



CSR REPORT 2024

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Letter from the CEO



Hongli Sun

CEO TGE Gas Engineering

We are pleased to share our Corporate Social Responsibility (CSR) Report for the first time for the year 2024.

The commitment to excellence in project execution is the key principle by which we do work at TGE. Our business is founded on its core competencies of project management, engineering, procurement and construction excellence and strong partner integration, all combined by TGE's fundamental company values. TGE operates under an integrated management system (IMS) combining the requirements of ISO 9001, ISO 14001 and ISO 45001.

The commitment to safety is a basic foundation of TGE's culture, we are performing work safely and Operations is expected to carry this corporate consciousness into every project where TGE is and will remain customer focused. We require ethically and legally correct behaviour from all employees and encourage fair and respectful collaboration within the company and with our partners. Corporate directives and policies provide clear guidance on expected conduct, ensuring that we uphold the highest levels of business ethics and good business practices.

TGE's excellence derives from its people, who come from a diverse variety of cultures, traditions and outlooks. Diversity, along with our complete obedience to our Core Values: Integrity and respect, Cost-effective Innovation, Empowerment and Collaboration, are essential prerequisites for creating added value for clients.

Our most valuable asset for achieving these objectives is the expertise, experience and commitment of our people. Therefore, it is our explicit policy to integrate them well into our organisation and encourage them to contribute and participate. As we move forward, we remain dedicated to promoting a culture of compliance, safety, and excellence, not only for TGE and its shareholders, but also for TGE's customers, partners and suppliers.

Hongli Sun
CEO

Strategy & Mission

Vision



TGE through its technological expertise, will be a world-class provider of contracting solutions for the LNG and petrochemical industries.

Strategy



As a part of TGE's product diversification strategy, we will focus on hydrogen and biogas because we expect that they will replace today's natural gas and (together with renewable electricity) provide the climate neutral energy mix of the future. Our goal is to develop the required business models and technological base until 2025 to such an extent that they can be scaled up for wider market applications with less preparatory work at the same time. TGE is proud to offer energy producers all over the world an opportunity to align their business practices towards a cleaner, more sustainable energy future.

Mission



TGE creates added value for:

- The society and investors in the LNG and petrochemical industry by providing safe and professional investment solutions targeting high quality, efficiency, and flexibility.
 - The ecological partners and stakeholders through a trustworthy and open cooperation that is flexible and market oriented.
 - The employees who are willing to make a long-term commitment to the group, by offering them a highly motivated, team spirited, friendly working environment with direct and open-minded communication.
-



Business Overview

TGE Gas Engineering GmbH ("TGE") is a world-wide leader in the storage and handling of liquefied gases. We provide a comprehensive range of products and services for the energy, LNG, and petrochemical industries. From feasibility studies and concepts to complete EPC plant construction, as well as maintenance and optimization. TGE is active worldwide and is connected with local presence in six strategic locations throughout Europe and Asia. Our goal is simple: To always offer the best solutions, and to provide our customers with the full benefit of our expertise.



Product Lines



Terminals & Storages for LNG

We construct terminals such as storage tanks and loading stations for ships and trucks, including elements like refrigeration and regasification or liquefaction units. We install large-scale tanks for up to 200,000 m³ of liquefied gases.



Logistics & Storages for Green Energy

We offer innovative solutions for De-carbonization projects. This includes the design for Green Energy storage terminals. In addition, we update plants with state-of-the-art technology, ensuring they comply with all regulations and standards while minimizing operational impact.



Terminals & Storages for Petrochemicals

Our cryogenic storage facilities for the import, export, buffer or distribution of liquefied gases ensure the highest level of process efficiency, energy integration and safety. We work with our customers to find the optimal solutions for LPG, Ethane, Ethylene, Propane, Propylene, Butadiene, Ammonia or other liquefied gases.



