

CSR Report 2019



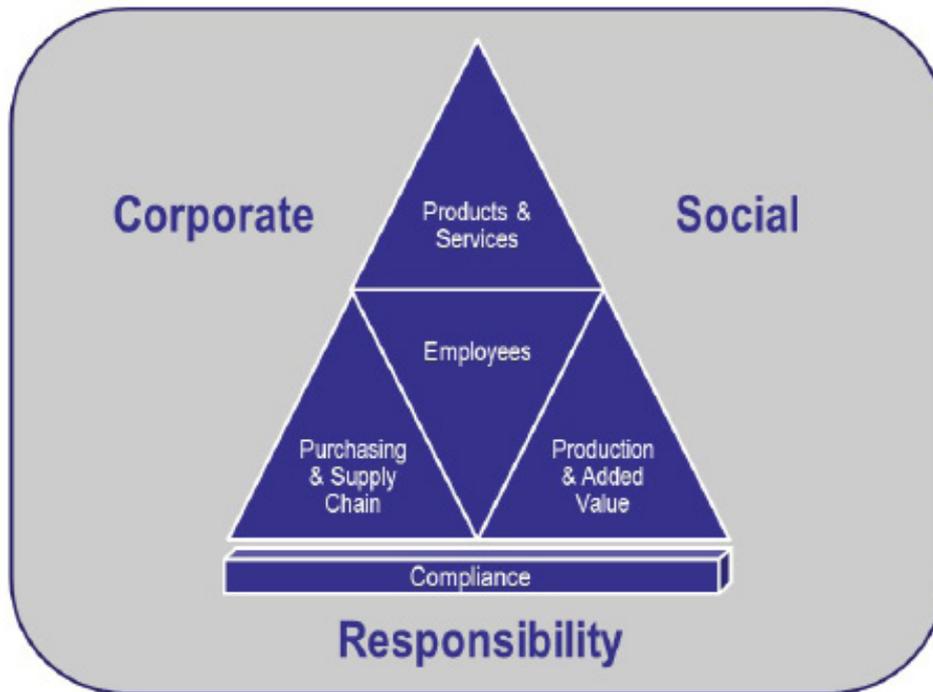


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INTRODUCTION

Carcoustics is an innovative, medium-sized company on a course of international growth. The company develops and produces acoustic and thermally effective components for the automotive and commercial vehicles industry. People may not be aware of Carcoustics' products. Yet without these products, passenger cars and commercial vehicles would be so noisy that we would certainly miss these insulating and damping materials.

But we are not only good at insulating engines and making loud things quiet. Our core competence lies in the ability of our experts to use their precise knowledge of different technologies and materials to find other uses for insulating products. By combining, forming and reworking materials, Carcoustics creates products that offer the very best combination of price, performance and quality.



Carcoustics brings together the concentrated expertise of central research centers in Europe, China and the USA, and a manufacturing structure that allows it to be in close proximity to the customers in all the world's major markets. This means Carcoustics can quickly and efficiently make the best benefits of new innovations available worldwide. The customers include major automotive and commercial vehicles manufacturers.

The company's success is attributed to the individual contributions made by each and every one of its 2,600 employees, both at the headquarter in Leverkusen, Germany, and its 18 other locations in Europe, Americas and Asia.

Carcoustics' Technologies

Carcoustics' six different manufacturing processes are one of the company's key success factors. These technologies can also be combined to create hybrid products that perfectly match with the customers' needs.

Aluminiumforming: Carcoustics' aluminium components such as heat shields and structural parts are used in a large number of automotive applications. Thanks to many years of experience in manufacturing and innovations, the individual requirements of the customers can be met.



Blow Moulding: When acoustic or thermal components require special geometric structures – for stiffening or sound absorbing resonators, for example – blow moulded polyurethane is often the best solution. Carcoustics is currently using the blow moulding technology primarily for engine and transmission enclosures in commercial vehicles.

PU-Foaming: Using polyurethane (PUR) and complementary materials, Carcoustics develops and supplies solutions that meet the complex requirements of intelligent and consumption-reducing insulation – such as noise insulation while simultaneously reducing weight.



Die Cutting: Several hundred materials specifically adapted to the application are used for Die Cutting, which are processed into several thousand different articles. This makes it possible to find the right solution for almost every problem.



Thermoforming: Thermoforming is perfectly suited for producing acoustically and/ or thermally effective components for e.g. paneling. By combining different materials, further functions such as structural load-bearing capacity, robustness and optical properties of the surfaces can be integrated into the component.



Vacuumforming: The range of vacuum-formed products includes not only classic single-layer components but also hollow bodies and assemblies. Carcoustics plays a pioneering role in the Twin-Sheet process. Using this special process, a highly automated manufacturing facility can produce particularly lightweight and flexible air ducts which improve acoustics in the passenger compartment.

CORPORATE SOCIAL RESPONSIBILITY AT CARCOUSTICS

One of Carcoustics' core competences is making vehicles quieter and lighter – which is the very first and really important point in which Carcoustics makes a significant contribution to environmental aspects: by helping to reduce noise and emissions due to the weight of a vehicle.

But furthermore, as an economically successful company, Carcoustics is also aware of its Corporate Social Responsibility (CSR). Within the last years, Carcoustics increased its activities regarding CSR – in the fields of its products and services, production and added value, purchasing and supply chain as well as regarding the topics of Compliance and employee responsibility.

Until now, these activities and behavior as well as the existing guidelines were not documented but actively lived at Carcoustics. From now on, Carcoustics also will show and demonstrate its attitude regarding CSR within a yearly updated CSR report which includes the above mentioned topics.



Interview with the Management Board of Carcoustics

1. Why is Corporate Social Responsibility such an important topic now and for the future?

Frühauf: The global population is growing. At the same time a bigger part of the population can afford and asks for individual mobility and other products. So the demand for resources continues to rise worldwide which endangers their future availability. So the question arises: how can we use our resources more wisely in a sustainable way? This question must be answered by each individual, but also by every company, especially in manufacturing. As a company we have a responsibility for our environment. Recent debates and actions show that society and especially the young generation demands for explanations, how this "social responsibility" can be put in practice. This is why we at Carcoustics decided to create and to publish a CSR Report.



f.l.t.r. Georg Brasch as the Chief Financial Officer is responsible for the CSR topics Compliance and Purchasing. Kai Uwe Frühauf as the Chief Executive Officer of Carcoustics is responsible for the CSR strategy and Human Resources. Martin Berndt as the Chief Operating Officer of Carcoustics is responsible for CSR within the Operations area.

2. Why is CSR important especially for Carcoustics?

Berndt: As an automotive supplier we are a main part of the overall supply-chain of our customers. We therefore play a key-role in making individual transportation more sustainable in the future. We can improve efficiencies with regard to the usage of energy and raw materials. But also our products, services, the employees and other topics are important. Besides, as a top employer we want to attract the best talents. These employees demand an employer to provide answers to above questions. That's why in our manufacturing plants we constantly try to reduce energy use and waste by more intelligent processes.

