thyssenkrupp Marine Systems

Sustainability Report

thyssenkrupp

Content

Dear reader,

Nothing has shaped the economy in recent years like sustainability, proving it is not just a journey, but a destination. Therefore, for thyssenkrupp Marine Systems, sustainability has become a crucial core value and guiding principle for all our actions. With our people operating worldwide and the position as a leading systems supplier in subsurface and surface shipbuilding and in the field of maritime safety technologies, we are aware of our role in creating a more sustainable society and economy. We take responsibility for the social, environmental and corporate governance needs of future generations. Our mission is to supply innovative products, high technologies and services that contribute to the sustainable success of our customers.

Striving to become one of Europe's most sustainable shipyards, we implement goals in every ESG dimension with a strong ESG strategy and governance. I am aware that our ambition is high, and the task is challenging given its complexity, but the mission is crucial. But I am confident, knowing that we have alongside our willingness the knowledge as well as the technology to shape a sustainable future.

Bearing this major goal in mind, we have set course and navigate strictly along it. The reduction of our carbon footprint is certified by the Science Based Targets initiative and in line with the goals of the Paris Agreement on Climate Change. By 2030, we will reduce our direct emissions from our own facilities and indirect emissions from electricity consumption by 30 percent. We aim to become a net-zero company by 2045 according to SBTi standard.

It is a matter of the heart to put a priority on people in our own company and along our value chain. thyssenkrupp Marine Systems demands and promotes fair working conditions, occupational safety and health, equity, diversity and inclusion. We offer long-term, secure employment, good wages, training programmes, democratic values and employee participation in a working environment where people can succeed and develop. It took us a few years to establish a strong code of conduct, today recognized as one of the core values we share with our partners and suppliers. We see the necessity to stay connected with the value chain and suppliers in times where regulations are becoming more and more stringent. Collaboration is our guiding principle in facing challenges and overcoming them together in order to reduce company risks.

Our corporate guidelines are based on the principles of the United Nations Global Compact and the United Nations Universal Declaration of Human Rights. Combined with one of the most restrictive export control regimes in the world, they guarantee the highest standards in safeguarding human rights and social standards when initiating and maintaining national and international business relationships. Our supplier qualification process takes social and ecological aspects such as human rights, working conditions, corruption prevention and environmental protection into account. By way of example, multiple workplace capability assessments were carried out already in 2022 by a third party on our account.

> "The task is challenging given its complexity, but the mission is crucial. We have the willingness, the knowledge and the technlogy to shape a future worth living for many generations."

I am proud to see that sustainability is now anchored in both our hearts and our business strategy. We have set sail, are well underway, headed in the right direction – but there is still quite a way to go. Many things were achieved and more are to come, and the teams can be proud. Together, and with enhanced risks ahead and new businesses to be launched, more can be accomplished. We will further build on competitive and technological competencies, both internally and externally. As sustainability cannot happen in isolation, we need to strengthen cooperation and are always looking for new collaborations to find common solutions in addressing sustainability challenges. Our first double materiality assessment helped to engage further with stakeholders, and future ESG ratings such as EcoVadis certification will help us to align our strategy and measures.

thyssenkrupp Marine Systems' route for the near future is clear: For long-term success, sustainability and business go hand in hand. In the upcoming year, we will have a strong focus on a more diverse culture, upskilling of our people, further reduction and analysis of our carbon footprint as well as bringing sustainable technology to our customers.

Let's work together for a greener and a better future.
Let's give sustainability a safe haven.

Oliver Burkhard
CEO

Dear reader,

The world around us is changing and we are changing within. As Head of Environment, Social and Governance (ESG) in a company operating globally, I have the pleasure to present the first sustainability report of thyssenkrupp Marine Systems to you. Many strategic discussions were needed along the way, and I am proud to be part of this important initiative to shape the future of multiple generations: From grandparents to parents and children, we employ many generations of families in Kiel – and that is only one example of our strong social background with fair working conditions that enable us to achieve our ambitious targets. We are stronger together and I want to thank all involved parties for their efforts. We will consistently follow our targets in all ESG dimensions by acting in an economically, ecologically and socially responsible manner. In 2021 and 2022, we have already implemented a strong supplier risk management system to comply with the Supply Chain Act, switched to renewable energy sourcing and promoted sustainable innovation and digital transformation with a massive effect on, for example, our paper consumption. Setting strategic targets, anchoring ESG in the company with accountability from the top and assessing our scope 3 emissions is just the beginning of an exciting journey.

I am pleased that you show interest in accompanying us on our way and I am looking forward to any feedback on our activities. In this spirit, I wish you interesting and informative moments with this report!

Dr. Marlene Fischer
Head of ESG

“This is just the beginning of an exciting journey and we are looking forward to upcoming business opportunities and new partnerships.”

Introduction

1

Introduction

In current times, sustainability is on everyone's mind. Acting responsibly and conscientiously with the resources available is already part of the daily life as citizens and is yet to become a licence to operate for industrial enterprises. The International Sustainability Standards Board defines sustainability as the ability for a company to sustainably maintain resources and relationships with its whole business ecosystem over the short, medium and long term. Furthermore, this includes the company's competence to manage dependencies and impacts within this ecosystem. And, by doing that, sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.

As the sum of more than 6,500 employees, thyssenkrupp Marine Systems follows a 360° sustainability strategy along the value chain to give sustainability a safe haven. This strategy is realized in the three phases shown in figure 1.1 to prepare for the future it ultimately wants to harness. The multiple crises of the past years have changed the world and, with it, the awareness for ecological, social and economic sustainability. thyssenkrupp Marine Systems does not only deliver military equipment, surface vessels and submarines to ensure security around the globe, furthermore it has decided to increase its efforts in tackling climate change. The year 2023 should also welcome the start of new business activities, in an attempt to bring state-of-the-art green technologies derived from military applications to civilian applications, while continuing to deliver sustainable innovations as a capability enabler for defence applications in its core business.

The company's history shows that it has innovative power. Without its employees, thyssenkrupp Marine Systems would not be where it is now. As one of Europe's largest employers in the maritime industry, it is important that it demands and promotes fair working conditions along its value chain and

"Acting responsibly and conscientiously with the resources available is already part of our daily life."

CFO

"Not only do we deliver military equipment, surface vessels and submarines to ensure security around the globe, but we have also decided to increase our efforts in tackling climate change."

Head of Strategy

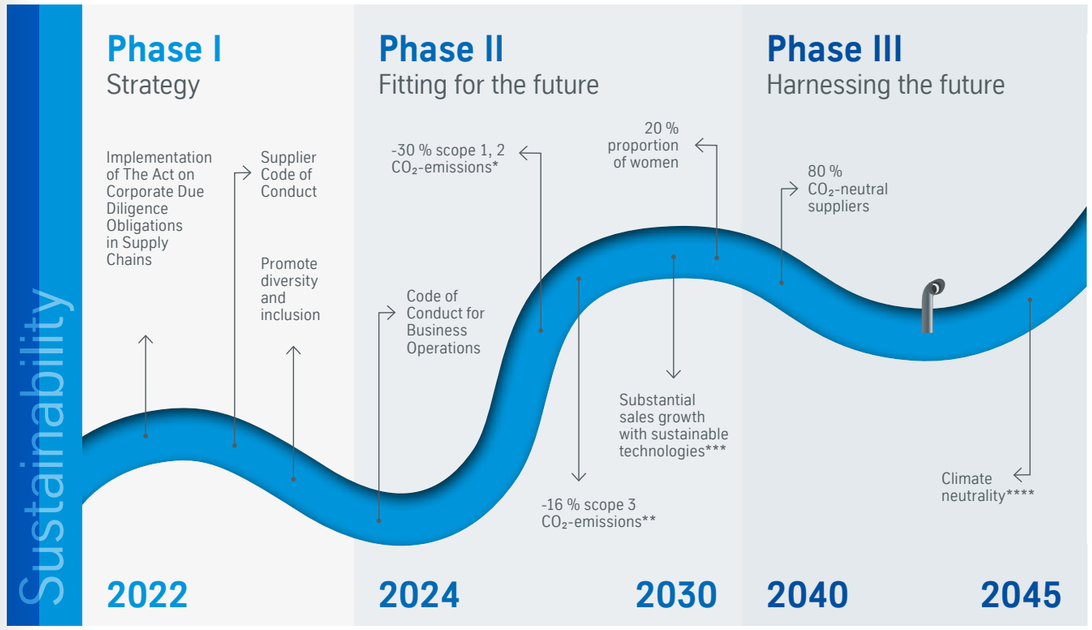


Figure 1.1: * scope 1, 2 = direct emissions from own plants and indirect emissions from electricity consumption | ** scope 3 = upstream and downstream value chain activities
*** technologies that promote environmental objectives according to the European Union's Taxonomy Regulation 2020/852 | **** definition according to Net Zero Standard from Science Based Targets initiative

offers long-term, secure employment. The company is committed to the highest sustainability standards, which embrace good corporate governance together with environmental and social responsibility. This includes, among others, the UN Global Compact and its Sustainable Development Goals (SDGs) as well as the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains. The main principles and rules of actions and the standards set in the dealings with business partners are summarized in the thyssenkrupp Code of Conduct.

thyssenkrupp Marine Systems is consolidating its new climate strategy and setting ambitious targets supported by the Science Based Targets initiative (SBTi). In this regard, it strives to become net-zero according to SBTi standard by 2045. This ambition includes direct emissions (scope 1), indirect emissions from purchased energy (scope 2) and indirect emissions in the value chain (scope 3). As a first milestone towards climate neutrality, the company plans on reducing its scope 1 and 2 emissions by 30 % compared to 2018, as well as its scope 3 emissions by 16 % no later than 2030. With its environmental efforts, it has followed targets on a +2 degree path until now. Focusing on an ambitious strategy, thyssenkrupp Marine Systems is pushing the discussion on SBTi-certified targets according to the net-zero standard along a +1.5 degree path. In addition to its own energy generation, it aims to purchase green district heating from 2028/2029 on. The agenda includes the testing of photovoltaic systems at its sites, green space management, and the conversion of the vehicle fleet to electric drives.

This first report structure is based on benchmark standards such as the Corporate Sustainability Reporting Directive standards (CSRD), the Principles of the Global Compact and the Sustainable Development Goals, as well as the guidelines issued by the Global Reporting Initiative (GRI) for Universal standards. The efforts conducted in the years 2021 and 2022 across the various sites are highlighted, as per the main sustainability pillars. Being a responsible business means balancing the expectations of the internal and external stakeholders with the own commitments and business objectives. To prioritize the efforts, intensive stakeholder discussions were conducted, and the material topics highlighted in the materiality matrix were aligned with the company's sustainability pillars: Governance & Management, Labour & Human Rights, Environment, Sustainable Innovation & Technology, as shown in the figure below. Find out more about the dedicated efforts to achieve ESG targets and company commitments (see table on page 11) in this first-of-a-kind report.

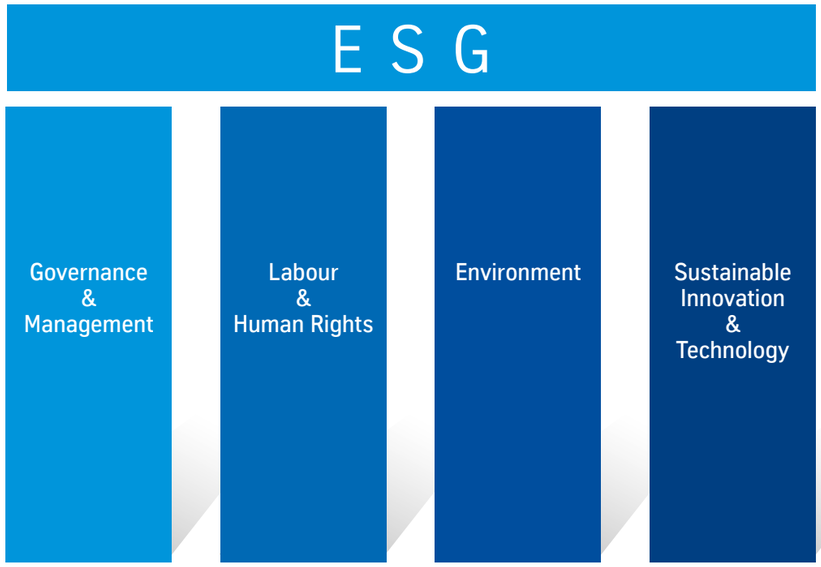


Figure 1.2: Sustainability pillars at thyssenkrupp Marine Systems

The Company's Commitments	Material Topics	Sustainable Development Goals
Growth with sustainable technology and products to support clients	· Technology & innovation · Marine ecosystem · Climate change & GHG emissions	7, 8, 9, 11, 13
Transparent and comprehensible sustainability strategy and actions	· Business ethics & integrity · Risk management & business continuity	16
Proven and tested fuel cell systems for a sustainable energy transition	· Climate change & GHG emissions · Marine ecosystem · Energy management & sources of energy · Environmental footprint of products and services · Technology & innovation · Solutions quality, safety & performance	7, 12, 13
Active promotion of climate and environment protection	· Sustainable & responsible supply chain · Material sourcing & resources efficiency · Climate change & GHG emissions · Waste management & recycling	7, 12, 13
Long-term and secure employment	· Diversity, inclusion and equity · Health & safety in workplace, and workers' rights · Involvement and upskilling of employees	1, 3, 4, 8
Fair working conditions in system of suppliers, partners and customers	· Business ethics & integrity · Sustainable & responsible supply chain	1, 4, 5, 10
Corporate policy and governance compliant with the highest ethical standards	· Business ethics & integrity · Sustainable & responsible supply chain · Risk management & business continuity	1, 3, 10, 16, 17

Highlights in 2022

SWITCHED TO
100 %
RENEWABLE ELECTRICITY
IN KIEL IN JANUARY 2022

FEMALE LEADERSHIP EVENT WITH AROUND 50 WOMEN PARTICIPATING RESULTING IN WOMEN´S NETWORK “EMPOWERING”

COMMITTED TO
ESG STRATEGY

MORE THAN
250 MWH ENERGY
PRODUCED BY HYDROGEN TEST FACILITY SINCE 2019

RESULT OF FIRST SCOPE 3 ANALYSIS:
39,507 t CO_2e
IN 5 OF 15 CATEGORIES

ACCIDENT FREQUENCY*:
3.6 (TARGET: 6.0)
HEALTH QUOTA:
> 95 %

PROJECT “REAL ESTATE SUSTAINABILITY ROADMAP”
WITH DEFINITION OF CO_2-CERTIFICATES FOR REAL ESTATE

TRANSPARENCY INTERNATIONAL RATING B
71 OUT OF POSSIBLE 100 POINTS (HIGH COMMITMENT TO TRANSPARENCY AND ANTI-CORRUPTION) IN THE 2021 DEFENCE COMPANIES ANTICORRUPTION INDEX (DCI) REPORT

REDUCTION IN ELECTRICAL ENERGY CONSUMPTION
-5,100 kWh
-22 % SINCE 2018

REDUCTION
OF PAPER CONSUMPTION
-25 % A3 PAGES **-50 %** A4 PAGES
MEANS ~ 407,000 A4 PAGES, APPR. 3.5 TREES WOULD BE NEEDED TO PRODUCE THAT AMOUNT OF PAPER

Figure 1.3

* in other words: accidents with at least one lost working day per 1,000,000 working hours completed

The Group’s Profile and Business Model

2

The Group's Profile and Business Model

thyssenkrupp Marine Systems is a business unit of thyssenkrupp AG. The business activity of the unit is defined as follows: "Development and realization of products and services of maritime systems including repair and modernization". As a systems provider, it is active in the construction of submarines and surface vessels, maritime electronics and security technology.

The structure of the company is shown in figure 2.1. It is further divided into various operating units and comprises the two legal entities thyssenkrupp Marine Systems and ATLAS ELEKTRONIK GmbH.

With over 6,500 employees around the globe, the company is one of the world's leading marine enterprises. Headquartered in Kiel, thyssenkrupp Marine Systems can look back on a history spanning 185 years. In essence, its business field consists of the development and construction of military surface vessels and submarines. Besides reconstruction and repair, the company offers system integration, services and follow-up supplies for all parts of the vessel. As Europe's leading marine technology enterprise, its tailor-made solutions are delivered around the globe for highly complex challenges in a changing world.

In the way it works and acts, the business unit gears itself to the requirements of its interested parties and those of the market. In order to cater to the high quality standards of its customers regarding these special products and services, the company keeps in line with the current state of the art and operates within tried and tested, established standards and methods. These are anchored with long-lasting effect in the business processes and are the subject of continuous further development. The application of systems engineering methodology in conformity with ISO/IEC 15288, transparent requirements management and the orientation of the processes to current events all form part of this. As the basis of successful product development, projects are handled in accordance with internationally recognized standards, such as those of the International Project Management Association or the Project Management Book. Heed is also paid to military standards and guidelines such as the (American) Military Standard and the NATO Quality Assurance Requirements, known by the acronym AQAP. The operation of the shipyards is safeguarded in accordance with the International Ship and Port Facility Security Code. Furthermore, thyssenkrupp Marine Systems works together closely with classification companies for maritime traffic to guarantee its customers the greatest possible security during the development and utilization of the products.

