer Loyalty and Satisfaction

The needs of our customers determine our actions. As a market leader in high-frequency power and x-ray technology we serve a wide range of customers, from global market leaders to SMEs. Regardless of our customers' size and business sector, we follow four basic principles in serving each one: Ask what problem really needs to be solved and why; inspire through our expertise; provide or co-create solutions with a clear benefit; and deliver what we promise, while saying early on when we cannot meet a need.

In order for us to deliver on these principles successfully, proximity and customer loyalty are crucial. Besides best-in-class products, a strong R&D organization, local presence with skilled sales and service teams in our key markets in Europe, North America and increasingly in Asia, another pillar supporting sustainable business relationships with our customers is our effective and efficient after-sales support.



SEMICON West 2021

We take every opportunity to stay in close contact with our customer base, in order to share ideas with customers and to understand and anticipate technological developments. This exchange takes place at various levels: in direct interactions between the account manager and the customer, in joint teams that solve specific problems, at trade fairs where we can present innovations from our portfolio, or at trade conferences such as SEMICON West. During SEMICON West 2021, we met once again with key customers of our PCT division, while also gaining detailed insights into the latest trends and growth opportunities.

The three divisions – PCT, IXM and IXS – are also responsible for measuring customer satisfaction. The approach to customer satisfaction surveys is not standardized at the Group level, as the customer structure differs between the divisions. The surveys are intended to help evaluate customer satisfaction by category (e.g., region), to identify possible negative influences on customer satisfaction (such as re-sponse time), and to draw conclusions about the expected influence on customer loyalty (e.g., through correlation analysis). In addition to quantitative methods such as tracking of account complaints, issue management, delivery performance, or re-order behavior and portfolio trends, qualitative methods are also used – for instance, customer interviews as part of key account management, and detailed customer surveys with selected major customers.

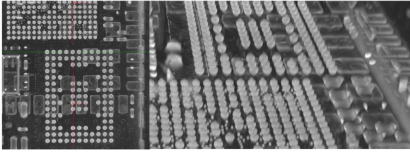
Product & Technology Leadership

Serving some of the most innovative customers, we manufacture products at the frontier of what is technologically feasible. With our forward-looking technologies, we strive to be the partner of choice to the most innovation-driven companies in our markets. And we work hard to defend and expand our technology and product leadership in order to remain among the leaders in our markets in the long term.

Product leadership is not defined by technology alone. Rather, achieving it is the result of implementing key strategic decisions such as gaining market leadership for selected products or a focus on standardized products (modular standardization). These strategic issues are regularly aligned with the Technology Committee of the Board of Directors.

To remain the product and technology leader in our markets, we invest between 11% and 13% of our sales in research and development each year. To ensure that these funds are used effectively and efficiently, we employ 242 people in R&D – or about 18% of our total workforce – with proven R&D specialists working at all organizational levels and in all functions.

We measure our targets in terms of market share, on which we collect and analyze data regularly based on internal and external sources. We use other key performance indicators to measure how successfully we sell newly launched products. With the exception of external market share data, these KPIs are presented to and discussed with the Executive Committee at quarterly business review meetings.



Read more [about the first inspection workflow for the semiconductor industry](#)

VoidInspect

Out of the collaboration of the X-Ray Systems team in Hamburg and the recently acquired software developer Object Research Systems (ORS) in Montreal has come a potentially game-changing new offering: VoidInspect, the first x-ray inspection workflow for the semiconductor and electronics market, was developed in 2021 and successfully completed its first customer deployment.

Product Impact

Our products can impact society and the environment in many ways. For society, our technologies play an essential role in the manufacturing of semiconductor chips and sensors that are the central building blocks of the digital world. And environmentally, the impact begins with the sourcing of raw materials and continues through the product use stage to the end of the product's life cycle.

For Comet, assessing environmental impact is becoming more and more important. This is partly because customers are increasingly looking for products that have as little impact on the environment as possible, and partly because, going forward, we will give even greater weight to this aspect in the selection of our suppliers in order to improve our own environmental footprint.