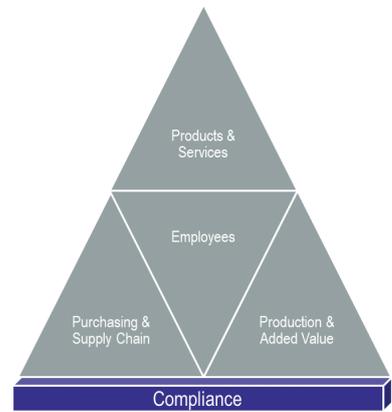
3. In which aspects is Carcoustics already working on CSR topics?

Brasch: With our Compliance guideline we already have a strong foundation for CSR topics. Furthermore, we already included various aspects in many of our company guidelines, behavior and activities without pronouncing it as a CSR project so far. So it is time to summarize all existing points as well as our CSR plans for the future. This is why we have structured this report into four main chapters including our products, our suppliers, our production and most important our employees. You can read that in the different chapters of this report.

4. How will Carcoustics make sure that CSR will further be lived within the whole Carcoustics Group?

Frühauf: First it was important to get a clear picture of the status quo, which this report is providing. Based on the gathered data we will use the coming year to analyze our strengths and also our weaknesses so that we can derive defined measures to improve our sustainability. By reviewing our achievements in the different areas every year within the scope of the report, we make sure that there is an awareness of these topics and progress in developing further. We want to strategically include CSR in our company culture and our defined values.

The whole management board gives its fullest commitment to focus on CSR topics and include these in Carcoustics' company culture.



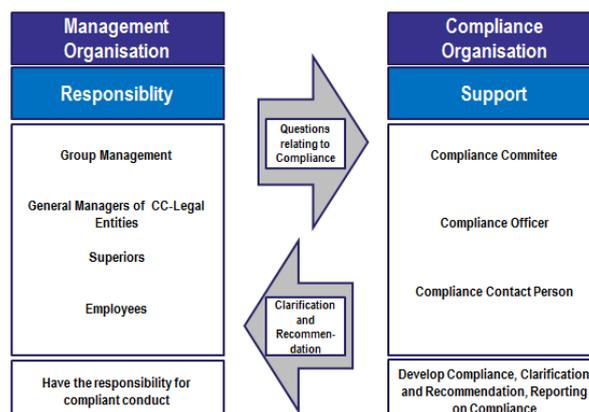
COMPLIANCE

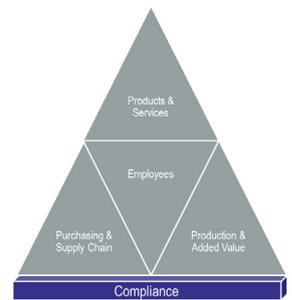


The goal of Compliance at Carcoustics is to ensure that Carcoustics employees comply with the rules in place and the applicable legislation. This enables the company and its employees to avoid negative consequences and helps to maintain our trustworthiness and reputation as a reliable business partner.

Responsibilities and Organization

The responsibility for Compliance lies with the management of the Carcoustics Group. A Compliance Officer for the Group and a local Compliance Contact Person for each legal entity have been appointed. They work to develop the Compliance Organization, and are the first point of contact for any questions, issues or clarifications needed. In addition, they compile and aggregate Compliance issues and propose recommendations to decision makers. They report on Compliance in regularly held meetings. External consultants may be asked to get involved if necessary.





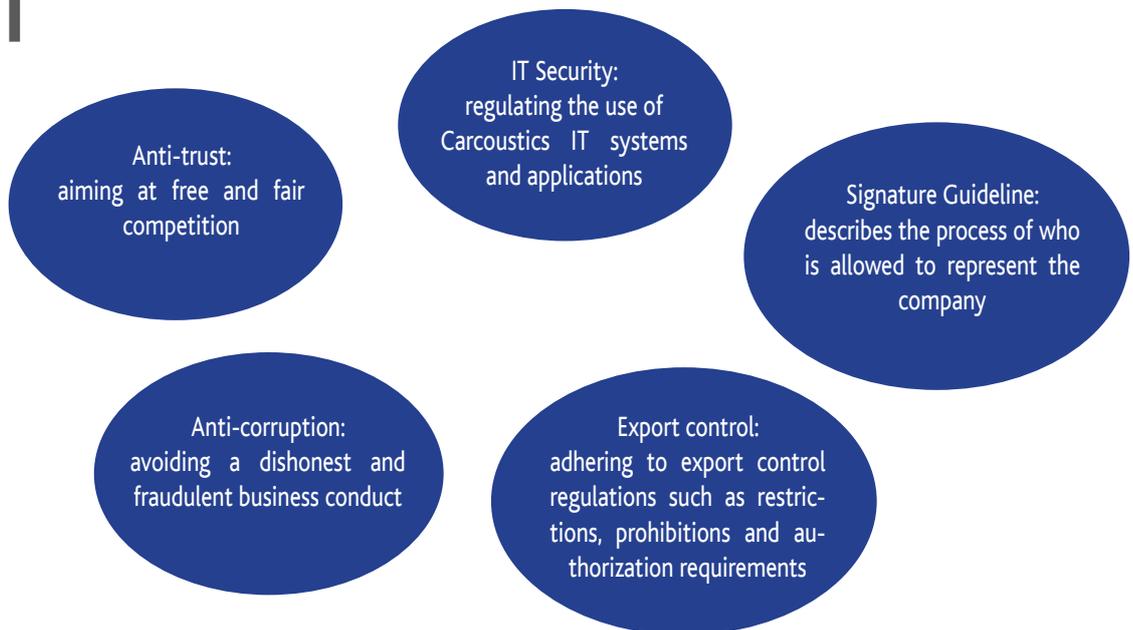
A Compliance Committee is in place and is represented by the Compliance Officer, an experienced manager with operating responsibility and the Vice President of Human Resources. The Compliance Committee is always active if topics or issues that are being assessed by the executives and the local Compliance Contact Person require additional, possibly group-wide coordination. The Compliance Committee issues recommendations to superiors and employees and may call for more in-depth investigations.

Compliance Trainings

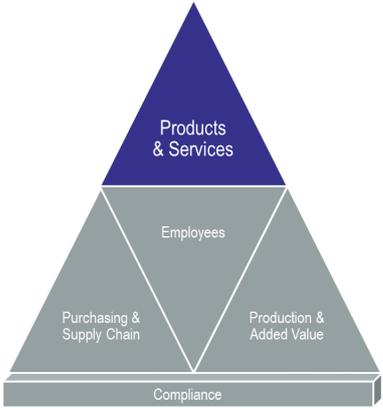
In addition to this support role, Human Resources coordinates Compliance training sessions. A training schedule is available and lists the trainer – either an external expert, the Compliance Officer, the Compliance Contact Person or export control manager. Superiors conduct further training if their employees have not participated directly in the general training sessions. Furthermore there is an e-learning course including a test with multiple choice questions which has to be completed by new employees and regularly by our existing staff. The results of the tests are being tracked.