This includes drawing up financing concepts for complex state and private-sector orders, the realization of corresponding offset deals and industrial cooperation schemes in the customer country concerned, integrated logistical support and life-cycle management for the entire working life of any given vessel. As a general contractor, it takes care of the entire technical and commercial handling of the order.

As a system house for marine electronics, ATLAS ELEKTRONIK GmbH has supported navies around the world to fulfil their missions optimally for decades. It has a wide range of sonars and sensors, command and control systems for maritime vessels, mine countermeasures systems, unmanned water vehicles, radio and communications equipment, naval weapons and coastal protection. In addition, it offers comprehensive services even after the delivery of its products. ATLAS ELEKTRONIK GmbH has the capability to equip submarines, ships and systems with its own and third-party sensors, effectors and subsystems and to integrate them into networked overall systems.

Figure 2.1: Operating units in the business unit Marine Systems within thyssenkrupp AG

The Organization and its Context

A precondition for the successful design of the business unit is to know and to take into account the relevant influencing factors, requirements and expectations. The business unit respects cultural, political, economic, social, legal and other conditions that provide the basic framework for action.

The needs and expectations of employees and customers, as well as those of many other parties, further limit this scope of action. Internal issues, such as values, goals and strategies, organizational structures, decision-making and information processes and many more, play an important role. All are safeguarded by an integrated management system updated on an ongoing basis, as shown in the figure below and further explained in the section Performance Evaluation: Monitoring, Measurement, Analysis and Evaluation.

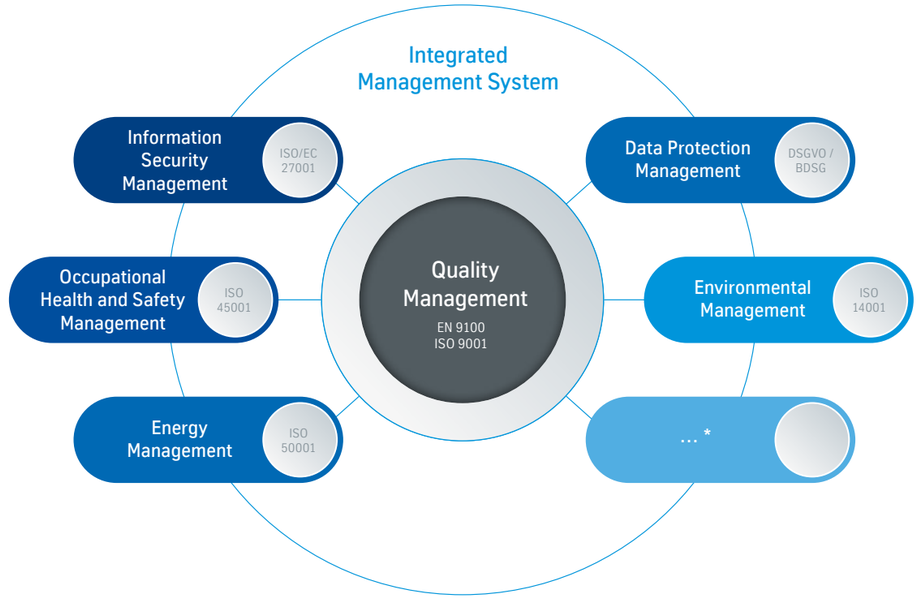


Figure 2.2

* Further requirements for e.g. protection of classified information, welding standards, port security and more are taken into account by the IMS.

Organizational Structure

The business of thyssenkrupp Marine Systems is divided into the four areas "Executive", "Financial", "Operating" and "Human Resources", each of which is represented by its respective Chief Officer.

Cross-company tasks and responsibilities have been combined in centralized functions for the whole business unit, as shown in figure 2.3. The specific functions and those which do not overarch the whole of the company are distributed thematically across the relevant business areas. Day-to-day operations, on which project business has had a lasting impact, are controlled by the various different operating units which represent the core business of the company and are divided into the following four sectors. The company operates worldwide within these four sectors. Figure 2.4 shows an overview of the many production and office sites.

		CEO	CFO	COO	CHRO
Cross-company functions		e.g. Strategy	e.g. Compliance		e.g. OSH
Not cross-company functions				e.g. Engineering	
Operating Units	SUB	Head of OU Submarines	Commercial Head of OU SUB		
	SVE	Head of OU Surface Vessels	Commercial Head of OU SVE		
	SER	Head of OU Services	Commercial Head of OU SER		
	NES	CEO OU Naval Electronic Systems	CFO OU NES		

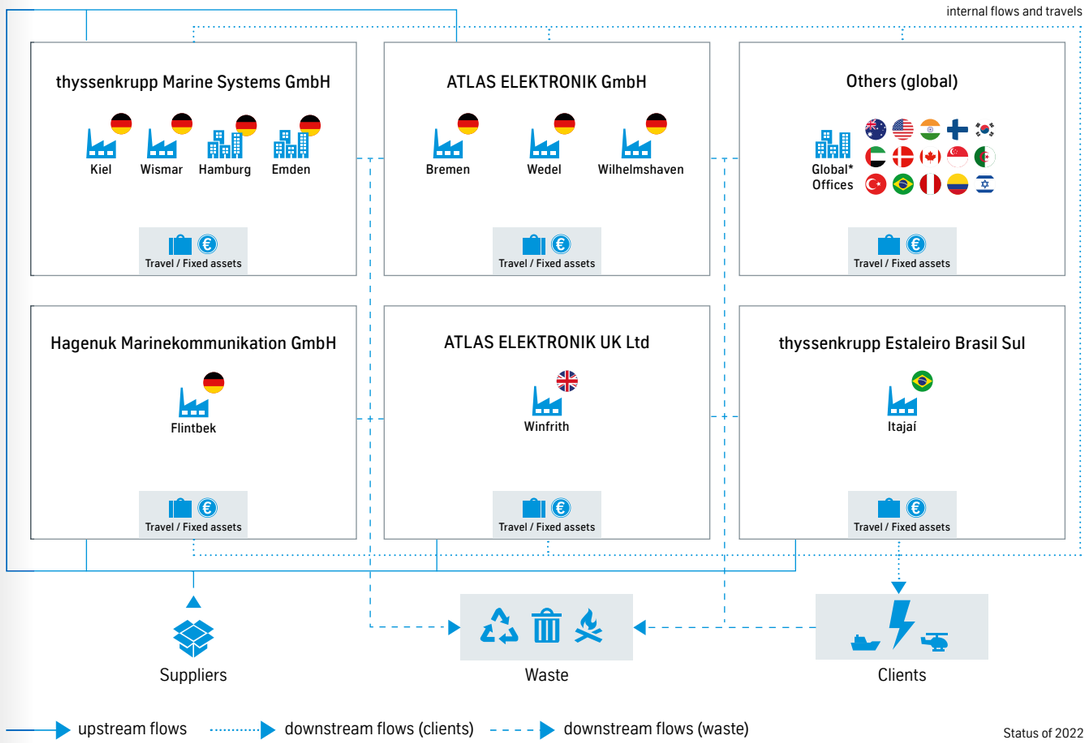
Figure 2.3

Operating Unit Submarines
with overall responsibility for (further) development, cost-effectiveness, pricing, submarine product portfolio, products and product architecture and platforms including all the relevant research and development work, receipt of orders for all submarine products and platforms, and realization and responsibility for profit-making on all new submarine building projects.

Operating Unit Surface Vessels
with overall responsibility for the further development, cost-effectiveness, pricing, surface vessel product portfolio, products and product architecture and platforms including all the relevant research and development work, receipt of orders for all surface vessel products and platforms, and realization and responsibility for profit-making on all new building projects for surface vessels.

Operating Unit Services
with overall responsibility for the further development, cost-effectiveness and pricing, service product portfolio, products and services including all the relevant research and development work, receipt of orders for all service products and services, and realization and responsibility for profit-making on all refurbishment, modernization, repair and training projects and the full operative implementation of service training courses, simulation, documentation and provision of replacement parts.

Operating Unit Naval Electronic Systems
as a business area, is comprised of ATLAS ELEKTRONIK GmbH and its subsidiaries. ATLAS ELEKTRONIK GmbH has a wide range of sonars and sensors, command and control systems for submarines and surface vessels, mine countermeasures systems, unmanned water vehicles, radio and communications equipment, naval weapons and coastal protection. In addition, ATLAS ELEKTRONIK GmbH continues to offer a wide range of services even after the delivery of its products.



Status of 2022

Figure 2.4: Overview of manufacturing and office locations and basic illustration of flows and travels

Group Actitivities through the Lens of European Taxonomy

The EU Green Taxonomy (European Union's Taxonomy Regulation 2020/852) and its delegated acts aim to direct private capital toward sustainable investments. By promoting a common classification system for environmentally sustainable activities across all sectors, it promotes greater transparency and standardization.

Under the EU Green Taxonomy, economic activities are environmentally sustainable if they:
- Make a substantial contribution to at least one of the six environmental objectives
- Do no significant harm (DNSH) to the other five environmental objectives
- Comply with minimum safeguards

The assessment as to whether an economic activity makes a substantial contribution to one of the objectives and does no significant harm to the five others is based on technical screening criteria (TSC). For now, these TSC are only available for the first two objectives (climate change mitigation and climate change adaptation). It means that disclosures can only be made for these two objectives for the fiscal years 2021 and 2022.

To facilitate the disclosure of information, it has been classified into:
- Taxonomy-eligible activities: if they can be allocated to the taxonomy criteria
- Taxonomy-aligned activities: if they also fulfil the criteria

In 2022, thyssenkrupp Marine Systems launched a project to assess the taxonomy requirements applicable to the EU environmental objectives of climate change mitigation and climate change adaptation. Driven by internal experts, thyssenkrupp Marine Systems' economic activities were allocated to the relevant taxonomy criteria. Further assessment is planned in 2023 to evaluate whether the pre-identified economic activities fulfil the relevant technical taxonomy criteria (alignment review). A significant part of these will include collecting and reviewing the evidence and records.

The Green Taxonomy clusters environmentally sustainable activities in six main objectives:

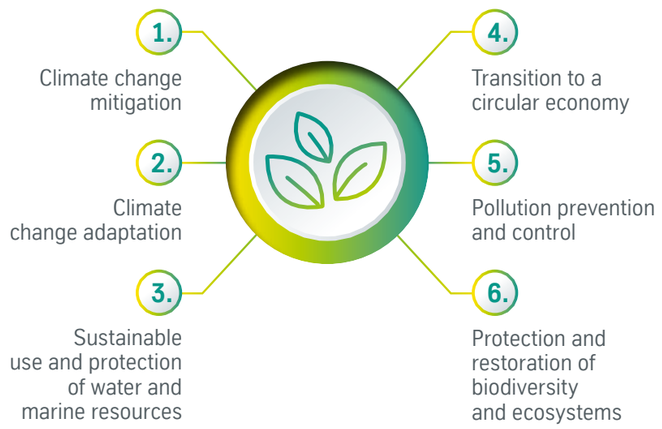


Figure 2.5

Substantial contribution: Identified technologies in thyssenkrupp Marine Systems' technology portfolio that can demonstrate substantial life-cycle greenhouse gas (GHG) emission savings have to be compared to the best-performing alternative technology available on the market for their given applications. According to the EU Taxonomy Regulation and its technical criteria, the reduction in GHG Emissions emissions has to be substantial. However, the Regulation does not stipulate a minimum value.

Do no significant harm: For a specific economic activity, the DNSH criteria predominantly refer to compliance with legal requirements and, in the case of the circular economy objective, to fundamental aspects of the economic activities. Climate change adaptation is assessed on group level to secure DNSH conformity in respect of the EU environmental objective.

Minimum safeguards: In this case, a group-wide approach to ensure compliance with the minimum safeguard requirements was adopted. This allows the relevant requirements to be assessed appropriately and without omission.

Deep dive on the assessment of "Manufacture of other low-carbon technologies"
Substantial parts of thyssenkrupp Marine Systems' current technologies, innovations and ongoing research & development projects have been identified as relevant under the "Manufacture of other low-carbon technologies" activities set. This is well founded on the long history of hydrogen technologies in the use of the products. Core parts of thyssenkrupp Marine Systems' economic activities are not directly allocable under the current taxonomy requirements, due to its inherent business model in the defence industry.

An analysis of exposure to taxonomy-eligible activities as required by the Regulation and its delegated acts has been performed.

The following activities and related data were analysed:
- Hydrogen-powered solutions for GHG emissions reductions
- Renovation of existing buildings
- Construction of new buildings
- Electricity generation using solar photovoltaic technology
- Installation, maintenance and repair of renewable energy technologies
- New technologies for enhanced marine biodiversity protection
- New technologies for ammunition clearance
- Measures and activities resulting from implemented energy and environmental management systems

The result of this assessment provides the basis for future reporting, as follows:
- The proportion of turnover derived from products or services associated with environmentally sustainable economic activities
- The proportion of their capital expenditure (CapEx) related to assets or processes associated with environmentally sustainable economic activities
- The proportion of operating expenditure (OpEx) related to assets or processes associated with environmentally sustainable economic activities

As the assessment is still ongoing, values will be published with the next reporting period.

"The Green Taxonomy as common classification system for environmentally sustainable acitivities supports the assessment of financial investments and strengthens our strategy to grow with sustainable technologies like low-carbon technologies."

Expert Future Corporate Affairs

Get to know more about European Taxonomy

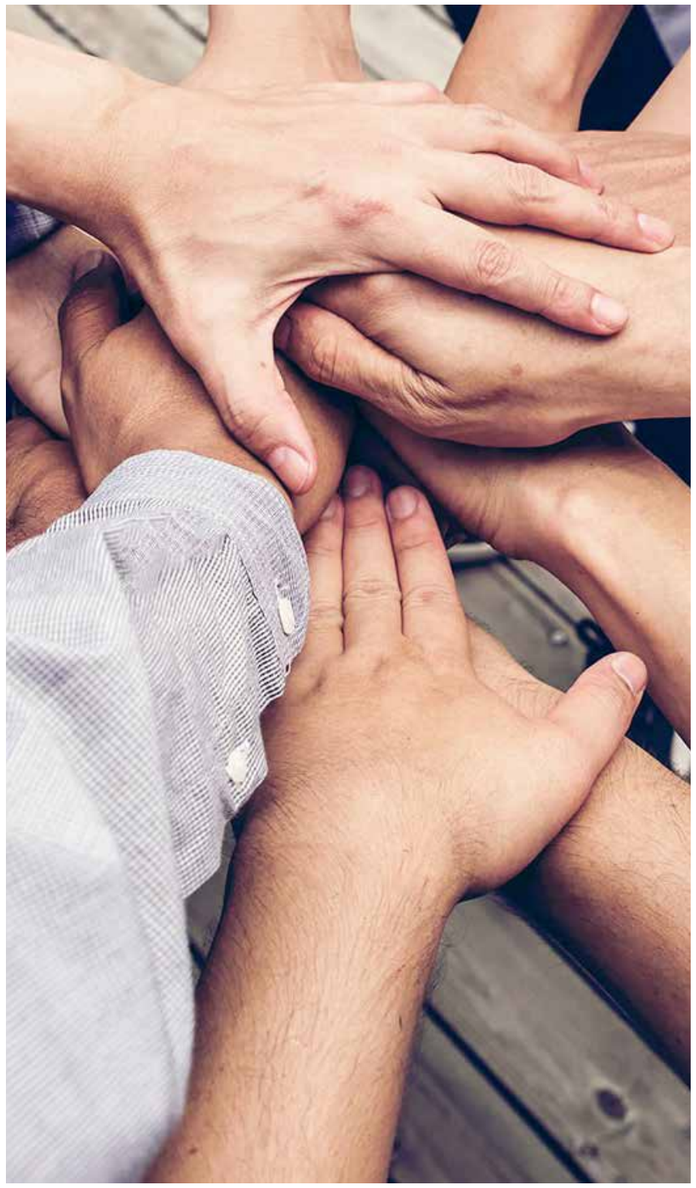
Weblink

Sustainability Governance and Compliance

3

"Good ESG governance enables us to find position in a more and more regulated environment and promotes business continuity and resilience."

Head of ESG



The world is changing. To further contribute to the development of governments and the well-being of the supported navies, an understanding of the main trends that are shaping the society and the planet, and particularly the oceans, is a necessity to become more resilient.

Integrity, reliability, credibility and consistency are the principles that guide the group in the creation of corporate governance processes. Compliance is a must, and the interactions are based on transparency and mutual respect. The rules summarized in the thyssenkrupp Code of Conduct reflect the commitment to ensuring that all collaborators and partners in or outside the group always act ethically and lawfully.

Approach to Sustainability Governance & Reporting

Corporate governance stands for responsible corporate management and control geared to long-term value creation. Efficient cooperation between Executive Board and Supervisory Board, respect for shareholder interests, and openness and transparency of corporate communications are key aspects of good corporate governance. It promotes the trust of investors, financial markets, business partners, employees and the general public in the management and oversight of the company and is essential to the company's sustainable success. An intensive, continuous dialogue between the Executive Board and the Supervisory Board is the basis for efficient corporate management. thyssenkrupp Marine Systems has enhanced and intensified this dialogue step by step and in accordance with national and international standards. The corporate governance structure of thyssenkrupp Marine Systems and all its subsidiaries and worldwide offices is a relatively traditional one, as presented in the organization chart, figure 3.1.