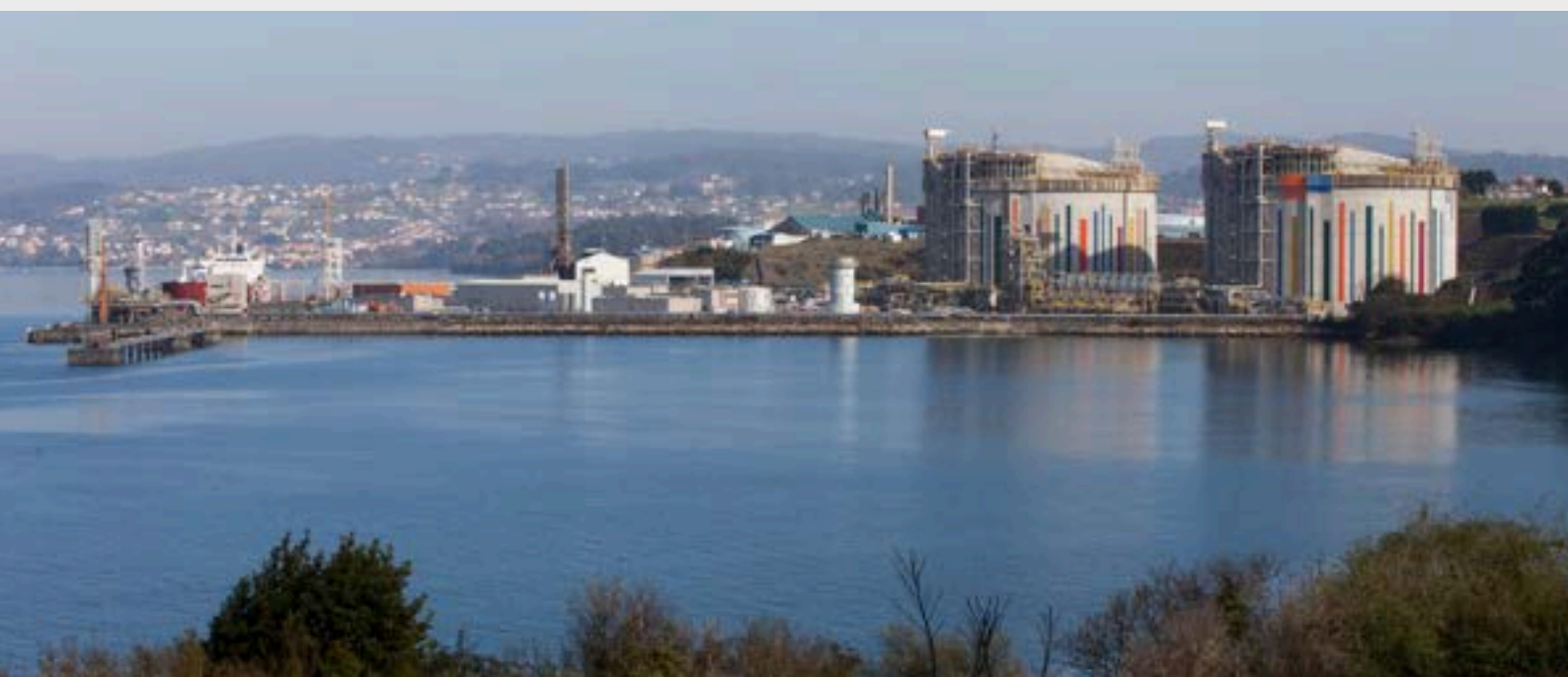
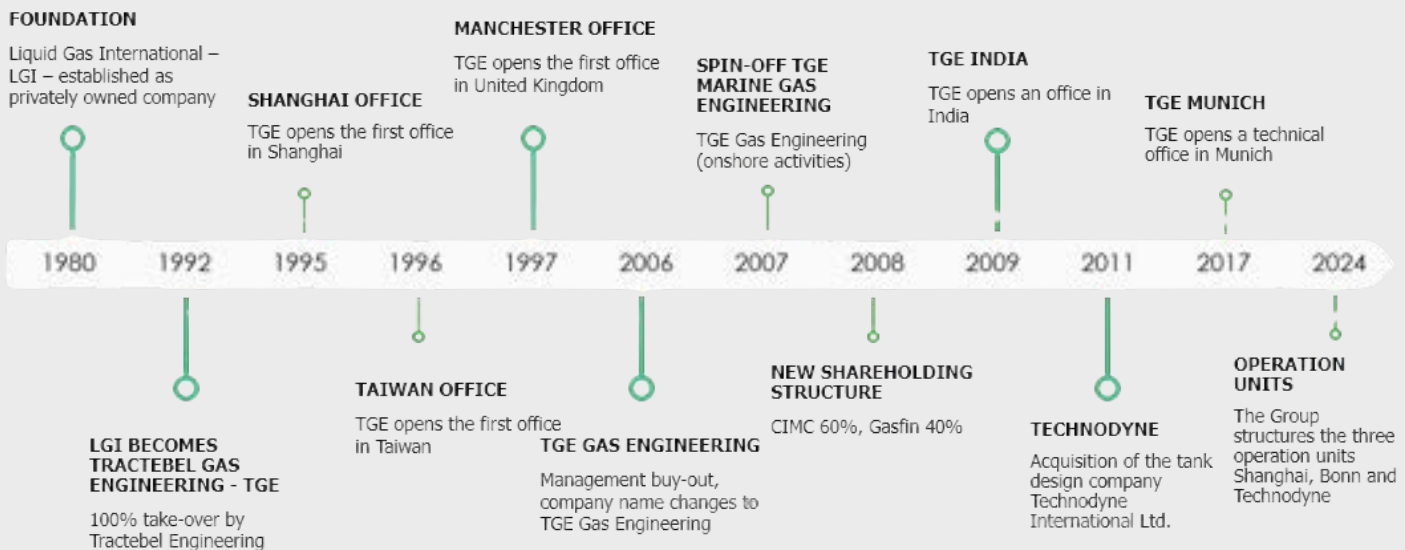
Logistic Solutions for CO2