Compliance Topics

The topics covered by the Carcoustics Compliance process are the following:



As part of being compliant, Carcoustics is reviewing every new employee and checking if they are on the Consolidated List of Persons to sanctions.



PRODUCTS & SERVICES

Carcoustics Core Competencies

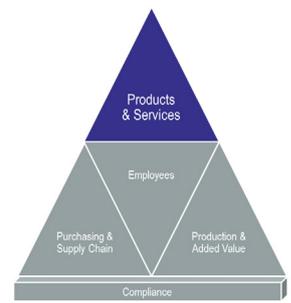


The major challenges of the global OEMs at the same time are weight and noise reduction, comfort improvement, increasing efficiency / reducing emissions, total cost reduction, global platforms with high model capacity and innovative solutions for powertrains.

Carcoustics' core competencies are making loud things quiet, heavy things light, voluminous things compact, hot things cold, wet things dry or find the optimum

between flexible and rigid. By this, the company meets the named challenges and comes to customer-oriented solutions which include innovative solutions to reduce weight, improvement of interior acoustic, improved thermo management for better fuel economy, customized solutions for hybrid and fully electric vehicles, global production with several batch sizes just in time as well as competitive pricing, fast delivery and high quality.

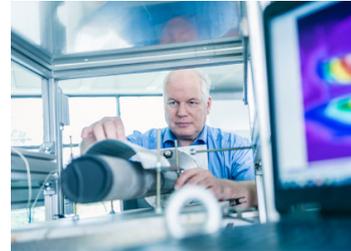




Carcoustics TechConsult

The Carcoustics TechConsult is an innovative problem solver that supports the Carcoustics Group on its growth path worldwide. The central research centers in Europe, Americas and Asia allow an individual, innovative product development close to our customers.

It is divided into the areas of Acoustics and Thermodynamics and Material Laboratory. Whenever particularly demanding solutions are needed for acoustics, insulation or damping the Acoustics and Thermodynamics team with a knowhow and experience that was built up over decades are the right specialists. Qualified tests and simulations make it possible to guarantee results quickly and in a high quality.



The Material Laboratory is responsible for the preparation and management of all material specifications of the Carcoustics Group. Material specifications are not used only to uniquely identify a material in series. Material data sheets can also be created from the material specifications, which Carcoustics can pass on to its customers.

With colleagues from the Carcoustics TechConsult, new and innovative solutions are constantly being developed and tested to meet the increasing demands of the customers. Tailor-made prototypes can be made by the in-house prototyping teams. The sustainable use of resources such as fuel, electricity and water is at the center of attention and at the same time puts a strain on the topic of noise emissions. The demand to produce every quieter vehicles repeatedly challenges Carcoustics and its customers with the challenge of saving weight and conserving resources or reducing noise emissions, thereby reducing the weight of vehicles. With the TechConsult as the company's internal competence center, Carcoustics has extensive know-how in the selection of materials and designs and can set apart from competitors.

Carcoustics TechConsult

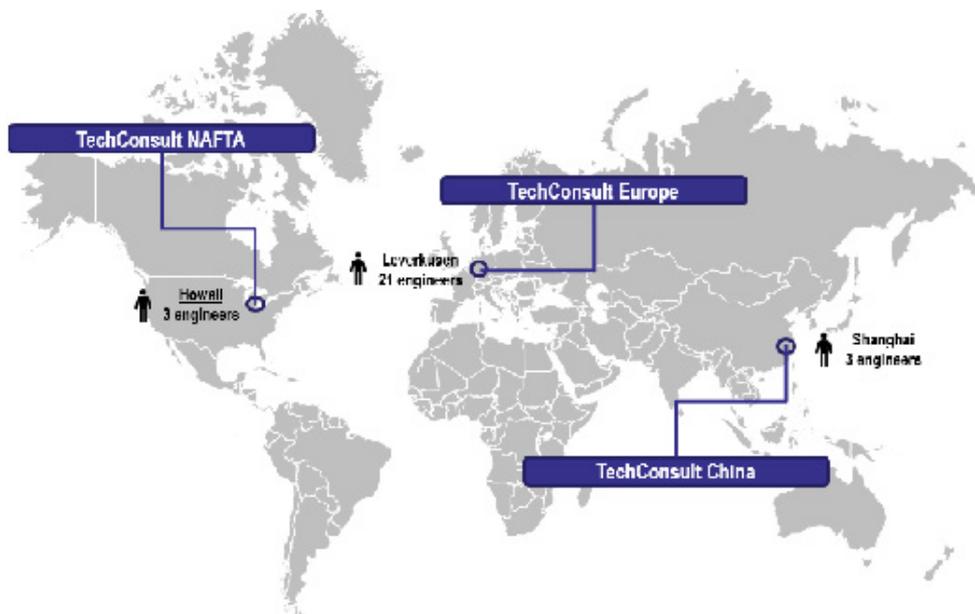
Central laboratory	Acoustics & thermodynamics
<div style="display: flex; justify-content: space-around;"> </div> <ul style="list-style-type: none"> • Material selection, material development • Environmental simulation, analysis • Worldwide responsible for: <ul style="list-style-type: none"> ◦ International Material Data System (IMDS) ◦ Conflict Minerals Report (CMR) ◦ Material specifications 	<div style="display: flex; justify-content: space-around;"> </div> <ul style="list-style-type: none"> • Acoustic examination • Thermodynamic and air flow mechanic examination • Acoustic and thermal simulations
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> </div> <div style="width: 65%;"> <ul style="list-style-type: none"> • Benchmarkings / Tear Downs • Trainings • Patent Department: <ul style="list-style-type: none"> ◦ Worldwide central contact point for patent claims by the Carcoustics Group ◦ Examination of inventions on their patentability and on their benefits for Carcoustics ◦ Cooperation with inventors, development managers, business unit managers, innovation managers and an external patent attorney </div> </div>	

The concept of the Carcoustics TechConsult was started in Carcoustics' headquarters in Leverkusen and expanded to further TechConsults in the Asian and in the NAFTA region in 2018.

Thereby Carcoustics wants to be present close to its customers in all its markets with a development centre.

One TechConsult was 2019 built up in Shanghai which is the economical centre of China and all important regions of China are quickly accessible.

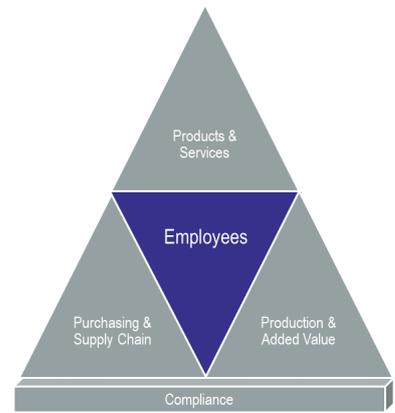
Another TechConsult was integrated into the already existing Carcoustics location in Howell in 2018 and is already involved in various projects to optimize and develop customer-oriented solutions as well as to support the departments as sales or purchasing.