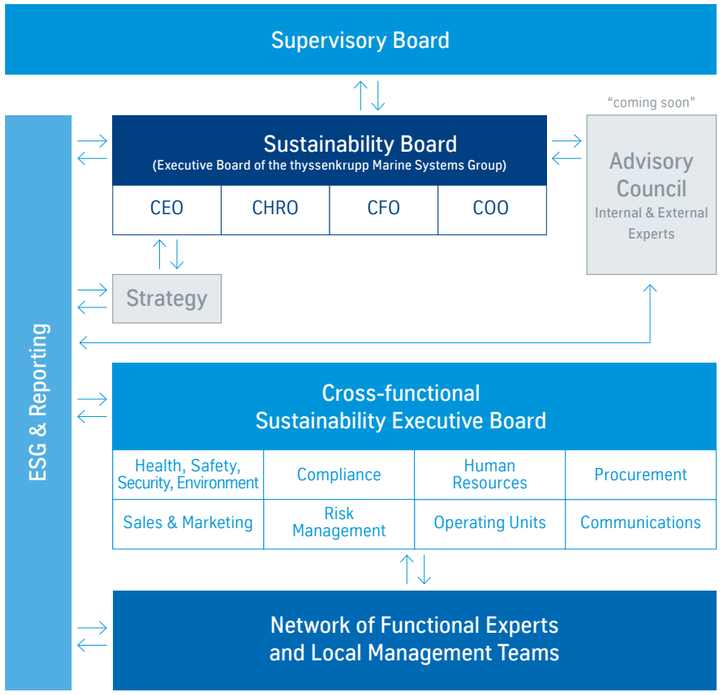


Figure 3.1: Organization chart of ESG governance

ESG governance is a cornerstone to good governance and the company has established a strong line of responsibilities to further stimulate commitments across the operating units and sites. To anchor sustainability across the whole organization, thyssenkrupp Marine Systems' sustainability governance model declares the highest internal governance body, the Executive Board of thyssenkrupp Marine Systems, accountable for it. The Chairman of the Executive Board bears overall responsibility for sustainability. Board committees are an important vehicle for educating the board on sustainability issues and helping demonstrate corporate commitment to sustainability at the highest levels. Sustainability oversight by the Executive Board is accomplished through the dedicated expertise each board member embodies. The Chairman of the Executive Board bears overall responsibility for sustainability.

The ESG department incorporates a central function with the following tasks:

- Definition, implementation and reinforcement of the ESG strategy & governance
- Reporting & data analytics
- Eco-design processes
- Decarbonization & carbon offsets
- Regulations & ESG risk management
- Sustainability communication, marketing & training
- Greenwashing protection
- Setting standards for and coordination of all legal entities in relation to ESG

In addition, material sustainability issues such as the responsible supply chain & material sourcing, energy management, GHG emissions, diversity, equity & inclusion and upskilling of employees are managed through an effective organizational structure using certified management systems.

Below the board level, having a cross-functional executive committee that engages leadership across business units, regions and functions affords further oversight and strategic guidance. It also mobilizes employees to implement strategies. The functions involved can vary, but may include procurement, sales & marketing, product management, operating units, public affairs, human resources, environmental, and health & safety.

Furthermore, as part of the thyssenkrupp group, the company participates in the Sustainability Committee and a dedicated Sustainability Council on group level.

thyssenkrupp

Facts on good governance on group level:
Corporate governance at thyssenkrupp is based on the German Corporate Governance Code (DCGK), as published by the DCGK Government Commission on 26th February 2002 initially and amended most recently on 16th December 2019. thyssenkrupp complies with all recommendations of the DCGK. The DCGK is a recognized standard for good corporate governance at German exchange-listed companies with the exception of the recommendations concerning the number of external supervisory board mandates (recommendation C.5) and the remuneration of the executive board (section G.I). The Executive Board and Supervisory Board of thyssenkrupp AG issued a declaration of conformity in accordance with section 161 of the Stock Corporation Act. Compliance management ensures that applicable laws and own guidelines are always observed.

CEO
Oliver Burkhard
ESG Strategy, Good Governance, Human Rights

CHRO
Bernd Hartmann
Social Engagement, People, Health & Safety, Diversity & Inclusion

CFO
Paul Glaser
Risk Management, Sustainable Financial Investments, Sustainable Procurement

COO from June 1, 2023
Dr. Dirk Steinbrink
Eco-Design, Sustainable Innovation & Technology, Sustainable Production

Matrix of directors' expertise

- International experience
- Banking and finance
- Digital technology
- Corporate Social Responsibility
- Research & Development
- Public affairs
- Human Resources

Figure 3.2: Board members and their expertise and responsibilities in relation to ESG

Business Ethics & Integrity

Respect, cooperation and social responsibility are the basis for sustainable business success. At thyssenkrupp, this philosophy has a long history. The German social security system is based in part on models the company introduced 160 years ago. As a major actor alongside governments and international organizations, thyssenkrupp Marine Systems is dedicated to continuously fostering a culture of ethical and lawful conduct while delivering safe and reliable products to customers. The company actively prevents and abstains from any situation presenting a conflict of interest and actively discourages any form of corruption at all levels in Germany or abroad. To ensure transparency in the management and control of the business, thyssenkrupp Marine Systems has established a sound set of management practices by applying a robust system – consisting of rules, tools, activities, procedures and organizational structures – to protect its reputation, integrity and people. The General Counsel of the thyssenkrupp group is also the Chief Compliance Officer and is responsible for managing the compliance programme and the global compliance organization.

It is particularly important to continuously exchange ideas with external experts to ensure continuous improvement. thyssenkrupp Marine Systems, with its group-wide Compliance Program established in 2011, was one of the first companies in Germany to be certified according to the Audit Standard 980 of the "Institut der Wirtschaftsprüfer e. V." (Institute of Public Auditors) with regard to antitrust law and anti-corruption. Those "soundings" are an important tool to re-evaluate and adapt policies and procedures as well as the whole Compliance Management System.

Compliance network on group level

80 FTE full-time on compliance

250 compliance officers

180 data protection officers

Since 2013, thyssenkrupp has the basic structure of its enhanced internal control system audited by two special auditors, BDO AG Wirtschaftsprüfungsgesellschaft and Prof. Dr. Hans-Joachim Böcking.

The main points of the audits are:
- Appropriate internal control system for the prevention of compliance violations
- Implementation of recommendations in the Compliance Management System
- Appropriate investment controlling process for future major investment projects and related information of the Supervisory Board

The systems and processes audited are continuously developed, and the concepts and planned measures are target-oriented, particularly in the area of the compliance-relevant internal control system.

Specific areas of risk are covered by the Compliance Program, for which the group function Legal & Compliance is responsible. This is based on three elements: "inform and advise", "identify" and "report and act".

A group-wide compass is created in the ⊖ mission statement to guide the employees' actions and behavior.

The main principles and rules of actions and the standards set in all dealings with business partners and stakeholders are summarized in the ⊖ thyssenkrupp Code of Conduct.

The mission statement and the Code of Conduct are accompanied by a ⊖ compliance commitment.

Compliance Culture

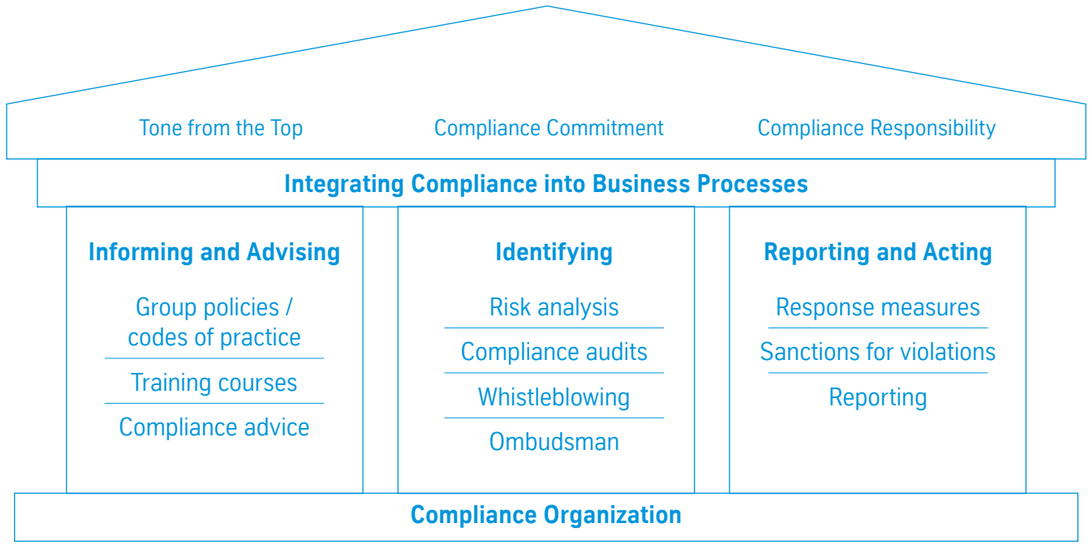


Figure 3.3

Three-Lines Model for Governance, Risk & Compliance

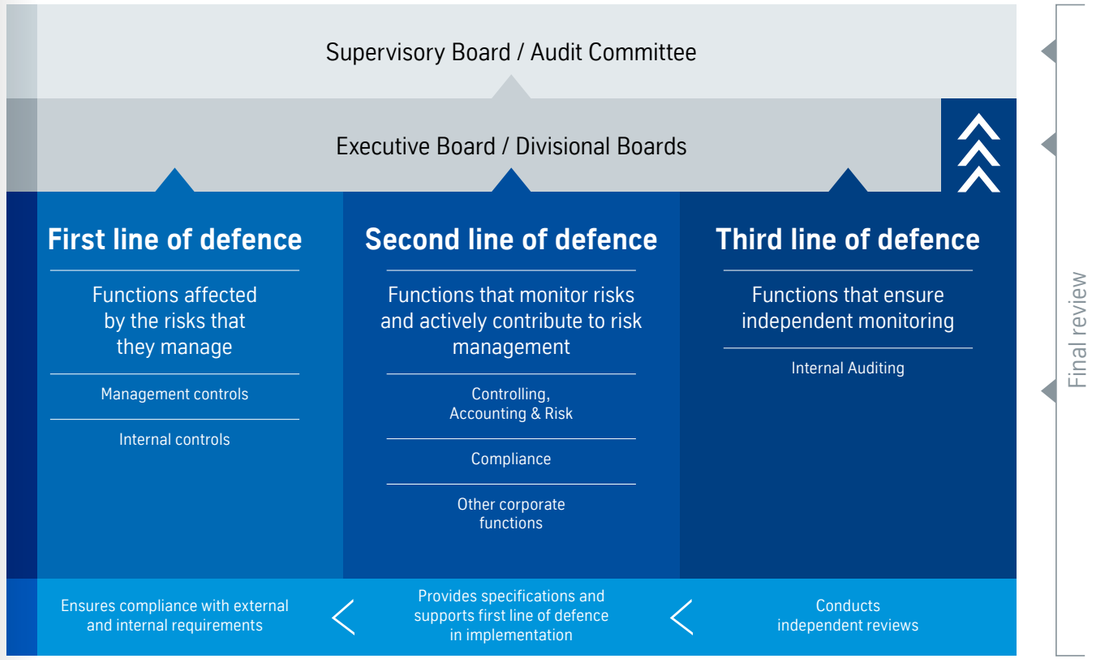


Figure 3.4

This programme is closely interlinked with risk management and with the internal control system. In this way, it is ensured that compliance is an integral component of every single business process. The key areas of the program are anti-corruption, antitrust law, data protection, anti-money laundering and trade compliance.

The main principles and rules governing the actions as well as the standards set in dealings with business partners and stakeholders are summarized in the thyssenkrupp Code of Conduct. For employees, managers and the board, it provides framework guidance on the following issues:

· Compliance with the law
· Avoiding conflicts of interest
· Fair competition
· Preventing money laundering
· Equal treatment and non-discrimination
· Human and labour rights
· Cooperation with employee representatives
· Occupational safety and health
· Sustainability and protection of the environment and climate
· Donations
· Political lobbying
· Presentation in public and communications
· Reporting
· Confidential company information and inside information
· Data protection and information security
· Protection of company property

The Defence Companies Anti-Corruption Index (DCI), published by Transparency International Defence & Security (TI DS), sets standards for transparency, accountability and anti-corruption programmes in the defence sector. By analysing what companies are publicly committing to in terms of their openness, policies and procedures, it seeks to drive reform in the sector, reducing corruption and its impact on the DCI. In the 2021 DCI report, thyssenkrupp was again ranked in category B – with 71 out of a possible 100 points (high commitment to transparency and anti-corruption).

The Executive Board sets a strong commitment to anti-corruption. Yet leadership does not just rest with the CEO; middle management bears the challenging responsibility in terms of setting the tone and culture of the organization for frontline staff. thyssenkrupp Marine Systems supports employees with accessible, tailored controls as well as trainings across all divisions and areas of operation.

Whistleblowing System
Bona fide reports help counteract violations at an early stage and limit the damage for company, employees and business partners. An open communication culture is a key component of a functioning compliance programme. Employees must be able to talk about mistakes openly and, above all, in good time. Therefore, several channels to report infringements anonymously have been set up. The primary point of contact for employees is the supervisor. Non-employees may contact their business partner. In other cases, the availability of the Compliance department is guaranteed.

whistleblowing@thyssenkrupp.com or
telephone: + 49 201 844 505050

The electronic whistleblowing system on the internet is available in 34 languages and is open to all thyssenkrupp employees and also to customers, suppliers and other third parties.
Reports received will be checked and handled by the Compliance Officers of thyssenkrupp AG (exception for North America and Canada: NAVEX Global). Follow-up communication between the Compliance Officer resp. NAVEX Global and the whistleblower

> "Employees must be able to talk about mistakes openly and, above all, in good time."
>
> Head of Compliance

is possible, anonymously if desired, in a secure mailbox that can be set up.

thyssenkrupp safeguards the interests of the whistleblower also by providing assurances that all information received by group function Legal & Compliance at thyssenkrupp AG remain confidential and that all means will be used to protect whistleblowers acting in good faith from any disadvantages as a result of their disclosures.

During its investigations, thyssenkrupp will also strive to protect the legitimate interests of other persons affected by a disclosure.

The electronic whistleblowing system can be reached via internet.

In North America and Canada, the TKNA Ethics Hotline can be contacted.

Human Rights

The above-mentioned mission statement, the compliance commitment and the code of conduct form the principal framework for the Executive Board as well as for all thyssenkrupp leaders and employees. The code of conduct contains all the fundamental principles and rules for responsible and ethical behaviour towards people inside and outside the company. This naturally includes respect for human rights as a core value. thyssenkrupp Marine Systems is committed to the United Nations International Bill of Human Rights and its implementation throughout the group. The commitment is also demonstrated by signing the ten principles of the United Nations Global Compact. An extensive supplier management system ensures that direct suppliers respect human rights and are committed to safeguarding that this is also the case for indirect suppliers.

thyssenkrupp Marine Systems is committed to the highest sustainability standards, which include good corporate governance as well as environmental and social responsibility. To secure the sustainable success of the customers with innovative product and service solutions, the necessary raw materials, goods and services are sourced worldwide. The basis for this is responsible corporate management geared to long-term value creation. In addition, thyssenkrupp has set up an international committee with the participation of the group Works Council, European Works Council and trade unions that is tasked with intervening in cases of violations or disputes that cannot be resolved locally. As agreed, incoming reports are processed in consultation between the International Committee and thyssenkrupp.

Human rights are addressed at thyssenkrupp Marine Systems particularly in the following policies, guidelines and standards:

thyssenkrupp Mission Statement & Code of Conduct
Find more on page 25

International Framework Agreement (IFA) and the core labour standards of the International Labour Organization (ILO)
In 2015, thyssenkrupp AG, the group Works Council, the IG Metall trade union and the IndustriALL Global Union concluded an IFA on global minimum labour standards at thyssenkrupp to document the corporate social responsibility. In addi-

Whistleblowing System

whistleblowing@thyssenkrupp.com
Telephone: + 49 201 844 505050

The electronic whistleblowing system can be reached via internet.

In North America and Canada, the TKNA Ethics Hotline can be contacted.

tion to recognizing the core labour standards of the International Labour Organization and the Universal Declaration of Human Rights, the IFA includes principles on good occupational safety and health, opportunities for professional and personal development, the right to adequate remuneration, the prohibition of child and forced labour, and the prohibition of discrimination of any kind. All employees and third parties can report cases of misbehaviour online.

thyssenkrupp Supplier Code of Conduct (SCoC)
The Supplier Code of Conduct clearly formulates the expectations. It is based on the principles of the United Nations Global Compact and the United Nations Universal Declaration of Human Rights. The aim is to work only with suppliers who adhere to the given principles and comply with national laws in this context.

thyssenkrupp Environment and Energy Policy
Environmental and energy management at thyssenkrupp Marine Systems and operational environmental protection in the businesses are continuously improved to minimize environmental impacts in an ecologically, economically and socially appropriate way, to conserve energy and resources, and to protect the diversity of natural resources.

thyssenkrupp Occupational Safety and Health Policy
The thyssenkrupp Occupational Safety & Health (OSH) standards are implemented in various group policies and regulations, above all in the OSH policy and in detail in the group policy “OSH” in conjunction with the OSH Management Manual, which meets the requirements of the international standard ISO 45001.