As of 2021, we did not prepare systematic life cycle assessments for our products. However, in our product development process, we take great care to develop durable products that can adapt to new requirements and thus need to be replaced less often. In the x-ray business, our products provide customers with solutions for non-destructive material testing and analysis. In the course of digitalization, this opens up numerous opportunities for us and our customers to optimize products and production processes and thus save resources.



How non-destructive testing enables the development and reliability of electromobility

The market penetration of electric vehicles is increasing rapidly worldwide. As an example, the share of electric cars in the total vehicle fleet in Western Europe is expected to rise from around 1% in 2020 to about 20% in 2030. As the market expands, so do expectations for performance and reliability, in particular for batteries. The inspection of components using x-ray methods is of great importance in the production process. It allows failure detection much earlier in development and production cycles, reducing downstream cost implications.

The x-ray systems from the IXS division and the x-ray modules from IXM are used for inspection in a wide variety of areas, such as cast parts, tires, battery packs, and the whole range of electronic components, including sensors.

- Large battery packs needed for the latest technology of EVs are examined with Comet x-ray systems to assure their reliability and long life. This dependability heightens the attractiveness of electric vehicles as a replacement for vehicles with combustion engines, which is accompanied by a reduction in CO₂ emissions. Another important application is the quality inspection of electronic components (e.g., sensors). Such components enable the safe operation of features and functionalities in the latest EV technology. All this minimizes additional development cycles, expensive recalls, and the opportunity cost of lost resources in ruined batteries and electronic components from destructive battery testing.
- Design and process optimizations are pursued with the help of x-ray systems in R&D applications to achieve optimum designs and process parameters and, as a consequence, maximum energy efficiency and performance in electric-motor components such as rotors and stators. For example, computed tomography allows the detection of porosities within conducting parts that impact their electrical behavior. Their design and manufacturing process can thus be optimized for peak performance. Once in production, the process is continuously monitored and improved based on the same data derived from CT inspection of the parts.
- Light alloy cast parts are also inspected early in the production process to find critical casting defects such as blowholes and porosities before the polishing and painting processes. This means less energy consumption because the later process steps can be omitted – also resulting in less use of chemicals in the recycling of defective parts, as well as a better raw material yield thanks to 100% re-use in the production process.

Product Quality & Compliance

The quality of our products and their conformity with all product-related regulations and directives are a fundamental element of our corporate culture and the basis for our business success. Our quality principles are an important argument for our customers. We are committed to providing our customers with high-quality products and services. Our products are competitive, defect-free, safe and environmentally compatible in their application and thus make a decisive contribution to the success of our customers. Therefore, we strive to avoid any risk

that could compromise quality. In addition, we are committed to continuous improvement that starts with the planning of new products, activities and processes. Our management sets division- and site-specific quality objectives, provides the appropriate resources and structures and regularly reviews achievement. Internal audits, customer and certification audits, benchmarks and best practice applications help to continuously develop the quality management system.

The process responsibilities are mapped in the management system of the Comet Group. Essentially, product quality and conformity are defined by the divisions, with responsibility assumed by the division country general manager and the accountability lying with the respective country general managers.

Operational Excellence

The Comet Group wants to become more efficient, more flexible, and faster. Our goal is to grow into a highly profitable company with CHF 1 billion in sales and clear market leadership in each of the markets we serve. A key lever in achieving this is the pooling of resources and strengthening of the organization. To this end, Comet launched an improvement program in 2019 involving all employees. Focused on global collaboration, we will continue to improve business and operational excellence.

Operational Excellence is a process set out in the management system, which provides the framework for making Comet a sustainable, high-performing organization. The Group function Quality & Excellence is responsible for the management system, including the process framework and architecture. Within this framework, the following tasks, among others, fall into this area of responsibility:

- Define/implement/improve Group-wide processes in close cooperation with the divisions
- Set minimum standards for non-financial KPIs for the Group and the divisions
- Monitor the state of the overall management system, and prioritize improvements
- Ensure certification and compliance with ISO standards throughout the Group
- Lead the Quality & Excellence Board to drive and support collaboration and execution between divisions and corporate functions

Target achievement is monitored on the basis of defined KPIs such as the number of successfully implemented improvement projects, automated availability of the selected KPIs, and the certification of all Comet sites to ISO 9001.