Carcoustics and alternative powertrain concepts

The area of application of Carcoustics products depends to a large extent on developments in the automotive industry. The trend towards alternative drive concepts therefore plays a major role. Carcoustics products are solutions for all drive concepts. Current developments confirm that the product variety of Carcoustics for alternative drives will continue to increase. In addition to acoustic measures, these new vehicle concepts also require thermal insulation and lightweight concepts. Carcoustics has already developed concepts for several OEMs for the encapsulation of electric motors or climate compressors up to series production readiness.

In addition to its components for vehicles with alternative powertrains, Carcoustics' solutions for common powertrain vehicles have an impact on CO2 reduction as well. As one of the core competencies lies in weight reduction, Carcoustics can make a vehicle much lighter and therefore reduce the CO2 emission of the vehicle.



EMPLOYEES AND SOCIAL RESPONSIBILITY

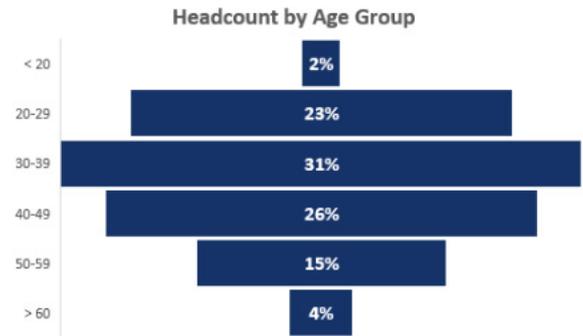
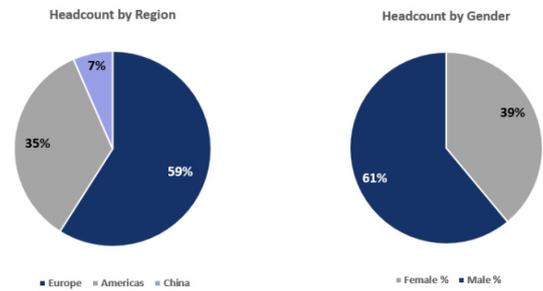
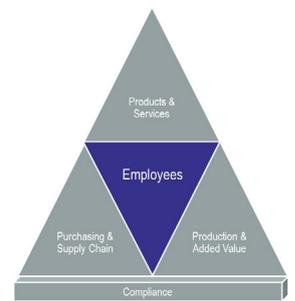
Employees

Carcoustics employees are the most important asset in the company. Especially considering the company's growth path, its staff is the most essential factor for success. Carcoustics has a focus on the defined corporate values: Enthusiasm, Sense of Responsibility, Unconventional, Solution-oriented, Perspective for Added Value, Appreciation and Respect, Collaboration, Flexibility and Learning Attitude. Currently, Carcoustics has 2,600 employees in 19 locations and 10 countries. Moreover, the company strives in developing Young Talents by offering apprenticeships, internships, dual student positions and trainee positions and is happy to be able to develop many of our "Young Talents" into permanent positions.



Employee Diversity

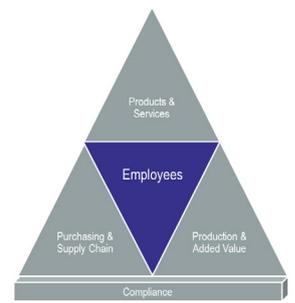
For Carcoustics as a company with a global footprint and diverse & international teams working together on a daily business, diversity and non-discrimination plays an important role. Having a diverse workforce is a key factor to the success of Carcoustics.



Training and Development

As part of the company values, lifelong learning is expected by the employees. Continuous development is crucial in order to be prepared for new challenges and the changes in the environment. Carcoustics strives to develop its own staff to allow them to go the career path they aim for.



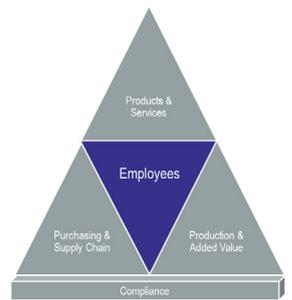


As part of the company development program, Carcoustics presents the program “Ways” to its employees which shows potential career paths in the three main areas “professional career”, “leadership career” and “project career”. There are various examples of employees who built their careers at Carcoustics and it is the goal to continue to support the employees in their goals.



With the initiative “Win a Talent” where all job openings are posted internally to encourage the employees to apply for positions and refer people outside the company for open positions we pursue two goals. First of all, to increase the internal promotion rate to foster the development of our employees and thus to increase employee satisfaction and secondly to use the best resource for recruiting: our employees. They know the company and can evaluate if someone could be a fit for our organization.

In order to further promote lifelong learning, an access to an external e-learning provider is offered to our employees since 2019. Its library encompasses 8000+ courses on topic areas like business skills and technology but also on safety and compliance which helps the employees to develop a greater awareness for the importance of these issues. By offering access to the platform, employees can proactively search for interesting trainings online and develop their personal as well as functional skills. This is another step into digitalization of our processes.



Employee Benefits and Satisfaction

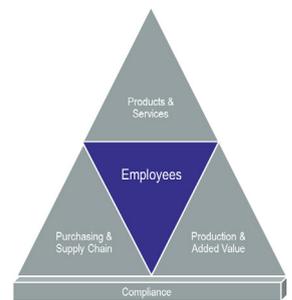
Carcoustics offers its employees great benefits and provides fair remuneration and is proud of all the benefits to offer to its employees to satisfy their needs.

During the last year, Carcoustics further improved its flexible time schedule for salaried employees in order to improve their work-life balance. By allowing home office to a large number of employees, they can better adapt to personal needs and life style. Moreover, several employees make use of the Sabbatical program to take some time off for their personal desires.

Every year, Carcoustics reviews the salary & benefits structure not only internally but externally to the market and makes adjustments where necessary. Therefore, the company receives market reports for every single country it is acting in to ensure that a payment not just above legal regulations but also above market is continued.

Further improving the benefits and employee satisfaction and retention is an essential goal of Carcoustics' human resources and talent management strategy. In addition to receiving internal feedback, the company continues to compare its processes to other organizations. Carcoustics takes great pride to be able to compare to bigger companies in receiving several awards, such as "Top Employer Automotive Austria", "Top Employer Automotive Germany", "Great Apprenticeship Training Facility Austria" and "Family Friendly Company". This is helpful to identify areas of improvements, which can then further be worked on.





Feedback and Performance

A culture of feedback and evaluation of performance is an important part of the development of Carcoustics' employees. Only by giving feedback, people know which areas they perform well and which areas they need to further work on.



One tool for managers and specialists is the target agreement. In the beginning of every year, individual and group targets are created in a workshop, which are derived from the company balance score card. In the workshop employees talk about the goals as well as what is needed for being successful in the area. We review the targets at least two times a year to ensure the success. An additional benefit for the employee is the bonus payment according to target achievement in the beginning of the following year, which helps our strategy "pay for performance".