The topics covered include not only the physical aspects of OSH, but also mental health. The aim of the dedicated standards is to:
- Create a uniform understanding of OSH management throughout the group
- Define responsibilities, duties and minimum standards in OSH management (in addition to existing statutory regulations)
- Create a suitable organizational structure for OSH management to prevent accidents and work-related illnesses, as well as to strengthen awareness, motivation and skills for individual health promotion and to include employees with limited abilities at thyssenkrupp as far as possible

thyssenkrupp Conflict Minerals Statement
The extraction of certain minerals sometimes contributes to significant human rights violations and the financing of violent conflicts in the regions of origin. Due to the higher risk, the EU Conflict Minerals Regulation and the US Conflict Minerals Regulation (Dodd-Frank Act) set minimum due diligence and reporting requirements for the sourcing of these minerals. These regulations focus on specific regions, such as the Democratic Republic of Congo (DRC) and neighbouring countries, where the risk is particularly high.

Conflict minerals include tantalum, tin, tungsten (and the ores from which they are extracted) and gold, regardless of where they are mined, processed or sold.

thyssenkrupp is not subject to SEC oversight and therefore has no legal obligation to comply with the conflict minerals requirements of section 1502 of the Dodd-Frank Act. At the same time, the company recognizes that the regulations require its direct and indirect customers to conduct appropriate due diligence within their global supply chains.

thyssenkrupp Modern Slavery Statement
thyssenkrupp aims to eliminate slavery and human trafficking both in its supply chain and in its own operations. The efforts in this regard are described in the “thyssenkrupp Modern Slavery Statement 2020/2021”, which was drawn up in accordance with the requirements of the United Kingdom Modern Slavery Act (2015) and the Australian Modern Slavery Act (2018).

Integrated Risk Management & Business Continuity

The COVID-19 pandemic, recent geopolitical constraints as well as major sustainability trends have caused widespread disruption across the defence industry. Major structural and global changes require enhanced risk management, including ESG risks, to build resilience for future disruptions. To manage these risks, thyssenkrupp Marine Systems has been revising its strategy, collaborating with governments, assessing risk-sharing partnerships, and innovating beyond its core activities.

Handling ESG-relevant risks and opportunities and, therefore, the related sustainability issues is necessary when establishing a resilient business model. Whereas the governance business processes build a stable foundation, the material ESG issues may vary from year to year and therewith influencing the focus of the governance activities. Material ESG issues are focused on topics that require a common set of management initiatives or a similar type of oversight. More details about the material topics and the connection to thyssenkrupp Marine Systems' stakeholders can be found in chapter Stakeholder Engagement. Awareness of the ESG issues' influence on the economic value of thyssenkrupp Marine Systems is a necessity, considering the typical business model and environment the company is operating in. By mapping all material risks, planning how to mitigate them and how to seize related opportunities, ESG risk management is designed to achieve the following:

1 - Strategy: keep high-level strategic objectives consistent with risk taking
2 - Operations: safeguard effectiveness, safety and efficiency of operations and resource allocation, in line with performance and financial targets
3 - Reporting: ensure reliability of reporting, both financial and extra-financial in line with the upcoming CSRD
4 - Compliance: comply with applicable laws and regulations; strong export compliance

ESG-related risks identified and assessed in 2022 are shown in the risk list and risk matrix (figure 3.5) and will be handled according to the implemented solutions for dealing with risks and opportunities. This first assessment does not include mitigation measures which will be realized or are already in place.

Major structural and global changes require enhanced risks management, including ESG risks, to build resilience for future disruptions.

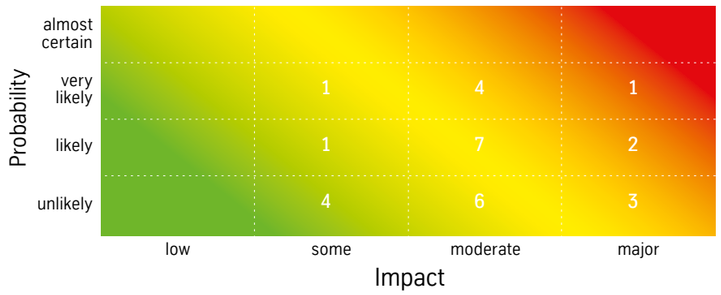


Figure 3.5: ESG risk matrix showing the amount of identified risks

Actions for Dealing with Risks and Opportunities
The Risk Management department coordinates risk governance, establishes the framework for measuring all related risks, designs the integrated risk monitoring process, operates mechanisms for the identification of the main risks, including ESG-related ones, and coordinates the integrated response to such risks, with the support of the appropriate bodies across the company.

A uniform opportunity and risk management process creates the conditions for identifying all relevant opportunities and risks at an early stage, analysing, evaluating, aggregating and coordinating them, and then systematically communicating related information to the responsible decision-makers. The methods for identifying and managing opportunities and risks are an integral part of the various management system disciplines.

With the regular systematic analysis and management of opportunities and risks, compliance with the German regulatory duties under the Companies Act and the Commercial Code is secured, and a comprehensive management tool focused on maintaining and enhancing the values of the company is provided. The opportunity and risk management process is supported by an audit-proof IT solution and ensures that effective measures are taken with regard to risk management. This forms the basis for management reporting in the various hierarchies to improve transparency.

Operational Risk Management
The biggest company risks relate to the successful execution of its programmes – on time, on quality and on cost while mitigating risks such as the lack of skilled workers, appropriate material sourcing and current energy-related issues. A continuous process to manage the risks and opportunities related to the achievement of the specified requirements was established. This process takes into consideration the following:

- Assignment of roles and responsibilities for risk management
- Definition of transparent risk criteria (e.g. probability, consequences, risk acceptance) and measures for dealing with risks and opportunities
- Identification, assessment, communication and analysis of risks throughout product realization
- Determination, implementation and control of measures to mitigate risks that exceed the defined risk acceptance criteria
- Acceptance of risks that persist after the implementation of mitigation measures and evaluation of the effectiveness of these measures
- Management of documents and records as well as legal requirements (e.g. Stock Corporation Act, Commercial Code, General Data Protection Regulation, Federal Data Protection Act)
- Information security risk management according to ISO 27001
- Occupational safety and health risks according to ISO 45001

Risk ID	Title
1	Widespread cybercrime and cyber insecurity
2	Increased costs of raw materials
3	Reputational risk tied to contribution to or detraction from the transition to a lower-carbon economy
4	Natural resource crisis
5	Longer-term shifts in climate patterns
6	Increased pricing of GHG emissions
7	Enhanced emissions-reporting obligations
8	Large-scale environmental damage incidents
9	Exposure to (climate-related) litigation claims or legal risks
10	Cost of living crisis related to energy and material costs
11	Technological improvements or innovations compete with the business model of the organization
12	Natural disasters and extreme weather events - event-driven physical risk
13	Mandates on and regulation of existing products and services
14	Substitution of existing products and services with lower emissions options
15	Costs of transition to lower emissions technology
16	Policy actions around climate change
17	Failure to mitigate climate change
18	Failure to mitigate climate change adaptation
19	Market risk by shift in supply and demand due to climate-related adaptions
20	Unsuccessful investment in new technologies

Embedding Export Compliance into Projects

Many laws and regulations apply to an export-driven enterprise like thyssenkrupp Marine Systems. Good governance strongly supports compliance with highest ethical standards. Furthermore, compliance with the following laws guarantees social responsibility in export projects:

- War Weapons Control Act
- Anti-Torture Regulation
- Foreign Trade Law
- EU Dual-Use Regulation (Regulation (EU) 2021/821)
- Embargoes
- Firearms Regulation – Regulation (EU) No 258/2012: implementing the United Nations' Protocol against the illicit manufacturing of and trafficking in firearms
- Defence-related Products Directive – Directive 2009/43/EC of the European Parliament and of the Council of 6th May 2009 simplifying terms and conditions of transfers of defence-related products within the Community

The company does not produce and is not involved in any kind of weapons of mass destruction (nuclear, chemical and biological weapons).

Responsible Sourcing

The company's aspiration is to promote a sustainable economy and society, protect nature and strengthen the trust of stakeholders and therefore monitors progress accordingly. As an internationally active company, raw materials, goods and services are sourced worldwide. In doing so, people and the environment are given priority. In order to maintain highest standards, it is therefore important to address sustainability as early as possible in the supplier management process. This promotes close cooperation with suppliers and engagement with business partners in the areas of human rights, environmental protection and general working conditions. Values such as personal responsibility, openness and transparency, as well as continuously ethical and lawful behaviour, play an important role.

Ensuring Supply Security and Supplier Management:

In relying on a sustainable and responsible procurement approach, one of the top priorities is to guarantee both security of supply and the protection of human rights. thyssenkrupp Marine Systems is committed to the Universal Declaration of Human Rights of the United Nations and its implementation and also supports the United Nations Global Compact.

With the establishment of a supplier evaluation, which is prescribed in the procedural instructions, a code of conduct for suppliers, a risk management tool for the supply chain and fair working conditions throughout the entire value chain are demanded and promoted.

In addition to the thyssenkrupp Code of Conduct, economic, social and ecological values are also anchored in the general terms and conditions of purchase, which apply worldwide. Among other things, it ensures the protection of human health and the environment from the risks that can arise from chemicals in accordance with the REACH Regulation.

The Act on Corporate Due Diligence Obligations in Supply Chains: Implementation Strategy and Main Initiatives

In June 2021, the Bundestag and the Bundesrat passed the Act on Corporate Due Diligence Obligations in Supply Chains (SCA). Legally, the law means that German companies with at least 3,000 employees will have to adapt and update their compliance and sustainable contract design, especially in the context of purchasing.

thyssenkrupp Marine Systems complies with all applicable laws, regulations and standards in the countries where it operates and expects its suppliers to do the same. The other human rights and environmental expectations, most of which are set out in the (Supplier) Code of Conduct, must at least be noted and observed by all employees and suppliers.

The management board of thyssenkrupp Marine Systems published a declaration of compliance in human rights and environmental protection due diligence to be transparent in their understanding of their obligations, the expectations towards employees and suppliers as well as the respective responsibilities. The company is constantly working on analysing the human rights and environmental impacts of business activities in order to minimise potential risks and prevent them from occurring. To this end, a supply chain-related risk management system was created to cover the following tasks:

- Risk analysis
- Processes for prevention and corrective measures
- Definition of responsibilities
- Definition of declaration
- Complaint management (open accessible to report misdemeanour)
- Documentation and reporting

The human rights envoy controls and coordinates the risk management system and reports regularly to the management board. The risk management system is accompanied by a variety of policies and regulations to strengthen the execution of human rights and environmental protection, see chapter Business Ethics & Integrity:

- thyssenkrupp Code of Conduct (CoC)
- thyssenkrupp Supplier Code of Conduct (SCoC)
- International Framework Agreement (IFA)
- thyssenkrupp Operating Instruction on Health and Safety at the Workplace
- thyssenkrupp Operating Instruction on Environment and Energy

In order to carry out a risk analysis of suppliers, a risk potential of the immediate suppliers is derived on the basis of the geographical location and the industrial sector

> "In order to maintain highest standards, it is important to address sustainability as early as possible in the supplier management process."
>
> Head of Procurement & Supply Chain Management

> "The implementation of the Supply Chain Act requires the use of smart and efficient IT solutions for the successful execution of defined measures. We follow the principle of «enablement before withdrawal» to build strong business partnerships under protection of the environment and human rights."
>
> SCA Officer

thyssenkrupp SCA Risk Analysis and SCA Risk Reaction Approach

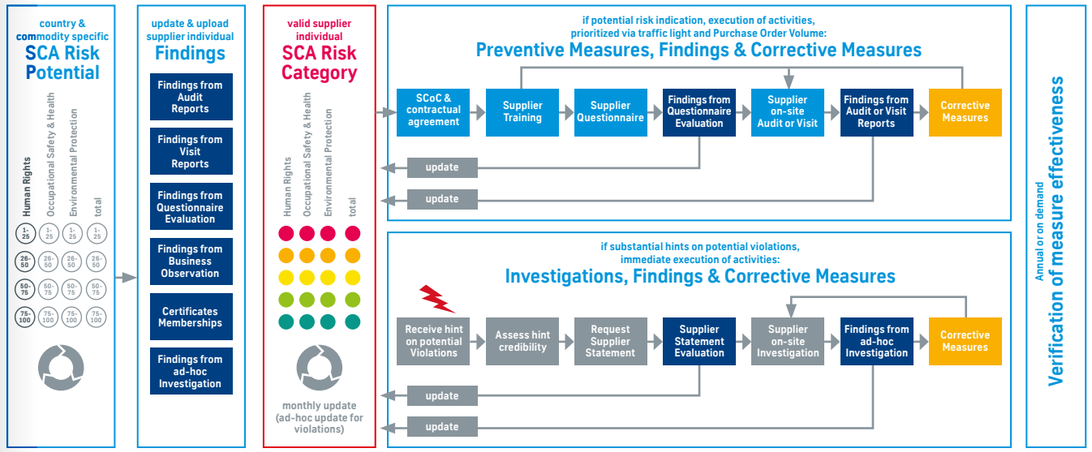


Figure 3.6

Complaints Procedure: Important Process Steps

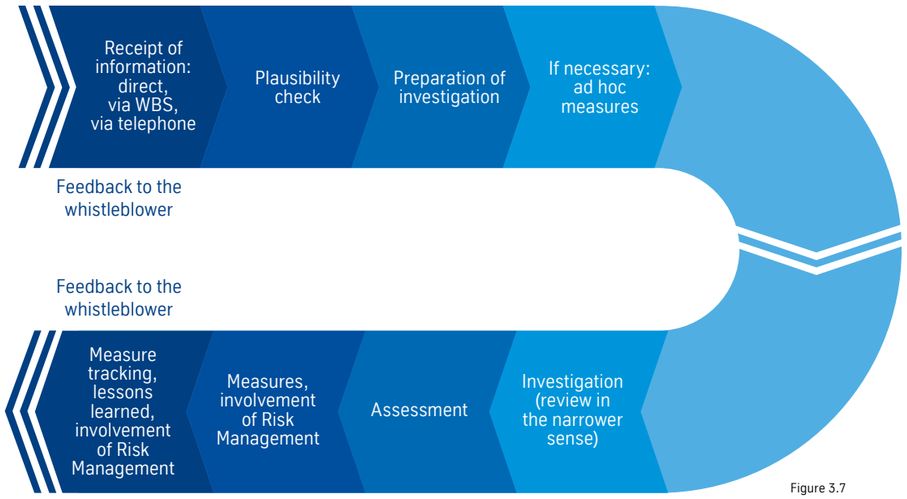


Figure 3.7

via risk indices of the external provider Verisk Maplecroft. This risk potential is further developed into a supplier-specific risk assessment by means of certain findings. Such findings update the risk rating of the dedicated suppliers (see figure 3.6).

The results of the review are decisive for the individual case-specific preventive and remedial measures derived to mitigate and address identified risks. These measures range from talks with suppliers to appropriate training up to the termination of business relations as a last resort. However, the principle of "enablement before withdrawal" applies. According to this principle, the primary goal is always to ensure the protection of the environment and human rights, and not to terminate business relationships that violate protected legal interests.

The implementation of the SCA requires the use of smart and efficient IT solutions for the successful execution of defined measures. Despite strict confidentiality requirements, have found a way to securely use the digital platforms "risk methods" and "Integrity Next". "Integrity Next" is used to monitor environmental, social and governance issues. In addition, the financial key figures of suppliers are reported via "risk methods". In particular, economic information is obtained via Bureau van Dijk. The tools thus not only help to fulfil the requirements of the SCA, but also actively support the avoidance of social, ecological and environmental sustainability risks in the supply chain.

In order to quickly counteract violations of the due diligence obligations of the SCA, a whistleblower system in the sense of a complaints procedure has been established. Therefore, different possibilities of contacting through several channels in order to report violations – anonymously if desired – are offered. The possibility of submitting a whistleblower is available to all employees as well as to third parties. The interests of whistleblowers are protected by the establishment of a secure whistleblowing system. The exact process steps are shown in figure 3.7. The system can be found on the internet. Please see page 26 for further information.

In addition, there are corresponding training courses for employees and suppliers to ensure that the human rights strategy and

> "The international supplier sustainability audit programme promotes and ensures sustainability along our supply chain."
>
> Head of Procurement Performance

the corresponding codes of conduct and guidelines are known, understood and correctly applied. The training is based on both the SCoC and the Declaration of Principles.

Procurement concept & Selecting new suppliers:

A globally active company bears a major responsibility with regard to sustainable development. With the aim of promoting and ensuring sustainability along the supply chain, an international supplier sustainability audit programme has been set up to check and ensure that suppliers comply with the requirements of the SCoC. The suppliers selected for the audit are drawn randomly from all suppliers worldwide.