The Quality & Excellence Board acts as a committee for the person in charge of the Quality & Excellence group function. The Q&E Board supports the VP Global Operational Excellence in implementing projects and initiatives in the divisions and corporate functions.



Scrap reduction program in the PCT division

Together with the PCT department, the Global Operations Excellence function is working on a project to reduce non-conformance costs by increasing yields in the production of vacuum capacitors. The project has an immediate positive impact on profitability and customer satisfaction.

In 2021, non-conformance costs were brought down incrementally, and measures driving expected further reductions are to continue throughout 2022.



Line-detector array optimization at X-Ray Systems

In the X-ray Systems division (IXS), a growing market for large-scale computed tomography systems, such as the FF85 and the new UX50, requires more line-detector arrays (LDA).

The IXS team has prioritized LDA optimization as an operational excellence initiative in 2022. Results are expected to improve quality, meet customer needs and enhance business resilience.

GRI Content Index



For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. The GRI Materiality Disclosures Service was performed on the English version of the report.

UNIVERSAL STANDARDS		Further information
GRI 101	Foundation (2016)	
GRI 102	General Disclosures (2016)	
	1. Organizational profile	
GRI 102 – 1	Name of the organization	Comet Holding AG High-tech components, systems and services in x-ray and plasma control technology for steering critical processes in the semiconductor industry and for non-destructive testing and security inspection. The Plasma Control Technologies division and X-Ray Modules division use the "Comet" brand, while the X-Ray Systems division uses the "YXLON" brand.
GRI 102 – 2	Activities, brands, products, and services	Comet Holding AG, Herrengasse 10, 3175 Wünnewil-Flamatt, Switzerland
GRI 102 – 3	Headquarters	
GRI 102 – 4	Location of operations	
GRI 102 – 5	Ownership and legal form	
GRI 102 – 6	Markets served	North America, Asia, Europe; semiconductor, electronics, automotive, aerospace, security; all types and sizes of customers served
GRI 102 – 7	Scale of the organization	
GRI 102 – 8	Information on employees and other workers	Due to its product portfolio and global presence, Comet has several thousand suppliers. Supply chains are established globally or regionally, depending on the availability of materials. For many products, there are only a few suppliers worldwide. The internal Supply Chain Council promotes and develops common standards within the purchasing organizations. In addition, the SCC helps to unify the standard processes of the divisions into Group standards.
GRI 102 – 9	Supply chain	
GRI 102 – 10	Significant changes to the organization and its supply chain	No significant changes
GRI 102 – 11	Precautionary principle or approach	
GRI 102 – 12	External initiatives	Sustainability reporting under Global Reporting Initiative (GRI), membership in Responsible Business Alliance (RBA), voluntary participation in the Swiss Energy Agency Association (EnAW) program for climate protection (CO2 reduction) and energy efficiency SEMI (global industry association that encompasses the entire electronics manufacturing and design supply chain), EUROBAT, JIMA (Japan Inspection Instruments Manufacturers' Association), Swiss Malaysian Chamber of Commerce
GRI 102 – 13	Membership of associations	
	2. Strategy	
GRI 102 – 14	Statement from senior decision-maker	
	3. Ethics and integrity	