In the employee appraisal process, the employees receive feedback about their performance and their behavior according to the company values. In the appraisal meeting they further discuss career perspectives, development goals of the employee and the employee gives feedback to the managers on their managing style.

360°-Feedbacks are conducted on the needs-oriented basis. Employees receive feedback from different stakeholders within the organization. This feedback helps the employees in their development by enabling them to build on their strengths and work on their development fields.

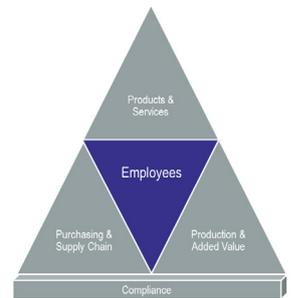
Talent Management is a priority for the top management at Carcoustics.

Therefore, talent conferences are held in order to identify high potentials as well as high performers, to discuss potential career paths and development options for the individuals and finally to create a common understanding of the Young Talents at Carcoustics and increase the focus on developing these.

Health and Safety

Carcoustics is committed to provide a healthy and safe work environment to its employees and any other person interacting with the company. The goal of the Health and Safety program at Carcoustics is to prevent accidents, injuries or illnesses before they happen. In order to have an external check on the Safety Program and to get feedback about best practice and how to further improve, Carcoustics has started in 2019 to prepare in two locations (Novaky, Slovakia and Klaus, Austria) for the ISO 45001 (Health & Safety Management System) Audit and successfully received the certification for our location in Novaky, Slovakia and we expect Klaus, Austria to follow in the beginning of 2020. For the future, it is planned to get all locations certified according to ISO 45001.





The programs in different locations include many different measures starting from a company doctor, offering vaccinations and voluntary health evaluations up to regular meetings including not only the management team but also team members from different areas.

When accidents happen despite the measures in place, Carcoustics does not only track the number and the type of accident but identifies preventive measures and works on them immediately. In 2019, a new reporting structure and a new process to share lessons learned from accidents and near-misses within the company were implemented.

Overall in 2019 Carcoustics had 35 accidents (with absences > 3 working days). Needless to say, the goal is to further reduce the number of accidents by taking preventive measures. As an example, a new process for all Carcoustics locations to share their accident and near miss reports and all lessons learned including the corrective actions was implemented in 2019. This will help Carcoustics locations to learn from each other.

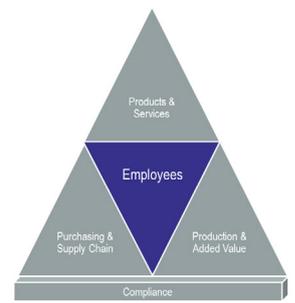
Social Engagement

Carcoustics believes that not only it is important to deliver great quality to the customer, but also to be aware and to contribute to their environment and society. The company's locations manage activities independently and with different focus areas as deemed most important locally.

The concept of having the locations decide themselves will further enhance their engagement in contributing to society. Therefore some locations might focus on awareness for disabled persons by hiring disabled candidates who otherwise struggle to find a job or supporting institutions for mentally disabled persons. Other locations focus on children problems, such as sponsoring language classes for children and supporting institutions for psychological consultations for children. The headquarter in Germany started a project to support refugees in the area to start a job at Carcoustics. Many locations support their local cultural program or local social institutions either by donating or creating special events to bring awareness to the topic as well as contributing themselves in the institutions.



Carcoustics Leverkusen fulfilling deprived childrens' Christmas wishes by supporting the "Sterntaler" campaign in 2019.

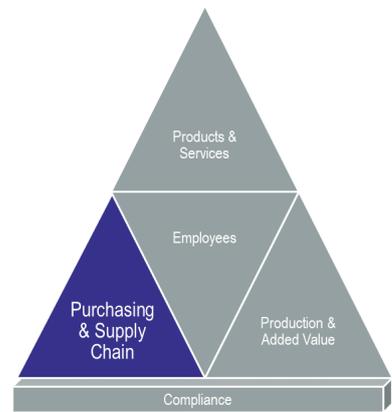


The educational mission that a company has is of great importance to the management of Carcoustics. This is reflected in the "Young Talents". In all Carcoustics locations students not only from universities but also schools are offered different opportunities to gain experience in the field: by offering internships, support students in writing their study thesis or by inviting them to experience a day in the company to be able to help decide about their careers. Also, not only boys are encouraged to go for the technical career but especially girls are supported by offering the "Girl's Day". Furthermore, apprenticeships as well as the opportunity to complete dual studies in the locations in Rankweil and Klaus, Austria, as well as in Leverkusen, Germany, are offered.



Carcoustics is awarded for being a particularly good training company by the Chamber of Industry and Commerce Cologne (Industrie- und Handelskammer Köln) 2019.

Moreover, these social contributions are promoted in the internal and global company newsletter "Fit For Future", with the intent of motivating other locations to think about if such a contribution could also be of interest in their location as well as inspire them for new ideas of social engagement in their location.



PURCHASING & SUPPLY CHAIN

The Carcoustics team for Gopal Purchasing and Supply (GPS) is globally responsible for all our Production Material (PM) as well as the Non Production Material (NPM). For Production Material and machines as well as tools there is a defined strategy for all our locations. This strategy includes that all of Carcoustics' suppliers for Production Material need to be evaluated – before they are commissioned and regularly during the duration of the cooperation. The assessment of the environmental management system and the distance to the respective Carcoustics location is one aspect of the supplier evaluation.



Furthermore, all of Carcoustics' suppliers (as well as employees) are scanned regarding the export control regularly: A tool automatically scans any changes in the supplier list as well as in the official, public sanction lists and matches the lists with each other. By this it is made sure that none of the suppliers is listed in a sanction list.

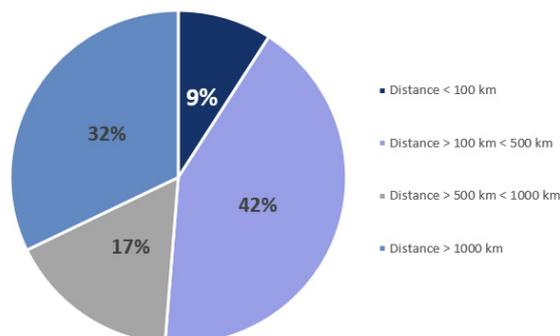
The purchasing conditions give a guideline for all Carcoustics suppliers. These conditions include that the company only buys from suppliers who:

- Respect human rights: no human trafficking, no forced or child labour, no discrimination, freedom of association
- Respect labour law: binding to collective agreements, fulfilment of working time, safety and payment and neither corruption nor bribery
- Respect environmental laws (economical use Of resources, recycling)
- Respect all Compliance principles, especially Anti-Corruption, export control and antitrust

Until now Carcoustics never got aware of the breach of these conditions by any of its suppliers. Nevertheless in all supplier evaluations and assessments these are core topics. If a supplier does not meet these requirements the cooperation will be stopped as soon as possible.