The aim of these audits is to evaluate the suppliers' sustainability management and to identify concrete opportunities for improvement. With the support of the external company Intertek, "Workplace Capability Assessments" are carried out on the basis of the SCoC. By means of the "Workplace Conditions Assessment" programme, the working conditions along the value chain are analysed and continuously improved. The focus is particularly on aspects such as the environment, but also on working conditions, health and safety and management systems.

Corruption prevention and compliance & Escalation process in the case of suspected violations:

Compliance in business transactions is of major importance. In accordance with general terms and conditions of purchase, contractors, subcontractors and suppliers are bound by applicable national and international legal requirements, in particular to comply with all regulations in the areas of economic criminal law, competition law, occupational health and safety and environmental protection.

Mandatory compliance and antitrust law training for all employees ensures a compliance-conscious company.

The use of personnel who are not in an employment relationship with thyssenkrupp Marine Systems is a suitable instrument for fulfilling the diverse tasks. However, the commissioning and performance of activities by external personnel entails considerable risks, such as pseudo self-employment, illegal hiring out of employees or moonlighting, if not handled in a lawful manner. Violations of obligations in the commissioning and use of external companies can result in severe sanctions.

For this reason, a Group Operating Instruction (GOI) has been in place since the beginning of 2018 to ensure the lawful use of external personnel (FPE) by setting minimum standards to avoid risks. The so-called FPE officer, who is anchored in the organisation of the company, is responsible to effectively prevent risk occurance. In order to protect the company and the individual employees, who are regularly involved in the commissioning and handling of external personnel, are adequately trained. In addition, the FPE officer checks contracts and monitors their implementation. Through these measures, employees are sensitised in the long term and lawful FPE is ensured.

Find out more about the basis for successful collaboration:
Link

Register as a supplier:
Link

Stakeholder Engagement

4

Adopted in June 2022 by the EU Parliament and Council, the new Corporate Sustainability Reporting Directive will become a key requirement for companies as early as January 2025. With the aim of improving the way companies report sustainability information, the CSRD integrates the concept of "double materiality". This means that companies have to report not only on how sustainability issues might create financial risks (financial materiality), but also on their own impacts on people and the environment (impact materiality). Beyond the legal aspects, the double materiality assessment is a powerful tool to detect material topics impacting on companies' operations and business as well as on their significance to stakeholders.

Starting in 2022, thyssenkrupp Marine Systems conducted its first double materiality assessment with its external and internal stakeholders. The aim was to gauge the perception of the company's orientations on about 18 pre-identified CSR issues (also referred to as "material topics").

In total, 90 surveys were distributed among a diverse group of internal and external stakeholders to quantify the impact materiality per ESG topic. The results were substantiated by qualitative measures taken from the survey as well as by in-depth interviews with eleven key stakeholders. During these interviews, the discussion focused on the risks and opportunities associated with the CSR issues, on assessing thyssenkrupp Marine Systems for sustainability, and on identifying the main obstacles, opportunities and next steps.
The results of the assessment are now being used to inform the sustainability strategy development, ESG governance and to facilitate strategic decision-making and customized stakeholder engagement.

Figure 4.1: ESG material topics

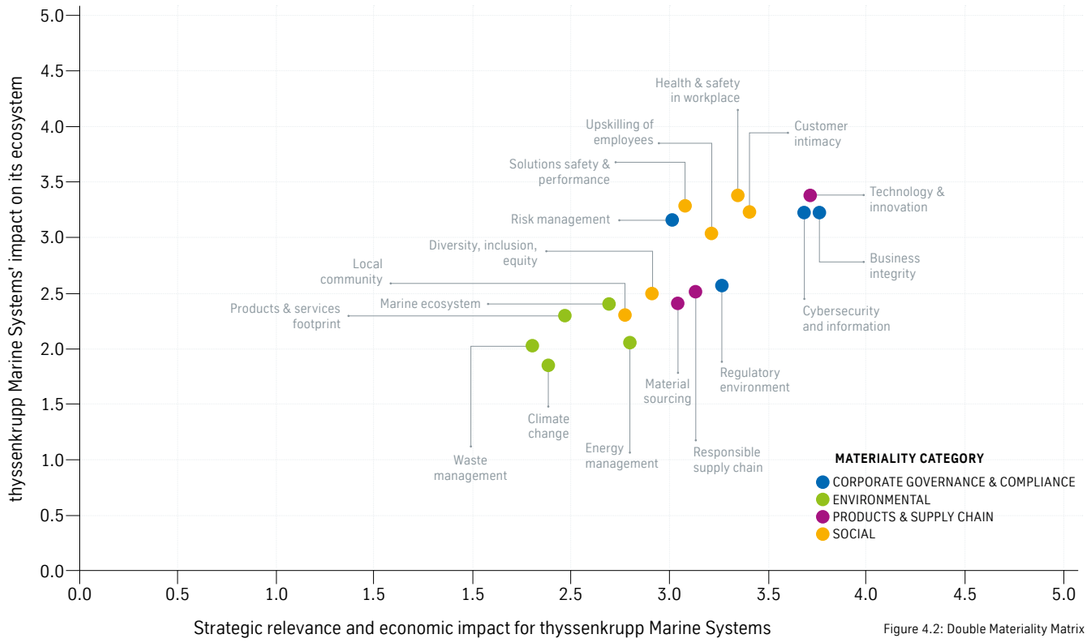


Figure 4.2: Double Materiality Matrix

Social Impact

It is a uniform response from the assessment that thyssenkrupp Marine Systems is a relevant employer within Schleswig-Holstein and beyond. It is recognized as an essential company for the region with a long tradition, high social impact and great responsibility. Speaking of responsibilities, ensuring business continuity is reflected in a high awareness among the respondents, especially when considering today's unstable business and geopolitical environments. Good governance, strong compliance, and health and safety of the workforce are core material topics, where the company sets high standards in order to ensure a secure and ethical workplace for all.

See chapters Stakeholder Engagement and People and Values to read further details.

Strengthening thyssenkrupp Marine Systems' Technology & Innovation

Clearly, technology and innovation are critical topics for the company. Remaining at the forefront of technological advancements is a must to provide safety and performance to its customers. Considering the high impact on thyssenkrupp Marine Systems' operations and market positioning, it has been ranked high on the priority list. Competition remains challenging and markets evolve rapidly. In this regard, slowly increasing decarbonization pressures on its customers will undoubtedly be translated directly into a rising business opportunity for the existing fuel cell technology. The further development of hydrogen-related technologies to foster the decarbonization is thus critical to the company, while carefully monitoring associated risks.

See chapter Sustainable Innovation to read further details.

Sustainability in the Defence Sector: Giving Sustainability a Safe Haven

Finding a position on sustainability in the defence sector is, in general, not easy. Nevertheless, there has been a great echo from the workforce that the social sustainability and security benefits provided by the company's products and services should not be underestimated. Thus, thyssenkrupp Marine Systems positively contributes to stability and safety globally. It is no surprise that business integrity and cybersecurity are consequently among the material topics with the most strategic and economic impact for thyssenkrupp Marine Systems as well as with the highest significance to the ecosystem. Customer trust and intimacy are distinctly prioritized by internal stakeholders and a sound governance is in place to protect this given trust. Regarding environmental sustainability, the company aims to play its part in the defence sector's efforts to reach carbon neutrality and to support governments in achieving their set sustainability targets.

See chapter Business Ethics & Integrity to read further details.

Culture & Upskilling of Employees as Enablers for the Future

A fitting and supportive corporate culture will facilitate progress on matters such as innovation, recruitment, diversity and equality. As targeted culture development requires vision, time and clear communication, it will be integrated into further corporate development plans. In doing so, thyssenkrupp Marine Systems is echoing employees' feedback from the assessment and interviews addressing the need to strengthen the corporate culture. Related to this, and of increasing importance to the company, is the recruitment of highly qualified profiles and the development of the existing workforce through upskilling and continuing education initiatives. It will be crucial to build on well-equipped employees when it comes to executing further complex projects in the future.

See chapter People and Values to read further details.

Embedding Diversity, Equity & Inclusion Values across the Whole Company

It is well understood internally and externally that truly diverse teams are best equipped to master complex challenges, since their execution and solution require diverse perspectives and skill sets. The double materiality assessment clearly indicates this as a great opportunity for the company to unleash greater potentials. Along with this, gender diversity and equity are also a key topic for thyssenkrupp Marine Systems. Awareness of this importance is shown by setting up KPIs and governance around it, so that an even more diverse and equitable workplace can be achieved. Therefore, developing a fitting and supporting corporate culture will only facilitate the aforementioned measures.

See chapter People and Values to read further details.

Environment

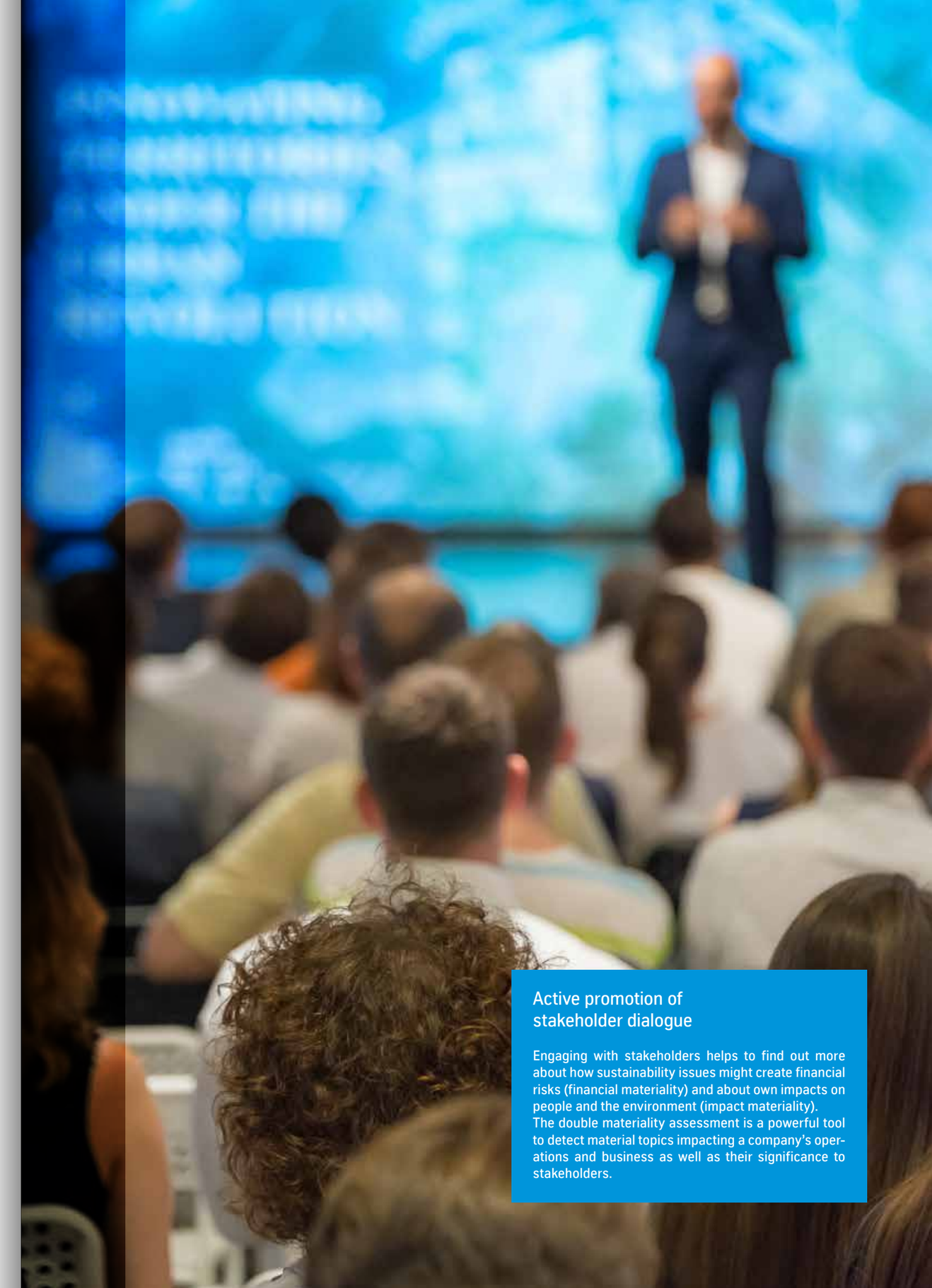
As highlighted in the double materiality matrix, environmental-related material topics are not considered to be of highest relevance. Often compared to its mother company, thyssenkrupp Marine Systems' environmental footprint is considered relatively low, thanks to the management systems and related initiatives already in place. Nevertheless, it was acknowledged that more could be done in this field, both on-site and regarding product design, namely due to the intrinsic relation of the company's products with marine biodiversity. Increasing noise pollution in the marine ecosystem is already a noticeable disruptor of advanced technologies and it is likely to worsen further. With the full life cycle of the products in mind, thyssenkrupp Marine Systems is already funding research programmes for appropriate countermeasures. In collaboration with other departments, the EU taxonomy and complementing regulations are challenging the company to be active. Here, establishing a well-suited ESG governance is essential and was therefore initiated to allow the company to be proactive regarding future responses to regulations.

See chapter Sustainable Innovation and Environmental Impact to read further details.

As mentioned before, products and production processes have different impacts on people and the environment. That is why thyssenkrupp Marine Systems engages regularly (see table below) with all relevant stakeholder groups, including employees, customers and business partners, as well as local associations, academic institutions, policy-makers and legislators at international, EU and national/regional levels. Continuous stakeholder dialogues help the company to identify important trends and new developments, as well as risks and opportunities, in order to achieve common sustainability objectives.

With governmental bodies as its main customers, thyssenkrupp Marine Systems is influenced by political decisions and legal requirements. Enhanced regulations and guidelines on issues such as sustainable procurement, energy management, sources of energy, eco-design, hazardous substances and the circular economy have been published primarily at a European level in recent years. Member states, notably Germany, also draw up their own sustainability-related regulations. Recently implemented, the Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains (Supply Chain Act) is having a direct influence on the company's business operations. Topics such as national restrictions on substances and programmes for improving resource and material efficiency have also been discussed in the process.

Target Groups	Relevant Material Topics (Derived from DMM findings)	Forms of Dialogue
Employees	· Technology & innovation · Cybersecurity & information · Business integrity · Health & safety in workplace · Customer intimacy	Regular: · Works council · Employee events · Employee reviews and surveys · Working groups · Compliance office
Customers	· Solutions safety & performance · Customer intimacy · Health & safety in workplace · Diversity, equity & inclusion · Regulatory environment	Continuous: · Customer service & sales talks · Industrial associations round table · Governmental dialogue · Fairs & exhibitions
Suppliers & service providers	· Cybersecurity & information · Technology & innovation · Risk management	Regular: · Dedicated working groups · Procurement department · Supplier days
Government & regulatory bodies	· Solutions safety & performance · Health & safety in workplace · Customer intimacy · Regulatory environment	Several times a year · National & international committees · Dedicated working groups in industrial associations & institutions



Active promotion of stakeholder dialogue

Engaging with stakeholders helps to find out more about how sustainability issues might create financial risks (financial materiality) and about own impacts on people and the environment (impact materiality).
The double materiality assessment is a powerful tool to detect material topics impacting a company's operations and business as well as their significance to stakeholders.

Engagement with Local Communities

Especially in challenging times, it is a matter of the heart to continue engagement with local and regional communities and institutions. In this regard, thyssenkrupp Marine Systems has built up a growing local and regional network with a large number of partners over the last years and decades. Strong partnerships were established by active memberships and collaborations with 35 different unions and associations. And more good things were achieved together by donations for over 30 recipients. With the selection of memberships and donations, the company is focussing on local, regional and social aspects as well as on maritime ties. Many associations, initiatives and institutions have been supported for many years, establishing strong bonds within the region.

Examples of Active Memberships in Unions and Associations

CAPTN e. V.	Förderverein Technische Fakultät e. V.
Verein der Wirtschaft für das Maritime Technologie- und Transferzentrum e. V.	VDSI Verband für Sicherheit, Gesundheit und Umweltschutz bei der Arbeit e. V.
Norddeutsche Initiative Nanotechnologie Schleswig-Holstein e. V.	GMT - Gesellschaft für Maritime Technik e. V.
WTSH GmbH Maritime Cluster Norddeutschland (Wirtschaftsförderung und Technologietransfer Schleswig-Holstein GmbH)	World Hydrogen Leaders Membership
Freundeskreis Yad Vashem e. V. Membership	

Engagement with Local Communities

Donations in the reporting period from 2020 to 2022

Figure 4.3

Total sum: 199,202

Examples of Donation Recipients

Hospiz Kieler Förde gGmbH	Feuerwehr Bremen
Spendenaktion Weihnachtshilfe der Bremer Tageszeitungen AG e. V.	Laurentius Hospiz Falkeburg e. V.
Prof.-Hess Kinderklinik/ Klinikum Bremen-Mitte	The Not Forgotten Association
QueerBW - Arbeitskreis Homosexueller Angehöriger der Bundeswehr e. V. c/o Rose	Stiftung Leben mit Krebs
Christophorus Hospiz Verein e. V.	Tafel Schleswig-Holstein/ Hamburg e. V.

Putting the Needs of Citizens and Customers First

5

Through innovation, thyssenkrupp Marine Systems aims to strengthen its position as the leading naval technology company in Europe, developing state-of-the-art technologies for more eco-efficient submarines, surface ships and cutting-edge maritime electronics.