Our extensive and proven expertise in CO₂ solutions empowers you our customers to dramatically reduce the carbon footprint. We provide customized solutions for CO₂. By managing the liquefaction, storage, handling, and transfer of CO₂ as pressurized gas, we ensure a complete and efficient logistic chain.

Milestones & Spotlights


History.

TGE looks back on over 44 years of experience in the storage and handling of liquefied gases. Founded in 1980, we started out as a small, privately owned company in Bonn, Germany, and have continuously expanded to become a major partner in the natural gas and petrochemical markets around the globe. Today, we are integrated in the CIMC Group as a worldwide EPC contractor for international projects




Achievements




 Installed Capacities

8,4 Mio m³

 Tank Sizes Built

1,200 - 200,000 m³

 Tanks installed


199

 Countries Working
Expertise

22

 Tank Design

1,200 - 250,000 m³

 Relevant Design Codes

All



Highlight Projects



Project One, Antwerp, Belgium

Ethane Terminal including 1 x 197,000 m³ Storage Tank for INEOS Olefins Belgium N.V. Belgium. Biggest Ethane tank built worldwide which is part of Ineos "Project One".



Huizhou LNG Terminal

LNG Terminal including 3 x 200,000 m³ Storage Tanks for Guangdong Huizhou LNG Co., Ltd., P.R. China.



Ammonia Terminal Turkey

Anhydrous Ammonia Terminal including 1 x 15,000 MT Storage Tank for Eti Bakir A.S., Turkiye.



Poland LNG Terminal Extension

LNG Terminal Extension including 11 x 180,000 m³ Storage Tank for Polskie LNG S.A., Swinoujscie.