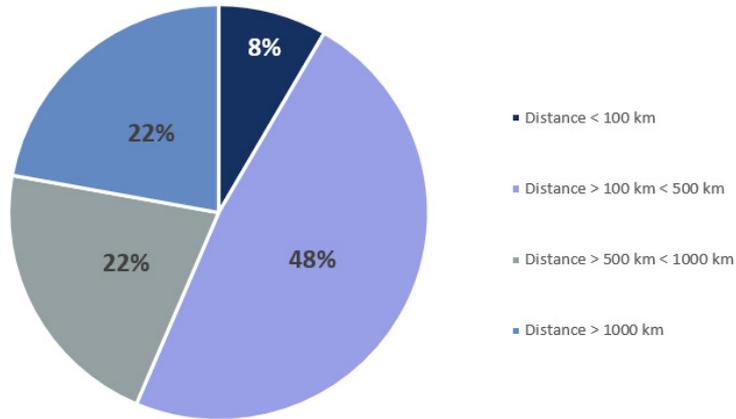
As a part of the CSR Carcoustics is trying to reduce the emissions generated by the transport of its production material. The result for the whole group is displayed below:

Total Supply Volume in relation to distance

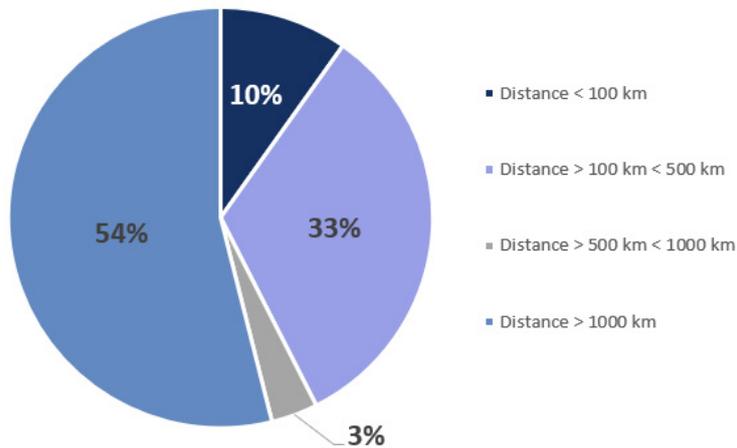


The detailed analysis of the distance of the suppliers to the production plants is displayed for all relevant regions can be found in the figures below:

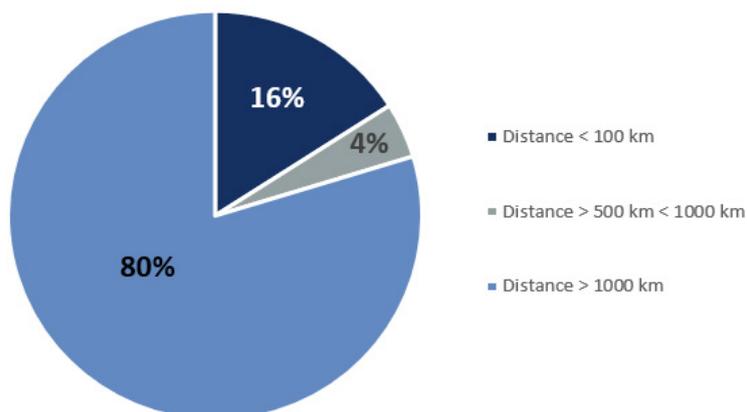
Europe Supply Volume in relation to distance

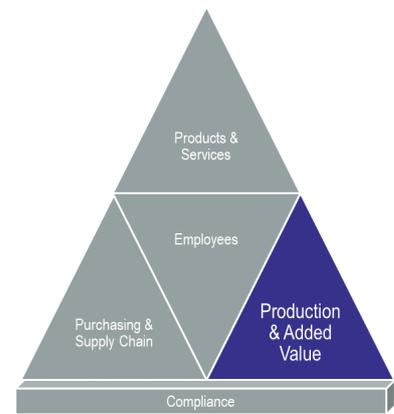


Americas Supply Volume in relation to distance



Asia Supply Volume in relation to distance





PRODUCTION & ADDED VALUE

Policy

The framework of the Carcoustics Quality- Environmental and Occupational health and safety Management System is the corporate policy. The entire Carcoustics Group is committed to the policy and the target setting is synchronized. Within the yearly Management Reviews, the adequacy and validity is checked by top management.

Certified Management Systems

The certified Carcoustics Integrated Management System (IMS) contains the following norms and standards:

Management System	Standard / Norm	3 rd party certification	Certification scheme and scope
QMS Quality Management System	IATF 16949:2016	TÜV Rheinland Cert GmbH	corporate
EMS Environmental Management System	DIN EN ISO 14001:2015	TÜV Rheinland Cert GmbH	corporate
OH&S Occupational Health & safety	ISO 45001:2018	TÜV Rheinland Cert GmbH	Corporate 5/ 2020
EMS Energy Management System	ISO 50001:2018	TÜV Rheinland Cert GmbH	German facilities
Compliance	Corporate Carcoustics Standards	na	na

Environmental Aspects within the Carcoustics Group

Within the defined scope of the Integrated Management System, Carcoustics determines the environmental aspects for:

Pre-operational aspects

- Suppliers & purchased goods (e.g components, machines, materials, etc.)

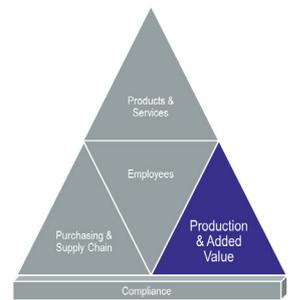
Direct operational aspects

- Input of resources (e.g. energy, water, etc.)
- Emissions (e.g. noise, dust, solvent, CO2, etc.)
- Sewage water
- Waste