As a system house for maritime high technology, thyssenkrupp Marine Systems works with a relatively small number of governmental customers, building on strong and lasting relationships and contributing significantly to the performance and safety of its customers and their citizens by delivering high-quality products. At every point in design, manufacturing and assembly, the company considers its customers' feedbacks, requirements and insights. High standards of quality are a key competitive advantage for continuously increasing the level of trust in business relationships.

A central quality team is in charge of coordinating and managing all activities aimed at preventing incidents and accidents involving the products.

Quality Management System and Process Management
The organizational unit "QM System / Process Management" implements the elements of the quality policy adopted by the management. It has the following tasks:

- Setting quality targets by quality policy and dedicated strategy to fulfil the requirements of the market
- Maintaining quality management accreditations and quality management certifications
- Continuously developing the integrated management system (IMS)
- Planning and conducting internal and external quality audits
- Planning and implementation of process management within the business unit Marine Systems

Quality Management Projects
The organizational unit "Quality Management Projects", on the other hand, ensures that the specifications of the quality management system and the processes in the projects are presented and implemented in an operationally appropriate manner. To this end, the "Project Quality Managers" (PQM) plan, implement and continuously improve all quality management-relevant measures in the projects from the tender phase through to handover to the customer. As a member of the project management, the PQM monitors all stages of quality assurance and compliance with the processes of the value chain, evaluates them and initiates corrective measures. Project Quality Managers are the customer's contact for all quality issues and report regularly to the Quality Management Board on quality management measures, especially on upcoming problems, as part of the information management.

Quality Management Products
The tasks of the organizational unit "Quality Management Products" and the organizational unit "Quality Management Technology / Production" at thyssenkrupp Marine Systems comprise monitoring and optimizing the quality management processes and their tools. These units are also responsible for carrying out supplier audits in the course of technical supplier management.

More about thyssenkrupp Marine Systems' products & services:

Link

"The quality management approach is derived from the seven Quality Management Principles of ISO 9000, which include Customer Focus, Employee Engagement and Relationship Management. Having these principles as the foundation of Quality Management ensures that people are, and will remain, the central aspect of all our QM activities."

Head of Quality Management

The following special features are addressed by the organizational units to attain further improvements:

- Development and maintenance of competence by means of training on the processes of quality assurance tools and methods allocated to “Quality Management Products”
- Development, implementation and improvement of the “Quality Assurance” process
- Quality management for key technologies such as underwater components and printed circuit boards
- Ensuring process-related technical quality management along the entire “Engineering – Construction – Procurement – Production” process chain
- Overall quality of products is ensured on several levels that are anchored in the development and realization levels of the V-model:
  - Process-accompanying internal inspections take place to ensure the quality of documents and personnel, e.g. construction document inspections with multi-stage release stages, documented in the ERP tool (SAP); personnel qualification, such as welder inspections as part of the welding workshop approval certificates (e.g. in accordance with DIN 2303, DNV); etc.
  - Reviews specified in the QM system conclude the individual process phases in a formalized manner
  - Contractual quality requirements are checked and verified in Factory Acceptance Tests (FAT) on component level, Harbour Acceptance Tests (HAT) on system level and Sea Acceptance Tests (SAT) on boat or ship level for overall performance values. Acceptance tests are usually performed with participation of the customer.

Product Safety

The safety and physical integrity of customers is a top priority. For this reason, internal specifications are issued that serve the safety of its products and the preparation of the associated verifications. These specifications are based on the internationally recognized US standard MIL-STD-882. Furthermore, each project is supported by a Safety Manager who is integrated into the project organization. This Safety Manager plans, coordinates and evaluates the implementation of product safety in the project. In coordination with the respective customer, they make use of relevant legal requirements, norms and standards. Some of these basics are shown in figure 5.1.
All bodies in contact with a client are responsible for shaping the cooperation with that client. Depending on the respective phase, the main contacts are Sales, Project Management or Customer Service

“The safety and physical integrity of customers is a top priority.”

Head of Engineering

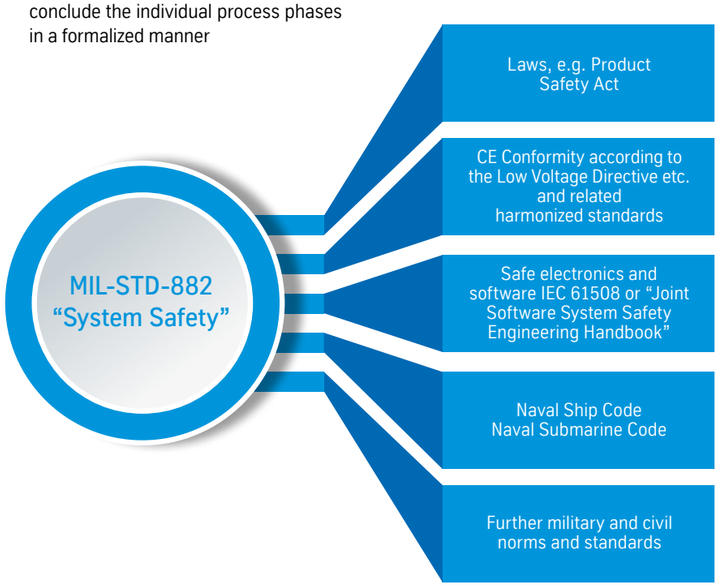


Figure 5.1: Overview of MIL-STD-882 “System Safety”

(“In-Service Support”). Customer reactions to fulfilled requirements for products and services (customer satisfaction) are recorded by these offices and evaluated by the Sales department. At the end of each project, the Safety Manager writes the Safety Assessment Report as a matter of course and makes it available to the client on request. In this way, the necessary transparency is ensured with regard to product safety.

Performance Evaluation: Monitoring, Measurement, Analysis and Evaluation

In the product development processes, planned tests, monitoring and analysis of the measurement results as well as improvements ensure that the products conform to customer requirements. The heads of the organizational units are required to review processes and work procedures in their area of responsibility at regular intervals with regard to changes in procedures, environmental protection, information protection, occupational safety and health, energy efficiency and the processing of personal data, in the use of equipment and materials as well as changes in standards and regulations. The review and adaptation of the processes are documented, and the effectiveness of the implemented procedures is evaluated. The measurements to be performed are divided into the following categories:

- Measurements regarding resources and infrastructure aspects, including environmental aspects
- Measurements of the product (determination of conformity with the requirements)
- Measurements of the processes for product and service delivery
- Customer satisfaction measurements

Cybersecurity, Information Security & Privacy

As a global actor, thyssenkrupp Marine Systems' products and services help society in a number of important ways, from securing nation states to supporting the fight against climate change. The company recognizes this responsibility to society and makes every effort to transform its business in responding to the existing and upcoming changes. When new security threats arise, new solutions are introduced and enhanced security systems are developed, both for the needs of the company's customers and for its own operations.

Information Security

Information is one of the most valuable assets of a company. The protection of sensitive information through secure processing is therefore one of the highest goals of thyssenkrupp Marine Systems, along with the competent support of internal and external partners. Ensuring the availability, maintaining the integrity and guaranteeing the confidentiality and authenticity of information are decisive factors for the fulfilment of tasks and the business success of the company.

It is still unavoidable that the personal data of the employees, customers as well as subcontractors, external company employees and temporary workers are collected, processed and stored in the daily work environment. The protection of this sensitive data and the individual's right to informational self-determination is a core concern of thyssenkrupp Marine Systems beyond the legal requirements.

According to Article 5(1) of the General Data Protection Regulation (GDPR), personal data must be processed in a manner that ensures appropriate security of personal data through appropriate technical and organizational measures ("integrity and confidentiality"), including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage. To ensure that the legal requirements and the rights of the data subjects derived from them are met, thyssenkrupp Marine Systems has a robust data protection management system as well as suitable technical and organizational measures that are subject to constant monitoring.

In order to achieve the aforementioned security objectives and to establish a documented information security management system (ISMS), the specifications and measures of the international standard ISO/IEC 27001 as well as state-of-the-art security practices are used. Through independent auditing of the ISMS by an accredited certification authority, thyssenkrupp Marine Systems demonstrates its competence in the field of information and IT security, increases its position as trusted partner towards its customers and business partners, and fulfils customer requirements, thus securing a competitive advantage in this area.

As a company of special public interest according to the Act on the Federal Office for Information Security (BSI Act), thyssenkrupp Marine Systems has implemented state-of-the-art technical and organizational security measures for components, systems and processes that are considered of strategic importance and deemed to be worthy of protection. These special requirements are considered when selecting appropriate security measures. Top management demonstrates leadership and commitment with respect to the ISMS by fully supporting the formulated information security objectives and the measures derived from them, and by promoting continual improvement.

IT Security

As such a company of special public interest, thyssenkrupp Marine Systems is affected by the increasing number of cyberattacks, which represent a growing threat to private and public sector organizations. New sophisticated attack methods and increased efforts by state and non-state actors confirm that the preventive technical cybersecurity measures established and continuously improved are key to avoiding information security incidents. These measures are flanked by organizational instructions and appropriate internal awareness education and training to continuously reduce the residual risk of system failures. The trainings are mandatory for all employees.

Thanks to the consistent implementation of and adherence to the company's own cybersecurity strategy, all attacks on the thyssenkrupp Marine Systems' IT infrastructure have been successfully repelled to date.

> "Thanks to the consistent implementation of and adherence to the company's own cybersecurity strategy, all attacks on the thyssenkrupp Marine Systems' IT-infrastructure have been successfully repelled to date."
>
> Chief Security Officer

Sustainable Innovation & Technology

Innovative power and a sound knowledge of technology are part of thyssenkrupp Marine Systems' core strengths. Offering sustainable and innovative products and services is a key success factor for growth. The definition of sustainable technologies is linked to the technical screening criteria of the EU Green Taxonomy. The company's research and development (R&D) activities therefore focus on four areas: climate protection, energy transition, mobility of the future and digital transformation. The adjusted R&D intensity was 6.6 % in the fiscal year 2021/2022 and refers to R&D costs as a proportion of sales, without trading and distribution. The target is 6.7 % for the fiscal year 2022/2023. In FY 2020/2021 and FY 2021/2022, approx. € 15.5 million R&D spending financed the development of major programmes with respect to hydrogen, fuel cells, batteries, alternative fuels and digitalization.

The global R&D network of thyssenkrupp Marine Systems includes 75 sites with some 3,600 employees. It is augmented by collaborations with external partners such as universities, research institutes and other industrial enterprises. The patent portfolio now contains 3,210 patents and utility models. The trademark portfolio comprises around 762 property rights. The innovative power of this corporate network offers a variety of sustainable solutions for its products and knowledge for joint R&D activities. By way of example, thyssenkrupp Steel is tackling climate change by producing green steel using hydrogen instead of coke. It is expected that more steel suppliers will follow, making it possible to switch the sourcing from commercial steel to green steel in the future. To read more about initiatives related to sustainable procurement, see chapter Responsible Sourcing.

ESG topics are included into the set of standard basic requirements for new product developments. Modern submarines and ships are designed in accordance with current environmental regulations, including MARPOL and the banning of REACH substances, and prepared for recycling. In 2022, the implementation of processes for eco-design was initiated to continuously improve the climate and environmental targets in construction and production processes. Besides its efforts on early-stage technologies and new product life cycles, thyssenkrupp Marine Systems started working on the recycling of old submarines. Here, the most modern methods and standards are applied with the aim of recycling as many materials and components as possible.

The commitment to environmental protection is strong – as demonstrated by the growth of innovation-related activities in dedicated areas. As part of a local research network set up in 2022, the company is investigating possibilities for restoring seagrass areas in the Baltic Sea. Seagrass is a plant that is favourable for climate and environment protection, due to its capability to act as a carbon sink and promote biodiversity and coastal protection. Furthermore, a concept for the disposal of unexploded explosive ordnance has been under development since 2021 and its realization is constantly being discussed with federal institutions. The legacy of the wars on the European continent in the 20th century is still present. Unexploded ordnance (such as bombs, grenades, naval mines) is scattered throughout Europe's coastal waters to an unbelievable extent. In clear facts, there are at least 1.6 million tonnes of munitions from the World Wars in the North and Baltic Sea, 300,000 tonnes of which are in the Baltic Sea alone. thyssenkrupp Marine Systems has the expertise, willingness and technology to clean the oceans and make them a safer place.

The definition of standards and regulations is being actively supported, especially concerning future climate-protective technologies. For example, since 2009 the company has been part of the e4ships consortium and advises the working group CESNI on technical standards.

> "The global R&D network from thyssenkrupp Marine Systems includes 75 sites with some 3,600 employees. Working together with all kind of experts we create an impressive work force to foster innovations for our maritime products."
>
> Head of Research & Technology

Energy Transition, Climate Protection and Mobility of the Future

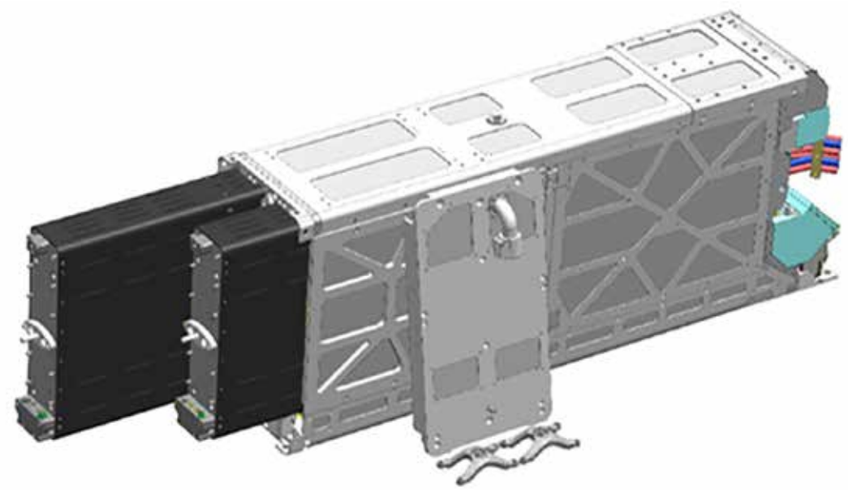
thyssenkrupp Marine Systems is a leader in designing and building modern ships and submarine propulsion systems. With the knowledge of using fuel cell technology for air-independent propulsion for submarines over almost 40 years, the company is now evaluating possibilities for expanding the scope of this environment-friendly technology to the civilian sector.

The rapidly changing market of fuel cells, driven by the anticipated increasing demand, resulted in the availability of many new technologies and materials. In 2014, a decision was made: thyssenkrupp Marine Systems was to develop its own 4th Generation Fuel Cell System for submarines. The Advanced Submarine Fuel Cell will be available for future submarines and combines many advantages, such as modularity, high efficiency and easy maintainability. The company invested in its own serial production line for fuel cells at the shipyard in Kiel, where it has already been producing hydrogen storage cylinders based on metal-hydride for decades now. Starting in 2023, the modern and automated factory for fuel cells will deliver fuel cells as well as being a home for an engineering department dedicated to the development of hydrogen technologies. The engineering department also includes experts in reformer and battery technologies based on former development projects, such as the methanol reforming system that was coupled with a proton exchange membrane fuel cell (PEMFC). The system produces high-quality hydrogen fuelled with methanol. In addition, thyssenkrupp Marine Systems has developed a lithium-ion based battery system for submarines, replacing the lead-acid batteries and their toxic compounds and increasing overall energy efficiency. Hybrid systems with fuel cells and batteries are a promising technology for long-distance missions.

The Research and Development department comprises experts for all areas of shipbuilding and operation. For more than ten years, work has progressed on the handling of new fuels, while the safe design of fuel systems has been a key capability for decades. Using alternative and regenerative fuels, such as green ammonia, methanol or hydrogen, to

Fuel Cell History

As early as 1983, the first shore-based fuel cell test facility was commissioned in Kiel. Soon after that, in 1985, the first fuel cell system was integrated on board the U1 as a trial facility and, since 2003, the Type 212 submarines have been operating with these systems.
The use of fuel cell systems has made it possible to significantly extend the submersion periods for non-nuclear (conventional) submarines – an innovation which more than 25 years ago was not standard, but a real revolution in submarine construction that caused a worldwide sensation. The continued superiority of this technology provides a key contribution to the world market leadership of thyssenkrupp Marine Systems.



4th generation of fuel cell produced by thyssenkrupp Marine Systems

improve energy density and storage capacity and thus become competitive to traditional diesel and heavy oil systems, is a necessity for fighting global warming and reducing pollution. IDEALFUEL is an EU-funded research and innovation activity aiming to develop new production methods for sustainable marine fuels to replace heavy fuel oil (HFO) in shipping. thyssenkrupp Marine Systems' primary tasks in this project are evaluating the consequences of using synthetic fuels on board ships and supporting the process of having the fuels approved by the IMO. For this purpose, the need for safety measures in the fuel systems of ships will be investigated with regard to the fuel characteristics. Based on that, proposals for a safe shipboard fuel system will be made to fulfil the requirements of the relevant regulatory bodies (IMO, CESNI).