GRI 102 – 16	Values, principles, standards, and norms of behavior	
4. Governance		
GRI 102 – 18	Governance structure	
5. Stakeholder engagement		
GRI 102 – 40	List of stakeholder groups	
GRI 102 – 41	Collective bargaining agreements	Less than 5% of employees are covered by collective bargaining agreements
GRI 102 – 42	Identifying and selecting stakeholders	
GRI 102 – 43	Approach to stakeholder engagement	
GRI 102 – 44	Key topics and concerns raised	
6. Reporting practice		
		In general, the report covers the entire Comet Group and the fiscal year 2021. If only part of the company is meant (as an example, or due to the availability of data), this is clearly indicated. For the reporting boundaries in the consolidated financial statements, see section O2.4.1 of the notes to the consolidated financial statements
GRI 102 – 45	Entities included in the consolidated financial statements	
GRI 102 – 46	Defining report content and topic boundaries	
GRI 102 – 47	List of material topics	
GRI 102 – 48	Restatements of information	No restatements
GRI 102 – 49	Changes in reporting	No changes, first year of GRI reporting
GRI 102 – 50	Reporting period	Jan 1, 2021 to Dec 31, 2021; environmental data: Jan 1, 2020 to Dec 31, 2020
GRI 102 – 51	Date of most recent report	March 18, 2021
GRI 102 – 52	Reporting cycle	Annually, fiscal year from Jan 1 to Dec 31
GRI 102 – 53	Contact point for questions regarding the report	
GRI 102 – 54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option
GRI 102 – 55	GRI content index	
GRI 102 – 56	External assurance	No external assurance
TOPIC-SPECIFIC STANDARDS		
GRI 200	Economic	
GRI 201	Economic Performance (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 201 – 1	Direct economic value generated and distributed	
GRI 205	Anti-Corruption (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 205 – 3	Confirmed incidents of corruption and actions taken	None
GRI 206	Anti-competitive Behavior (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 206 – 1	Legal actions for anti-competitive behaviour	None
GRI 300	Environmental	
GRI 302	Energy (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 302 – 1	Energy consumption within the organization	
GRI 302 – 4	Reduction of energy consumption	
GRI 302 – 5	Reduction in energy requirements of products and services	
GRI 305	Emissions (2016)	

GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
GRI 305 – 1	Direct (Scope 1) GHG emissions
GRI 305 – 2	Energy indirect (Scope 2) GHG emissions
GRI 305 – 5	Reduction of GHG emissions
GRI 307	Environmental Compliance (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
	Non-compliance with environmental laws and regulations
GRI 307 – 1	
GRI 308	Supplier Environmental Assessment (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
	New supplier screening using environmental criteria
GRI 308 – 1	
GRI 400	Social
GRI 401	Employment (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
GRI-401 – 1	New employee hires and employee turnover
GRI 403	Occupational Health and Safety (2018)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
	Occupational health and safety management system
403 – 1	
	Hazard identification, risk assessment, and incident investigation
403 – 2	
403 – 3	Occupational health services
	Worker participation, consultation, and communication on occupational health and safety
403 – 4	
	Worker training on occupational health and safety
403 – 5	
403 – 6	Promotion of worker health
	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships
403 – 7	
	Workers covered by an occupational health and safety management system
403 – 8	
403 – 9	Work-related injuries
GRI 404	Training and Education (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
	Programs for upgrading employee skills and transition assistance programs
GRI 404 – 2	
GRI 405	Diversity and Equal Opportunity (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
GRI 405 – 1	Diversity of governance bodies and employees
GRI 406	Non-discrimination (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)
	Incidents of discrimination and corrective actions taken
GRI 406 – 1	
GRI 408	Child Labor (2016)
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)

GRI 408 – 1	Operations and suppliers at significant risk for incidents of child labor	Comet does not operate in businesses or regions that pose significant risks, including risks related to child or forced labor or to the respect for the fundamental human rights of employees
GRI 409	Forced or Compulsory Labor (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 409 – 1	Operations and suppliers at significant risk of incidents of forced or compulsory labor	Comet does not operate in businesses or regions that pose significant risks, including risks related to child or forced labor or to the respect for the fundamental human rights of employees
GRI 413	Local Communities (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 413 – 1	Operations with local community engagement, impact assessments, and development programs	
GRI 414	Supplier Social Assessment (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 414 – 1	New suppliers that were screened using social criteria	
GRI 419	Socioeconomic Compliance (2016)	
GRI 103: 103 – 1/103 – 2/103 – 3	Management Approach (2016)	
GRI 419 – 1	Non-compliance with laws and regulations	