Post-operational aspects

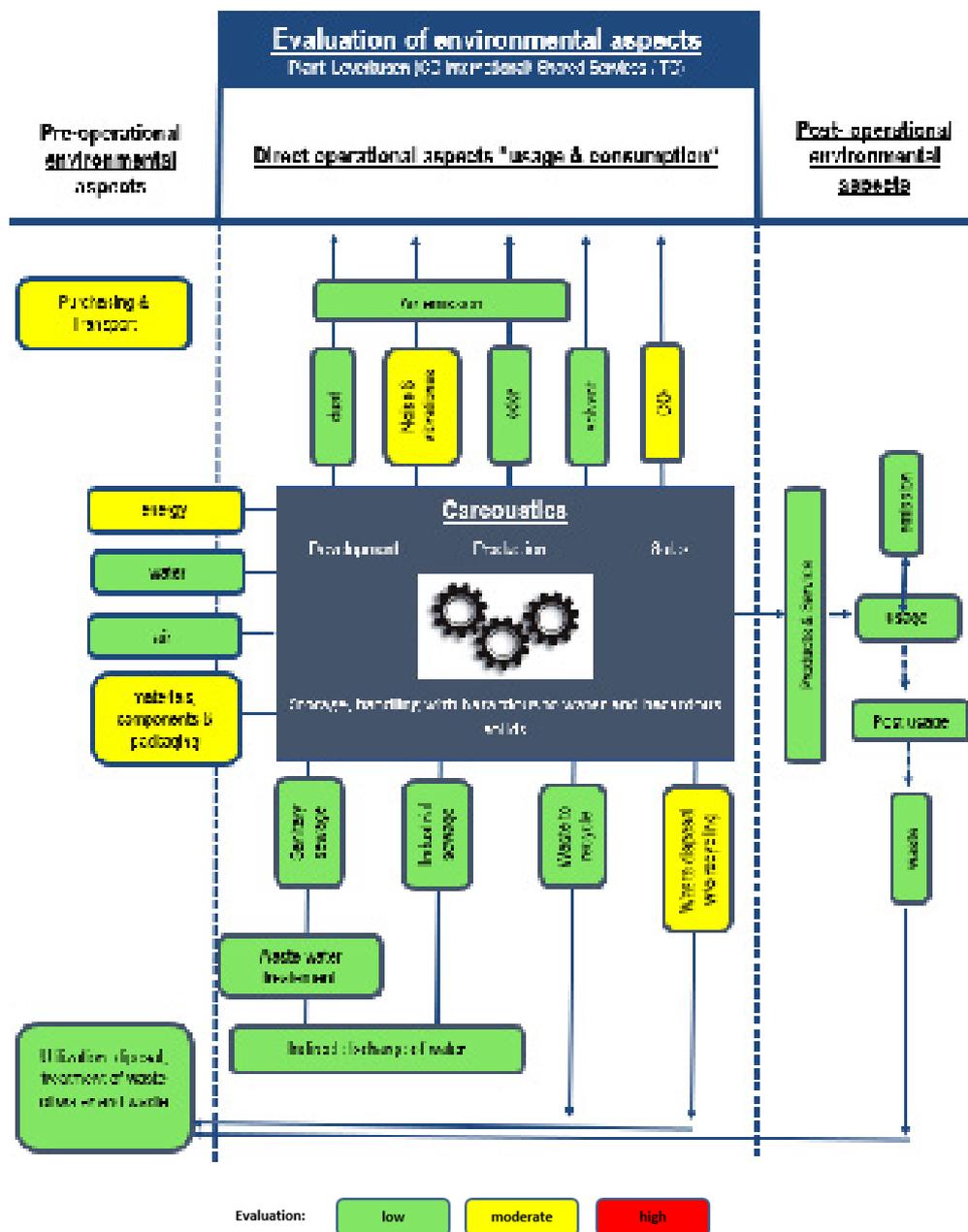
- During usage of products
- Post usage of products

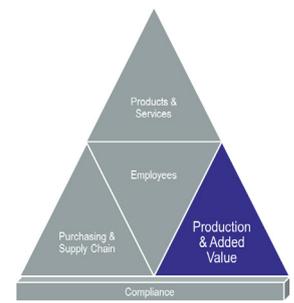
A re-evaluation of all aspects is part of the yearly Environmental Management Review and after occurrence if important changes or incidents.



The illustration below shows the overall evaluation of environmental aspects on a corporate level with the following classification:

- „green“ means „low“ environmental aspect and no urgent measures requested
- „yellow“ means „moderate“ aspect and measures have to be determined within improvement plan
- „red“ means high environmental aspect and immediate measures have to be determined

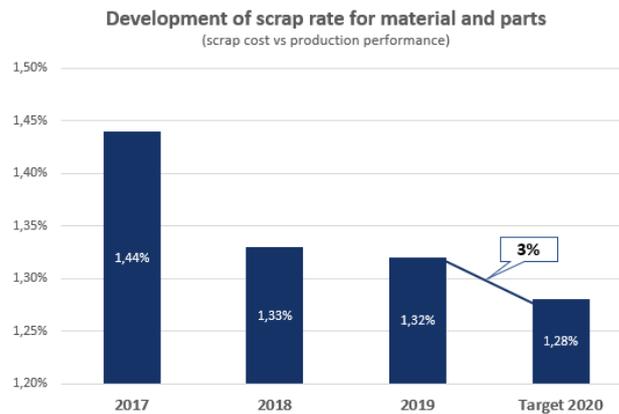




KPI's of relevant environmental aspects within Carcoustics Group

Material usage

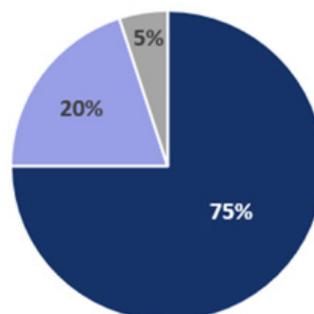
The optimum material usage is a key factor for all Carcoustics products and processes. Economic and environmental aspects are connected. Starting with the product and process development, by using software technologies to create the best possible material usage and to avoid waste and scrap. In serial production Carcoustics is running continuously QIP projects (Quality Improvement Projects) to reduce the scrap rates. These QIP projects are staffed with multidisciplinary members, led by high qualified specialist from Quality or Lean Management departments, using state of the art problem solving and improvement techniques, like Six Sigma, PDCA and DoE.

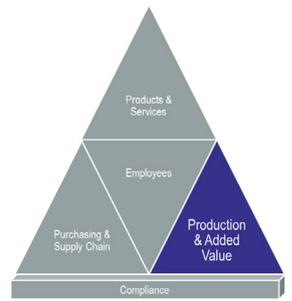


Overall energy usage

With 75% of the total energy consumption, electricity is the major energy source used in Carcoustics. The highest portion of electric energy is used for production processes and machines, especially for heating of materials and tools. Natural gas is the second biggest energy source used on Carcoustics group level containing 20% of total energy use. Natural gas is mainly used for heating of buildings. Other energy sources are below 5% of the total energy use and contain, liquefied petroleum gas (LPG) used for forklift vehicles and diesel or gasoline for company car operations.

Share of energy use 2019





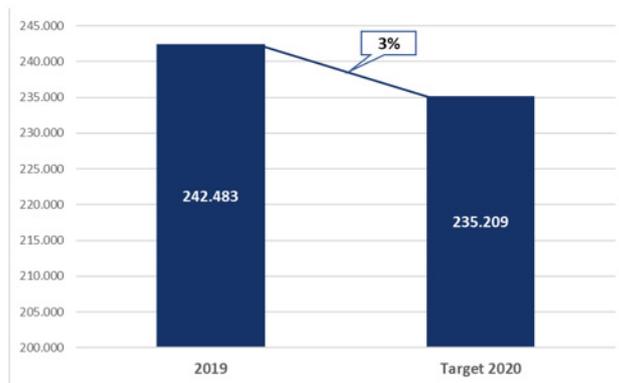
Energy use indicator

To trigger and control the continuous improvement process and to reduce the energy consumption, Carcoustics is measuring the energy use KPI, measuring the energy demand in annual KWh vs 1 Mio Turn Over Finished Goods.