The overall aim is to offer innovative, zero- or low-emission propulsion systems of high efficiency. The required high efficiency will either be achieved through optimization of the system, e.g. by using renewables like wind energy, or through optimization on the components level. More than 30 years of experience with fuel cell systems and hybrid propulsion make it possible to deliver the most suitable technology for a sustainable energy transition in the maritime industry.

Future innovative propulsion systems will rely mostly on alternative fuels and energy carriers. Within the Clean Autonomous Public Transport Network (CAPTN) in Kiel, thyssenkrupp Marine Systems is taking part in the project CAPTN Energy to find a solution to infrastructural challenges regarding this new energy carrier. CAPTN Energy is funded by the Federal Ministry of Education and Research (BMBF) as part of the funding line "WIR! Change through Innovation in the Region". The network includes more than 50 alliance partners, which all focus on a regional implementation of renewable energies as the foundation for environmental-friendly maritime traffic in Kiel Fjord and Kiel Canal.

> "More than 30 years' experience with fuel cell systems and hybrid propulsion enable to deliver the most suitable technology for a sustainable energy transition in maritime industry."
>
> Head of Technology Management

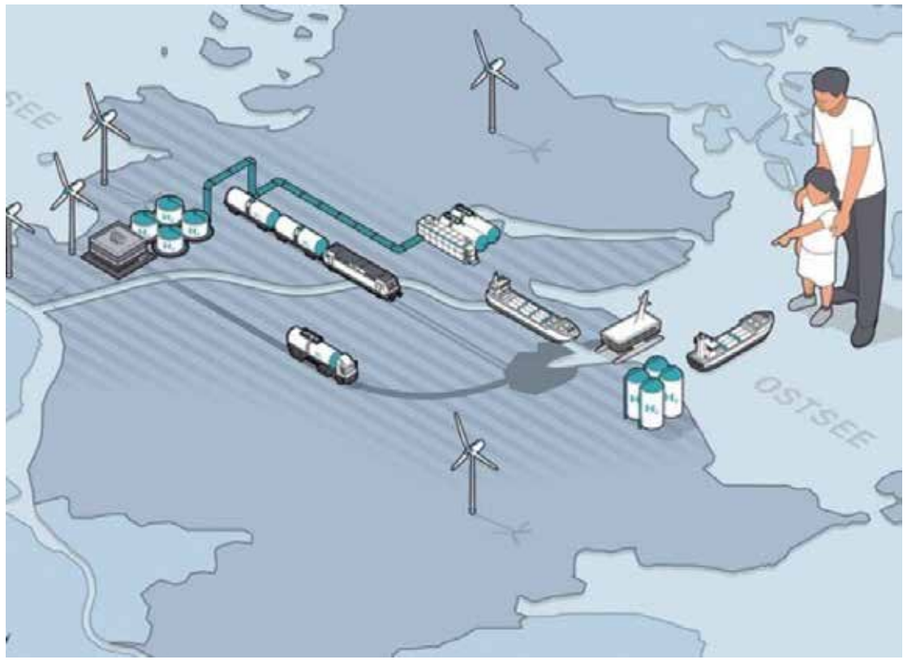


Figure 5.2: Infrastructure with renewable energy carriers is focused by the project CAPTN Energy

(Source: https://captn-energy.de/)

Digital Transformation

thyssenkrupp Marine Systems strives to implement digital solutions in all stages of the value chain and apply digital innovations where they bring added value. The digital transformation is about solving problems and making lives easier through digitalization – for customers and the work force alike. An essential part of the digitalization strategy in production areas is paperless production. Not only are paper drawings being dispensed with, but all other documents created during the production process will also be digitized. By working without drawings, a lot of time has been saved during the creation of construction documents and up to 60,000 printouts a year are avoided, including DIN A0 formats.

Previously, to start the work order and hand it over to the relevant worker, a so-called order bag with all information on at least five pages of paper was created. In the future, all employees will find this information online in the Manufacturing Execution System (ME System), which they operate with a tablet. Access to the current and approved information at any time is not the only advantage – it also saves up to 300,000 printed sheets of paper (DIN A4) per year.

Large parts of the documents created in the production process are proofs of quality. For example, every single weld seam on the pressure hull has its own separate document. With the resulting paper that is produced, entire rooms can easily be filled for each submarine. To spare this amount of paper in the future, all welding machines now have access to the network. They report their current status at all times, as well as the parameters suitable for the respective weld seam. In addition, every machine in the pressure hull production will also provide its current power consumption, for greater transparency and energy efficiency.

Digitalization helps thyssenkrupp Marine Systems to become more flexible, efficient and transparent in production. In addition, valuable resources, such as several hundred thousand sheets of paper are saved every year. From automated manufacturing processes, IoT sensors, augmented reality to paperless quality assurance, the digitalization process brings along many advantages – not only for customers but also for the environment.

One of the biggest successes in 2021 and 2022 in consequence of the ongoing digital transformation has been the reduced paper consumption at all locations and the decommissioning of many printing devices. The increased home office quota as well as the implementation of pool printers were also beneficial.

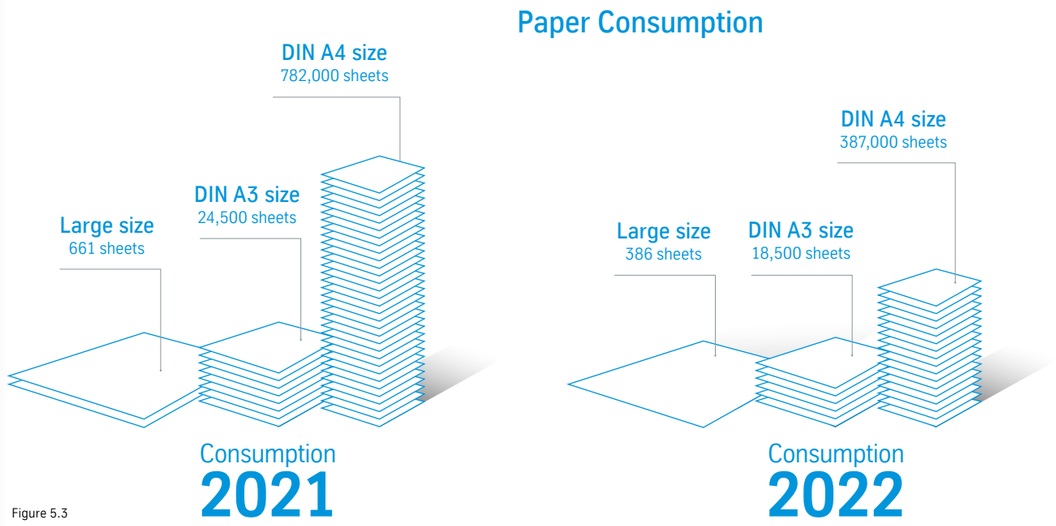


Figure 5.3

Sustainability of Metal Additive Manufacturing

Modern manufacturing processes can play a major role in terms of emissions reduction as well as performance increase for products. Many advantages can be achieved:
· Reduction of energy consumption
· Reduction of material usage
· Reduction of production time
· Better working conditions
· Reduction of greenhouse gas emissions

One modern manufacturing process is the 3D printing of parts. With a view to industrializing the 3D printing process, thyssenkrupp's recently opened TechCenter Additive Manufacturing at thyssenkrupp Marine Systems in Kiel has started making customized products from metals and plastics in a single digital process. The entire design and manufacturing process is handled digitally, offering numerous advantages not only for the value and supply chain but also for customers and the environment. The company aims to use its existing experience and research partnerships to unlock the potential of 3D printing for customers within a short space of time.

Key markets such as engineering, naval shipbuilding and defence will benefit particularly from this technology. Internal projects are already underway. "Additive manufacturing is a further step in the digital transformation of our company and an important element of our innovation strategy," said Dr. Heinrich Hiesinger, CEO of thyssenkrupp AG, at the inauguration of the centre.

Housed in a production shop on the premises of thyssenkrupp Marine Systems, a small, agile team is initially working with one printer for metals and one for plastics. Both printers process powdered materials by selective laser melting or sintering to build up parts layer by layer. All that is needed is a CAD file with a 3D design of the required part; the product can then be made directly from the digital data in a seamless process. The conventional step of tool or die-making is no longer needed. The production of highly complex parts becomes possible, and a vast reduction of weight and volume will be achievable (e.g. the weight of a certain part was reduced from 14 kg to only 2.1 kg through additive manufacturing).

> "Can additive manufacturing be more sustainable than other (traditional) manufacturing methods? And how can users leverage this method to reach carbon goals?"
>
> Head of TechCenter Additive Manufacturing

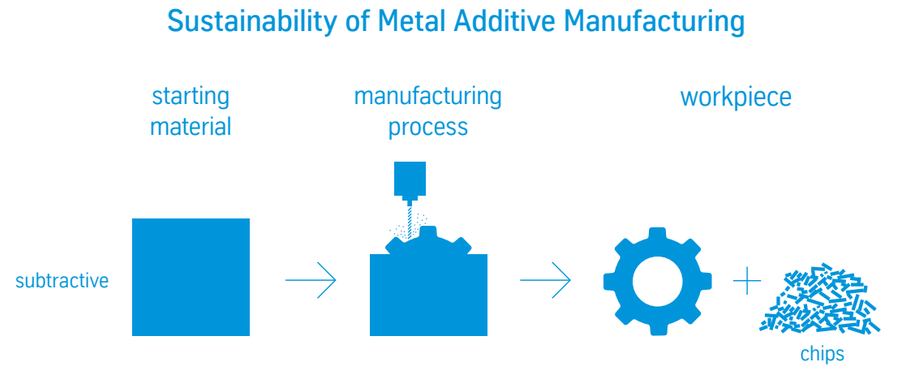


Figure 5.4

TechCenter Additive Manufacturing at thyssenkrupp Marine Systems in Kiel offers an internal production line for complex parts of products.

With its inherent characteristic of adding something instead of removing material as shown in figure 5.4 (as is done by conventional manufacturing methods, e.g. chipping), additive manufacturing has a strong impact on waste and the responsible use of material. Another beneficial aspect is the possibility of recycling the powder that forms the input for the manufacturing process.

In summary, the benefits of additive manufacturing are:
· Implementation of complex geometries in short production times
· Lightweight construction with finite element methods
· Future spare parts management – local printing possibility avoids storage, delivery effort and times and obsolescence management
· Fast and easy functional prototyping
· Merging of assembly groups to avoid critical joining technologies

In 2022, questions regarding further improvement were addressed:
· Can additive manufacturing be more sustainable than other (traditional) manufacturing methods?
· What factors have a major influence on a low carbon footprint?
· How can users leverage this method to reach carbon goals?
· Is circular additive manufacturing possible?

In answering these questions, the broad network of companies in the group can be of great benefit. Furthermore, experts of thyssenkrupp Marine Systems are participating in a project circle initiated by the Incubation Forum for Circular Economy in European Defence (IF CEED) as part of the EDA initiative towards a circular economy in the defence industry, with the aim of continuously investigating the possibilities of additive manufacturing.

Get to know more about the European Working Group thyssenkrupp Marine Systems participates in:

IF CEED

People and Values

6

thyssenkrupp Marine Systems is part of society and its social environment. The actions of the company have an impact on employees as well as external collaborators across the value chain, both within Germany and abroad. Through its value-oriented approach, the company contributes to the positive development of society and shapes the future, starting from within. The Covid-19 health crisis and related lockdowns have had a strong impact on the operations, forcing all employees and partners to adapt in order to enable business continuity, while guaranteeing the health and safety of the people involved.

Health & Safety in Workplace, and Workers' Rights

Supporting Employees during the Health Crisis

2022 still presented major challenges with regard to the Corona pandemic. Significant measures had been taken at the beginning of the pandemic for all employees and partner companies to follow in their daily work, with the aim of protecting themselves and their colleagues. During the pandemic, more and more legal regulations and requirements were added, which thyssenkrupp Marine Systems followed closely to guarantee that its employees could work and return home safely.

The great efforts and the involvement of all the experts in the organization – from occupational safety and health to production, from crisis management to logistics, from management to co-management, and among the employees – demonstrated the company's human and economic resilience in these critical times, without compromising on customer satisfaction and product quality. The ability of the organization to act quickly, prudently and yet effectively in times of crisis made it possible for thyssenkrupp Marine Systems to constantly uphold its service operations.

With occupational safety and health facilities at all locations, it was also possible to support the state's vaccination campaigns at a very early stage. Every employee was given the opportunity to receive their vaccinations from their employer, guided by the occupational physicians. A vaccination rate of 97 % was achieved very quickly. So far, the protection provided by the vaccination, coupled with clear rules of conduct regarding masks and distance, enabled the company to proceed safely through the pandemic, see figure 6.1.

> "Vaccination, clear rules and discipline of our people carried us safely through the pandemic."
>
> Company Healthcare Officer

Course of Corona Infections during the Financial Year

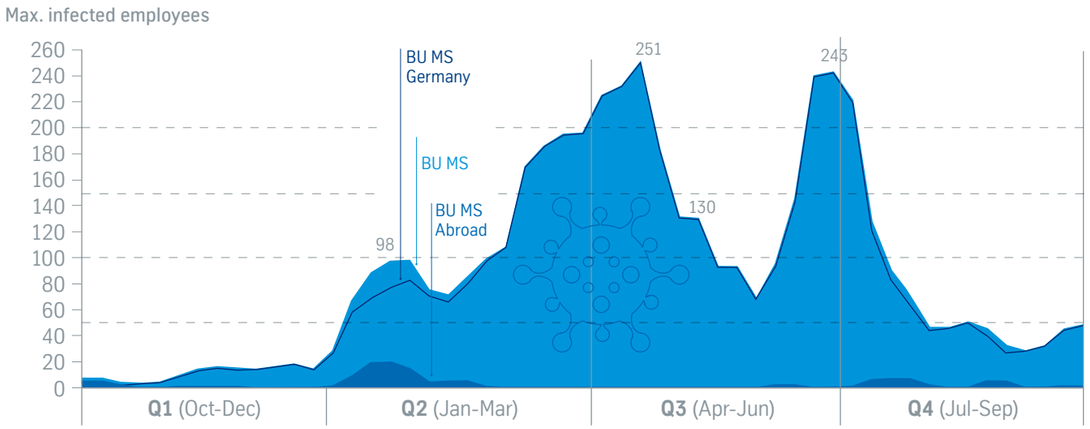


Figure 6.1

BU MS (business unit Marine Systems)

Accident Frequency Rate

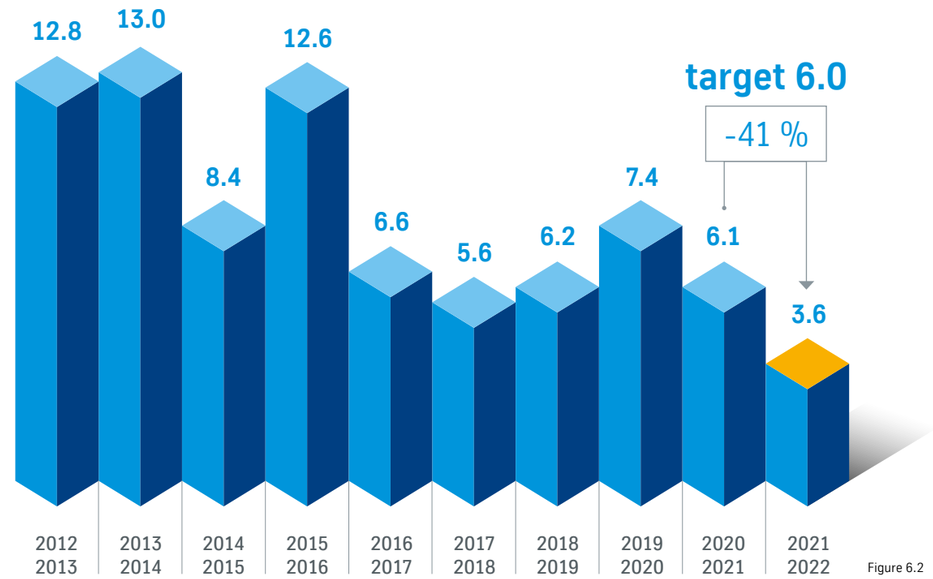


Figure 6.2

Health and Safety at Work

Every accident is one accident too many, and protection of health and safety at work remains a top priority for the company. All strategic and daily decisions within the company are geared towards this goal of "zero accidents". Good health and safety performance supports efficient production and is an indication of management excellence. The health and safety key performance indicator is the rolling average of the lost time in accidents rate (in other words: accidents with at least one lost working day per 1,000,000 working hours completed). Between 2021 and 2022, the company managed to reduce the accident frequency by 41 % in the comparison period, see figure 6.2.

To further improve the effectiveness of health and safety management, the HSE (Health, Safety and Environment) teams worked on a number of topics and initiatives. Two approaches were in focus:

1. Reactive Occupational Safety and Health (OSH) Response

In the OSH response, every accident and every incident is a "window into the system". Transferring the debriefing from an accident analysis into the response effectiveness enabled the teams to focus on the prerequisites for health and safety in the workplaces, by comprehensively analysing behavioural patterns and the environmental influences and hazards involved during an incident.