Endorsements & Certification

Sustainable Development Goals and ILO

TGE embraces the United Nations Sustainable Development Goals. Here at TGE recognise our responsibility not only to respect human rights, but to do our best to support, promote and advocate for them. TGE upholds the freedom of association and the effective recognition of the right to collective bargaining, rejects all forms of forced and child labour in accordance with the conventions of the "International Labour Organization" (ILO), and does not permit discrimination in employment and occupation.



- Ensuring the safety and health of our employees
- Zero-accident culture
- Training and engaging our employees
- Adherence to ISO 45001 certification



- Promotion of gender equality and diversity



- Green Ammonia Concepts
- Hydrogen Logistics
- Carbon Capture Technology and CO2 Logistics
- Sustainable consulting services, workshops and trainings

Endorsements & Certification



- Efforts to prevent the generated waste
- Continuous effort to reduce emissions
- Effort to reduce energy consumption



- Adherence to ISO 14001 certification
- Reduction of environmental impact of processes



- Cooperation with business partners
- Open dialogue with employees
- Initiatives to support local communities
- Business Partner Due Diligence



Stakeholder Engagement

At TGE we believe that strong relationships and open communication with our stakeholders are the important points of our success. Engaging with them through different communication channels, allows us to gain invaluable insights, helping us make informed decisions that reflect their needs and expectations. The direct communication not only identifies risks early on but also keep us compliant with laws and standards.

Interested Party	Expectations	Control measure	Communication channel
Client	<ul style="list-style-type: none"> • First class plant, easy to operate and maintain • Project completion on time • High HSE performance • Reliability, responsiveness, assurance, and empathy 	<ul style="list-style-type: none"> • Professional project management • Contract/Design review • Site HSE manager • Customer satisfaction survey • Visit of the project site 	<ul style="list-style-type: none"> • Minutes of Meetings • Regular meetings with project managers • Invitation to Tender / Request for Proposal • Congresses • Different events
Neighbour of client	<ul style="list-style-type: none"> • Minimal impact on noise, emission impairment during plant construction and operations 	<ul style="list-style-type: none"> • Compliance to laws and local regulations • Technical and organisational protection measures 	<ul style="list-style-type: none"> • Press release • Open house days
Society / Public	<ul style="list-style-type: none"> • Minimal negative impact on the climate 	<ul style="list-style-type: none"> • Aim for development of new product lines in the area of climate-friendly energy supply 	<ul style="list-style-type: none"> • TGE's official website and social media channels • Conferences and congresses • Donations
Suppliers	<ul style="list-style-type: none"> • Carry out the job as per their own standards 	<ul style="list-style-type: none"> • Prequalification process • Supplier evaluation • Engineer in charge • Audits 	<ul style="list-style-type: none"> • Trade fairs and conferences • Information meetings • Document exchange
Shippers	<ul style="list-style-type: none"> • Smooth delivery process • hazard-free traffic • timely delivery 	<ul style="list-style-type: none"> • Traffic regulation 	<ul style="list-style-type: none"> • Information meetings • Document exchange
Subcontractor	<ul style="list-style-type: none"> • Carry out the job as per their own standards 	<ul style="list-style-type: none"> • Subcontractor evaluation • Subcontractor selection process • TGE Site supervision • Audits 	<ul style="list-style-type: none"> • Trade fairs and conferences • Information meetings • Document exchange

Stakeholder Engagement

Interested Party	Expectations	Control measure	Communication channel
Permitting authorities and legalisation bodies	<ul style="list-style-type: none"> Fulfilment of legal requirements 	<ul style="list-style-type: none"> Compliance to laws 	<ul style="list-style-type: none"> Clarification meetings
Notified Bodies	<ul style="list-style-type: none"> Witness of certain activities Receival of valid information 	<ul style="list-style-type: none"> Timely involvement 	<ul style="list-style-type: none"> Clarification meetings Minutes of Meeting Expertise Statements
Own employees / works council	<ul style="list-style-type: none"> Fair working conditions Fair compensation Two-way communications Healthy work conditions Non discrimination 	<ul style="list-style-type: none"> Works council in Bonn Annual dialogue with the superior Trainings 	<ul style="list-style-type: none"> Intranet (Teams) General Assembly Compliance hotline
Shareholder	<ul style="list-style-type: none"> Profitability of investments Stability of business 	<ul style="list-style-type: none"> Strategic acting of management ESG conform management 	<ul style="list-style-type: none"> Performance Reports Committee Meeting Regular shareholder meetings