The target for 2020 contains a reduction of 3 % for the entire Carcoustics group. Measures to achieve this target are defined in all factory sites, led by Plant Managers and local „energy saving teams“.

The results of improvement projects and best practice are shared within the Carcoustics group.

Energy use (KWH/ 1 Mio TOFG)



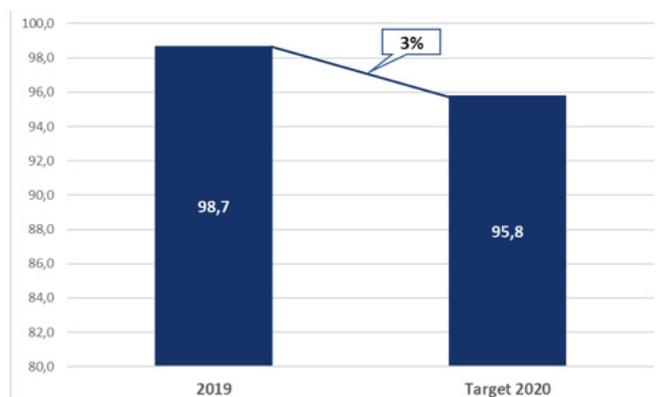
Emissions

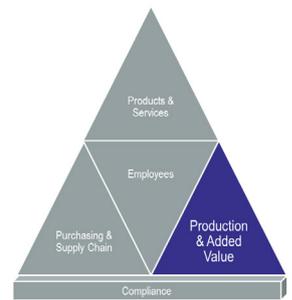
Carcoustics does continuously approach to reduce the CO2 footprint, considering:

- scope 1 for direct CO2 emissions caused by Carcoustics, e.g. internal heating, climate control units, corporate carpool
- scope 2 for indirect CO2 emission e.g. electricity
- scope 3 for indirect emission e.g. for transport of purchased goods and employees, indirect emissions from scope 1 & 2 are not evaluated in 2019 but will be considered within future CO2 footprint.

Due to the Carcoustics core competence, to develop and supply „lightweight“ products, Carcoustics has a positive contribution to reduce weight to vehicles and to reduce the Automotive CO2 emission, during vehicle usage.

CO₂ emission (metric tons CO₂ per 1 Mio TOFG)





Prevention of waste

The Carcoustics business model contains the strategy to develop and offer a wide range of solutions for customers, to improve acoustic insulation, sealing and maximum comfort properties of vehicles.

To reach and maintain the maximum performance of customized products, Carcoustics purchases most materials and components. This gives Carcoustics the flexibility to choose always the best material solution for customized products.

To assure competitiveness, it's a logical fact for Carcoustics to permanently improve the material usage.

There is a clear approach to prevent waste, before recycling and before disposal of waste. For prevention, e.g. there is used state to the art software to calculate minimum usage of materials, as well as robust process design to keep e.g. the material blanks as small as possible.

Recycling

Although prevention of waste is priority, Carcoustics is continuously developing and applying recycling concepts. Standard materials like cardboard, metal, plastics, wood, and electrics are separated and delivered to local recycling companies. Customized materials are converted into recycling products, e.g. stuffer bags or rebonded foam blocks.

Waste disposal

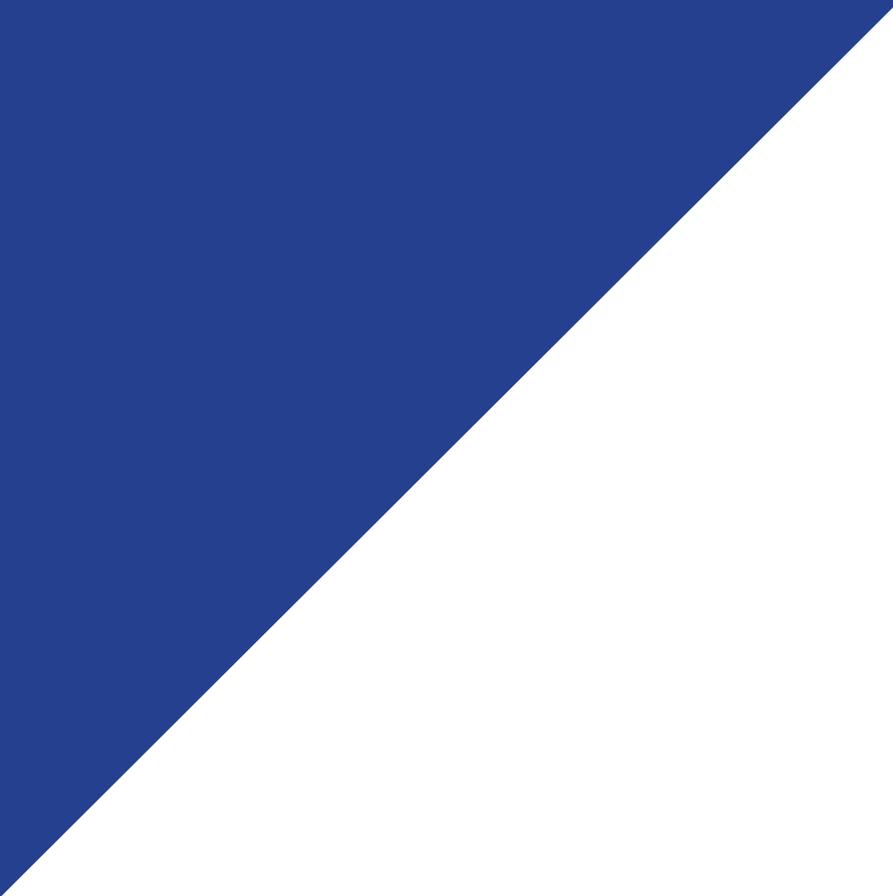
Generally Carcoustics products or processes do not cause any critical or dangerous waste. Carcoustics waste disposal intensity is currently below 0.7% of disposal cost vs total net Sales over last three years. The goal for all plants is to continue to reduce waste by intelligent redesign of manufacturing processes. The financial impact of these measures is constantly tracked by the controlling department. Based on the results specific strategies for further waste reduction are implemented.

Sustainable implementation of CSR reporting at Carcoustics

After releasing the first CSR report a first assessment of the status quo has been made. Now it is important to make sure that the topic of CSR will be handled with a high priority in the future. This means that standard processes for the measurement of KPIs are implemented and the challenging goals for improvement are set. To coordinate this process the global head of Quality Management will be the responsible CSR officer and push forward with the further professionalization of CSR reporting.

Summary and outlook

Carcoustics has displayed its main topics regarding CSR. For Carcoustics its employees are the most important asset. This is why this report is focusing on the employee perspective. But Carcoustics also has shown that there are effective systems in place to assess its own suppliers and to measure the efficiency of the production. Since this is the first CSR report of Carcoustics, there are not always comparisons possible against the past periods and target values have not been defined for all KPIs. This process will proceed during the course of the next year and 2021 it will be possible to show developments in all KPIs and to set target values.



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