Certifications

EcoVadis - sustainability rating agency, the results were received in 2024 for the first time. TGE is with the committed badge on top of 50% of the companies rated by EcoVadis. TGE is proud of the performance in sustainability and commits to continue the improvement and strive for a higher rating for the next years



Memberships

- Ammonia Energy Association (AEA) The Ammonia Energy Association (AEA) is a global non-profit industry association that promotes the responsible use of ammonia in a sustainable energy economy.
- German Engineering Federation (VDMA) - The largest network organization and an important voice for the machinery and equipment manufacturing industry in Germany and Europe.

ISO Certificates

TGE operates under an integrated management system (IMS) combining the requirements of



Quality



Health & Safety



Environment

ISO 9001 since 2004, ISO 45001 since 2005 (former OHSAS 1800), ISO 14001 since 2005

SCC Certification

TGE Personnel on European construction sites have their HSE competence qualified in accordance with an SCC (Safety Certificate Contractor).

Environment

TGE seeks to continuously reduce the environmental impact arising from its activities. Our business partners are encouraged to share and actively support this objective. In the scope of our integrated management policy, TGE complies with the environmental management system ISO 14001.



Essential Actions:



Act in line with applicable national and international statutory standards and laws concerning environmental protection.



Consider of environmental topics in all phases of the project like process design, safety design and commissioning.



Consider all measures for product related environmental protection related to material, recycling or hazardous substances.



Use resources and energy economically and efficiently in order to have the smallest possible environmental impact.



Conducting regular on-going training for all employees.

Environment

Environmental Risk Assessment

As safety is an essential part of process plant design, TGE undertakes a series of engineering design reviews for each project to identify potential hazards or faults and to ensure an appropriate safety level, e.g.:



HAZID



HAZOP



FIRE HAZARD ASSESSMENT



QRA



CONSEQUENCE MODELLING



SIL ASSESSMENT



ESCAPE ROUTE PLANNING



Hazid - Study

is a prominent way of the early identification of potential hazards and threats having effect on people, environment, properties and reputation. Identified hazards will be eliminated, reduced or mitigated by changes in the design. The study is carried out by a multi-disciplinary team that will use guidewords to help identify potential hazards and their consequences. The entire project life should be considered when identifying the external hazards, hazards from construction, commissioning and operation through to decommissioning and deconstruction.

Environmental Key Data



To conduct our engineering activities TGE has rented its business premises in a modern office building in Bonn. The main energy consumption is related to lighting, IT-equipment, heating and cooling.

Energy Audit

According to EU Energy Efficiency Directive and German Law on Energy Services and other Energy Efficiency Measures TGE conducts energy audits every four years, starting 2015. The external Energy Auditor is professionally qualified and approved by the Federal Office for Economic Affairs and Export Control. Our ongoing energy saving activities are resulting in significant reduction of electrical energy consumption.

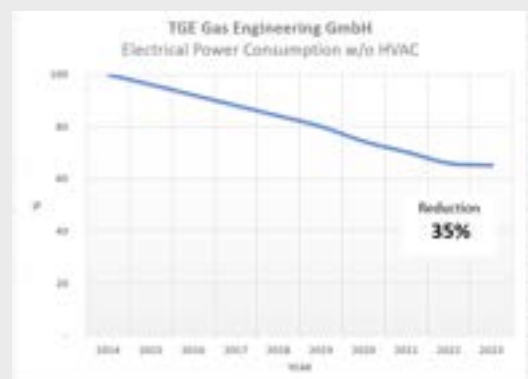
Waste

The amount of waste in our office is minimal rendering its weight and volume economically insignificant. Anyhow the waste is sorted in different waste streams based on German law and local regulations.



-35%

Electrical Power Consumption



Eco - Efficiency

We are aware of the responsibility we carry for future generations and our planet. Environmental aspects are a major consideration in all of our activities – from office and construction site management to plant design and operation. For example, our plant designs place special emphasis on the low consumption of energy and resources, and we have developed specific review techniques to ensure environmentally friendly designs.

Logistics & Storages for Green Energy



Green Ammonia Storage – the future energy carrier

- Ammonia infrastructure concepts
- Tank concepts for the storage of more than 100,000 m³
- Multiproduct storage terminals
- Plant conversion and upgrade engineering services



Hydrogen Logistics

- Integration of H₂ Production on EPCM basis
- H₂ Distribution & Compression systems
- Consultancy for H₂ Solutions

Logistic Solutions for CO₂



Carbon Capture Technology & CO₂ Logistics

- Efficient CO₂ capture from industrial processes
- Liquefaction, storage, handling, and transfer of CO₂ as pressurized liquid gas



Sustainable consulting services, workshops, and trainings

- Expert guidance on developing and implementing sustainable practices
- Empowering your team with knowledge on CO₂ reduction and sustainability

Labor Key Data



160

Employees



4

Trainees / Students



20

Nationalities



44

Average Age



>50% Technical Graduates



33%

Female Employees



1,5%

Sickness Rate



1,5

Recordable Injury Rate



0

Fatality and Life-
Changing Injury



Labor and Human Rights Policies



In the scope of our integrated management policy, TGE complies with laws, Standards, and rules to insure the health, safety of our employees. We foster a culture of investing and promoting their high individual performance and encouraging an open-minded dialogue.

TGE expects from its business partners to respect and protect international proclaimed human rights and to refrain from child or forced labour. Employees shall be treated fairly and equally with dignity and respect.

Essential Actions:



Providing a safe and healthy workspace



Implement an effective monitoring system in your supply chain



Observing health and safety requirements at the working place



Prevention of all kinds of discrimination



Enable the right of freedom of association and collective bargaining



No excess of national regulated maximum working hours



Prevention of child labour according to ILO Conventions

Employee Health & Safety Measures

At TGE we pride ourselves on working safely by following the local laws and requirements and our internal safety initiatives.

Main Activities:

Safety & Emergency Training

TGE conducts initial and yearly safety training for all employees regarding office Health & Safety, accidents & office emergency, protection against infections, and home office conditions. Evacuation drills are carried out regularly.

Qualified Safety Personnel

Special roles have been appointed to our employees to perform as safety wardens, first aiders and fire wardens in the office area. In addition, there has been an external occupational Safety Expert, and a Company Medic assigned.

Office Safety Procedure

TGE has formal procedures to provide safe and healthy working conditions to all its employees in compliance with the international standards ISO 45001 regarding accidents, injuries, provision of emergency equipment, emergency evacuation, first aid material and other situations with aspect to health and safety at the workplace.

Travel Risk Assessment

Before any work-related travel, we conduct a thorough travel assessment to ensure that all necessary precautions are taken. Our goal is to ensure our employees can focus on your business objectives while we take care of the rest.

Employee health & safety risk assessment

We conduct continuously employee health and safety risk assessment. It takes into consideration the daily operational tasks of our employees, the health and safety hazards present at the workplace and the associated risks and we have a proposed corrective action plan to address these identified risks.

Yearly instruction

TGE provides working instructions to employees on special health and safety risks regarding particular office equipment and hazardous substances to raise awareness and to strengthen their knowledge about health and safety risks at work.



Working Conditions & Benefits

Regardless of where TGE's employees live and work, they are the key to TGE's future growth and success. Recognizing the value that each employee brings to the company, we build on a corporate culture in which work-life balance, employee health, and professional development and training are central. Our goal is to ensure that each and every individual feels accepted and valued in the company – regardless of their position, gender or cultural background.



Benefits

Flexible Working

Digital Workplace

Corporate Benefits

International Experience

Health Care

TGE's Contribution

- Individual and flexible working time
 - Optimum work-life balance
 - Remote working
 - Part-time
 - Additional days off on bridge days
 - Work from home
-

- Modern equipment
 - Digital workplace
 - Content accessibility from anywhere
 - Collaboration platforms
-

- Platform with access to a large variety of discounts from well-known providers
-

- Active worldwide
 - Projects around the globe
 - Opportunity to expand professional skills
 - Network development
-

- Free coffee and soft drinks
- Weekly fresh fruit basket
- Preventive care appointments
- Ergonomic workplace

Social Dialogue

Internal Communication Culture

There is a two-way communication culture to facilitate employee voice regarding working conditions and benefits. Interactive communication strategies allow us to gather input and feedback directly from our employees.



Regular meetings of workers council in the scope ISO 45001



Participation in relevant HSE procedures



Information of business travel activities



All staff meeting by management board



Quarterly Industrial safety committee meeting (ASA)



Accident notification and analysis



Works assembly meeting by works council



Announcements at TGE intranet

Company Agreements

There is a collective agreement between TGE, our employees, and in accordance with German regulations regarding any of the following labour subjects: employees' health & safety, working conditions, career management & training, discrimination and/or harassment.



[Working hours](#)



[Home Office](#)



[Job Bicycle](#)



[Special leave](#)



[Business Trips](#)

Career Management



Actions to promote internal mobility

We enable our employees to move across positions within our company. We embrace possibilities to promote talent based on ability and potential, continue professional training, and encourage employees to broaden their range of skills.



Yearly performance and development talk

TGE has a process in place to perform a review and self-assessment talk of its employee's job performance on a regular basis. This includes processes to allow TGE to identify areas for improvement, provide support and guidance.



Ongoing trainings

TGE supports its employees' motivation for knowledge with a dynamic range of training courses internally and externally.



Attracting young generation

We do our best to invest in the young generations by offering positions for apprentices, working students and trainees to attract company's future and cultivate our vision in their first steps.

Social Initiatives



Our commitment to making a positive impact on economic stability and social well-being begins within our organization and extends to the communities in which we operate.

Following initiatives reflect our commitment to creating positive social impact and being a responsible corporate citizen.

Donation of our used laptops to a school

In our continued effort to support and uplift our community, our company has made a significant donation of used laptops valued at approximately 24,000 € to students in the school "Gesamtschule Neunkirchen-Seelscheid". This contribution aims to empower young minds by providing them with necessary technology resources to enhance their education and improve their overall digital access. By repurposing these laptops, we also foster a culture of sustainability.

Christmas donation - TGE Bonn supports local institutions

This initiative aims to support local institutions and make a positive contribution to the local community.

TGE Christmas raffle & cake sale for charity

We have launched a special initiative: our annual Christmas raffle and cake sales. Profits have been donated to the following charity organizations to support their important work. Our aim is to collect more donations every year and reach even more people.



Governance Structure

Governance System

TGE's governance system consists of Compliance-, Risk and Quality management which is combined in TGE's Integrated Management System (IMS).



Compliance

The compliance management system ensures the adherence by TGE and by TGE's Employees with applicable laws, ethical standards and internal rules / processes.

Strategic Risk Management

TGE company management takes a risk-based approach to controlling the company operations.



Governance

Integrated Management System

The Integrated Management System outlines the policies, principles, and organizational structure, detailing the relationships, responsibilities, and duties within TGE. It serves as a comprehensive framework to ensure effective management and coordination across all departments, promoting consistency, accountability, and continual improvement.

Our IMS follows the principal process of the PDCA Circle (Plan, Do, Check, Act).





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