2. Preventive Occupational Safety and Health (OSH)

In preventive OSH, the focus is on changing attitudes and behaviour. The OSH specialists, in cooperation with the responsible managers, paid particular attention to the topic, encompassing numerous activities. From daily 15-minute awareness trainings in production to the continuous detection of unsafe actions and conditions during inspection rounds, this topic is deeply integrated into the daily rhythm of each employee.

> "We follow a simple principle: Injury-free and healthy workplaces for everyone on our premises and in our products."
>
> Head of Occupational Safety and Health

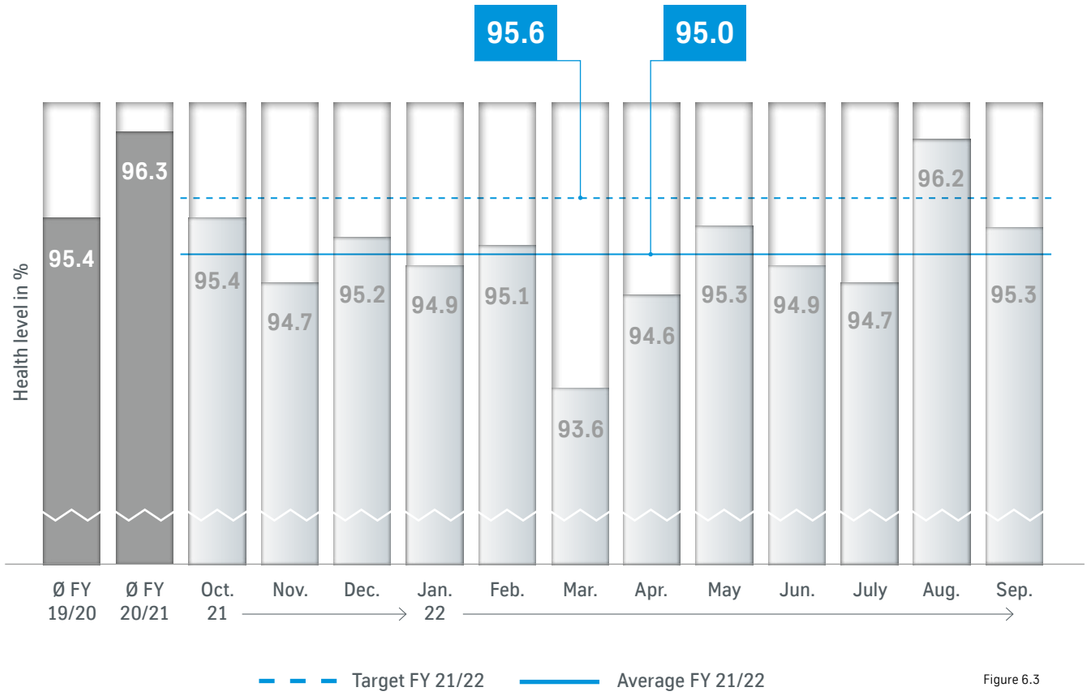


Figure 6.3

Managers, employees, specialists and works councillors, management and skilled workers form a community of responsibility in the area of occupational safety and health, and share the common goal: “Injury-free and healthy workplaces for everyone on the premises and in the products”. This also includes partner companies. The cooperation in selection, instruction and inspection, together with the joint definition of standards and procedures in the contractor management system, make it possible to comprehensively minimize the risk of serious or fatal occupational accidents. thyssenkrupp Marine Systems proudly closed 2022 without any serious or fatal accidents.

Quality of Life at Work

With the implementation of sustainable and strategic health management, thyssenkrupp Marine Systems has been able to safely manage a third year under the shadow of the Corona pandemic. The latest revision of the company’s information and prevention policy enabled it to keep absenteeism numbers extremely low again this year. With an average health rate of 95.0 % in the last financial year, the annual average is slightly below last year’s results (96.3 %), see figure 6.3. The political measures to contain the Corona pandemic were generally responsible for the low sickness rates in the previous financial year. In order to cope with the mental stress caused inter alia by the Corona pandemic, 98 % of the workforce had and continues to have access to an employee assistance programme, a confidential counselling service provided by external psychologists, physicians and educators. In addition, the “we care days” 2022 were held under the theme #bettertogether, in order to foster togetherness and cohesion within teams. Resilience of individuals is still considered one of the most important factors in being able to deal with external stress. In cooperation with various health insurance companies, thyssenkrupp Marine Systems developed a broad offer to increase resilience and to support all its employees at all levels and across all units.

Development of the number of active members at the network partner Hansefit (04/22-09/22)

Figure 6.4

Beyond the implementation of measures for the pandemic situation, health promotion measures took place in the areas of exercise, nutrition, addiction, stress management as well as the topic of “healthy leadership” on site. The medical screenings for skin and bowel cancer prevention and the “Hansefit” exercise programme were particularly well received by employees (see figure 6.4). To promote healthy working conditions in addition to healthy behaviour, water dispensers were installed at all thyssenkrupp Marine Systems locations for free and portable water withdrawal. To ensure that work continues to be safe and healthy, 295 new first aiders were trained in the reporting year, a rate of 9.4 % of all employees in Kiel. For the coming business year, the focus will remain on resilience and, above all, on target group-oriented measures such as the “Azubi-Fit” programme with dedicated health-promoting activities for the youngest employees.

Diversity, Inclusion & Equality

thyssenkrupp Marine Systems promotes diversity in its workforce, as well as inclusion in the workplace. The company believes that diversity boosts engagement, innovation and long-term value. As such, diversity is, or must become, an important component of personnel policy, starting with an enhanced recruitment policy. The starting point for more intensive work on the topic of diversity and gender equality is the results of the workshops initiated by the Kiel Works Council under the title “Women on board”. These workshops focused on increasing the quota of women and on the visibility and position of women in the company. Based on this, thyssenkrupp Marine Systems decided that the years 2022 till 2024 will be dedicated to the topic of gender equality.

Gender Equality
Currently, the proportion of women across the company is still relatively low. Nonetheless, one of the main goals is to recruit more women and bring them into management positions as well as to enable women and men to reconcile family and career.

Targets to be reached by 2025 are

16 %
of management positions
to be held by women (as of FY 2021/2022: 8.1 %)

a proportion of
20 %
of women
in the companies of the thyssenkrupp Marine Systems group (as of FY 2021/2022: 17 %)

20 %
of apprenticeships including dual studies
to be filled by women (as of FY 2021/2022: 13.9 %)

Figure 6.5

The role of fathers has systematically been promoted since 2018. As a result, the proportion of men taking parental leave and assuming responsibility for childcare has steadily increased since then.

Cultural, Social and Age Diversity
HR is focusing on the holistic view of diversity through appropriate actions on age, origin, sexual orientation and inclusion across all sites. For this reason, annual events for each area under the hashtag #grauistbunt (#greyiscolourful) have been established. The first measures under this label were the publication of a gender-sensitive language guide (thyssenkrupp AG guidelines) and the organization of dedicated events for managers.

Overview of Planned Actitivities in FY 2022/2023

Female Leadership Event
Annual event to convey innovative power and motivational impulses for the female career path via speaker

Empowering Network
Establishment of the company-wide women’s network to empower women in the organization

Women's Profiles in Regional Media
The focus of the profiles is on the different career paths of women in the company, which should inspire more external women to pursue a career path with thyssenkrupp Marine Systems

Video Message from the Management
Positioning of the CEO on women and specifically on women in management positions

Awareness Training
Raising awareness of management board, senior management and department leadership on the topic of equal treatment in the organization

Family Day at thyssenkrupp Marine Systems
Making the high value of family friendliness in the company visible through fathers (action of the fathers' network)

Race or Ethnicity
International Day against Racism: Signs against racism are installed at the entrances at all locations

Gender Diversity
German Diversity Day
A diverse day - Experience with all senses
Employees are provided with something for all five senses (smell, see, hear, taste, feel)

Age Diversity
International Day of Tolerance
Show tolerance - Using the Implicit Association Test (IAT) to test one's own tolerance towards other generations

Inclusion
International Day of People with Disabilities
Excursion - Special education students from Kiel schools have the opportunity to visit the shipyard and get to know the training department

Figure 6.6

Recruitment & Human Resources Management

thyssenkrupp Marine Systems needs highly skilled people to deliver its programmes. The company has a long-term people strategy, firstly identifying the competence it will need for future programmes and then planning recruitment, training, engagement and career development accordingly. In this way, it develops the skills needed to support its future innovations and solutions in Europe and other international markets.

Remaining an Attractive and Secure Employer Tomorrow

Amid fierce competition for key engineering skills, thyssenkrupp Marine Systems ranks among Germany's biggest employers in the maritime industry. As part of its recruiting strategy, yearly visits of about 50 trade fairs and schools are standard practice. The company's engineers and technology managers also collaborate with universities to tailor their courses to the naval industry's future needs and annually vote on new requirements in the field of future professions and courses of study (e.g. the course of studies Science and Technology).

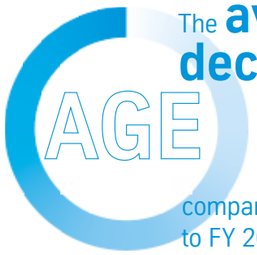
Education and Science as a Driver to Attract Young Talents

Recruitment and upskilling of employees have been identified as impactful for business continuity. thyssenkrupp Marine Systems engages actively with education institutions and promotes students, cooperating with various local and regional universities and schools (see page 65).

From FY 2019/2020 to FY 2021/2022, the amount of **employees** increased by

622 **people worldwide**, which represents a growth rate of

+ 9.8 %



The **average age decreased** by

2 %

compared from FY 2020/2021 to FY 2021/2022

In FY 2021/2022 the amount of **employed women world-wide** increased by

81

Human Resources Performance Indicators for Germany

Exit	FY 20/21	FY 21/22
Male	124	116
Female	38	23
Sum	162	139

Entry	FY 20/21	FY 21/22
Male	85	126
Female	35	31
Sum	120	157

Ratio of Exits in %	FY 20/21	FY 21/22
Male	4.16 %	3.88 %
Female	6.30 %	3.81 %

Ratio of Entries in %	FY 20/21	FY 21/22
Male	2.85 %	4.22 %
Female	5.80 %	5.13 %

Entry >=26	FY 20/21	FY 21/22
Male	82	119
Female	33	28
Sum	115	147

Entry <26	FY 20/21	FY 21/22
Male	3	7
Female	2	3
Sum	5	10

Cem Selvi and Jörn Schelzig (Principal of RBZ Technik Kiel) signing the cooperation agreement.

For example, RBZ (Regionales Berufsbildungszentrum) Technik Kiel is both the vocational school for the industrial/technical apprentices and a permanent cooperation partner. Through regular presentations and information events, for instance, the students get to know the company and also have the opportunity to experience work at the shipyard as part of internships, Girls' Days or trial days with the aim of convincing young talents of thyssenkrupp Marine Systems' attractiveness as an employer and winning them over for a career.

Close cooperation with Verein Arbeit für Menschen mit Behinderung e. V. makes it possible to foster inclusion. Activities include shipyard tours and joint manufacturing projects. Once a year, a wooden boat is being built and donated to a school or kindergarten as part of a welcoming and team-building event for new trainees. Preboarding events and the participation in the Germany-wide campaign "Girls' Day" support the approach to recruiting young talents.

Further cooperation agreements approved by the Chamber of Industry and Commerce Kiel exist with the following local schools:
· Schule im Augustental
· Gemeinschaftsschule am Brook
· Friedrich-Junge-Schule
· Theodor-Storm-Schule

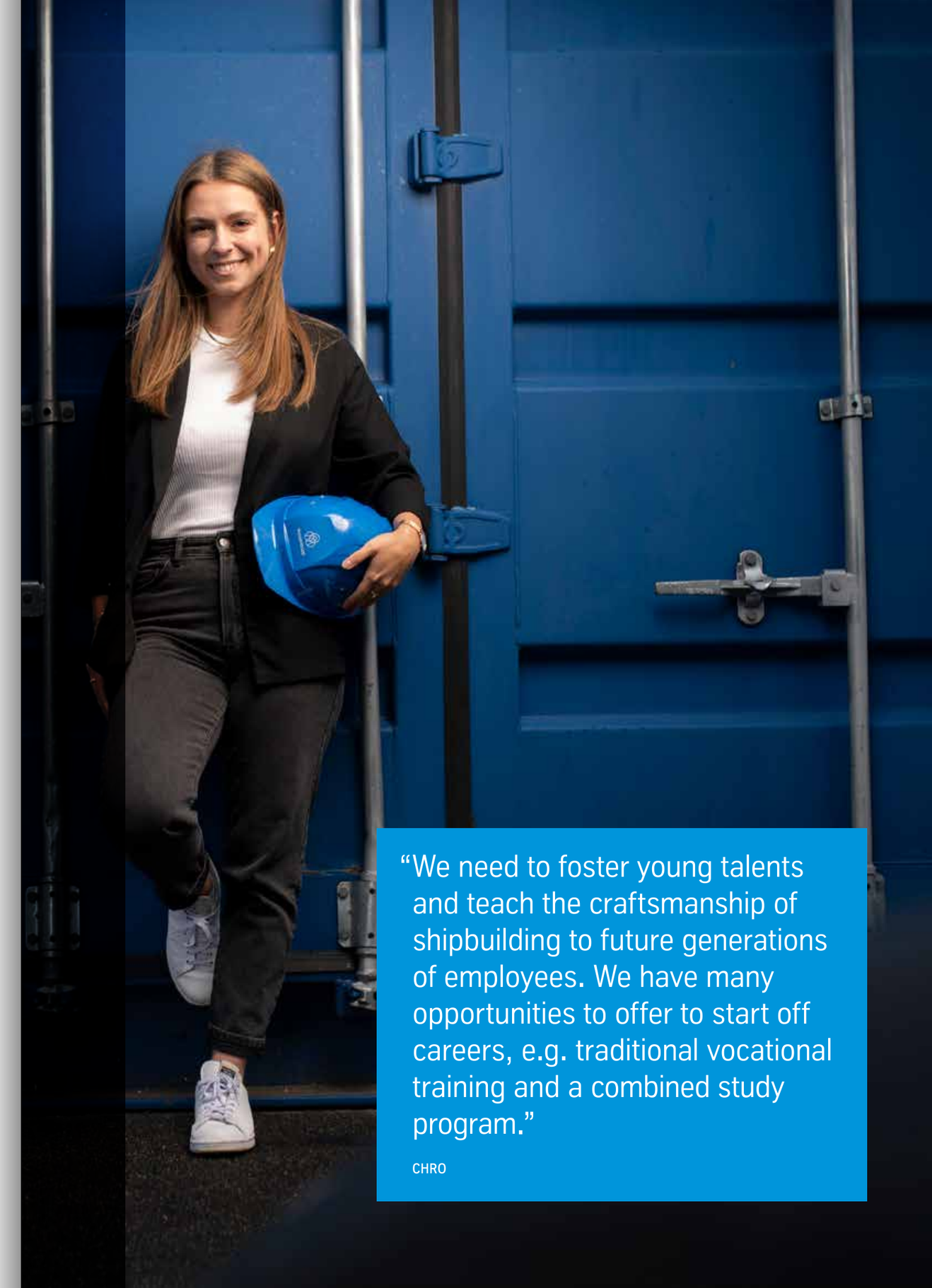
A-LAB
The ATLAS Laboratory (A-LAB) is an in-house research institute for the maritime technologies of tomorrow, where academic issues and industry meet. A-LAB provides a place for undergraduate and graduate students to complete student research in an interdisciplinary, innovative environment.

Within this framework, PhD research topics are supervised together with internships and bachelor's and master's theses. The possible topics are widely spread and are oriented towards the development areas of ATLAS ELEKTRONIK GmbH. When working on research topics, students and PhD students are supported by experts from the respective departments through a mentoring programme.

Various lecture series and discussions within the A-LAB team are aimed at promoting creativity and cooperation among undergraduates and PhD students. A-LAB was founded in 2021 and has been under continuous development ever since.

Find out more about the ATLAS Laboratory:

A-LAB



"We need to foster young talents and teach the craftsmanship of shipbuilding to future generations of employees. We have many opportunities to offer to start off careers, e.g. traditional vocational training and a combined study program."

CHRO

Involvement & Upskilling of Employees

New ways of working together, digital challenges and an increasing need for agility and flexibility present new challenges. In order to be able to process orders efficiently and in line with customer expectations over the long term, thyssenkrupp Marine Systems is currently undergoing a transformation to new, future-proof ways of working. Within the business unit, various strategies have been implemented in order to maintain the competitive edge technically and to retain its people. The company sets high standards in developing its employees and strengthening the skills of its leaders in order to meet its own and its customers' expectations and needs. thyssenkrupp Marine Systems is challenging its skills on a daily basis and is growing while doing so. Thus, many of the leaders were challenged by participating in the so-called Readiness Checks (virtual management audits), answering the question "How fit are we for the future?". Regular development of the employees is fostered on and along the job. In addition, the employees can choose from a wide range of internal and external trainings and courses. Furthermore, thyssenkrupp Marine Systems is taking new and also digital paths regarding the learning environment, focussing on quick wins true to the motto "learn smarter, not harder".

> "How fit are we for the future? Taking new and digital paths regarding the learning environment to focus on quick wins supports our motto 'learn smarter, not harder'."
>
> Head of HR Development & Recruiting

Personnel Development Trainings: Index Overview in %

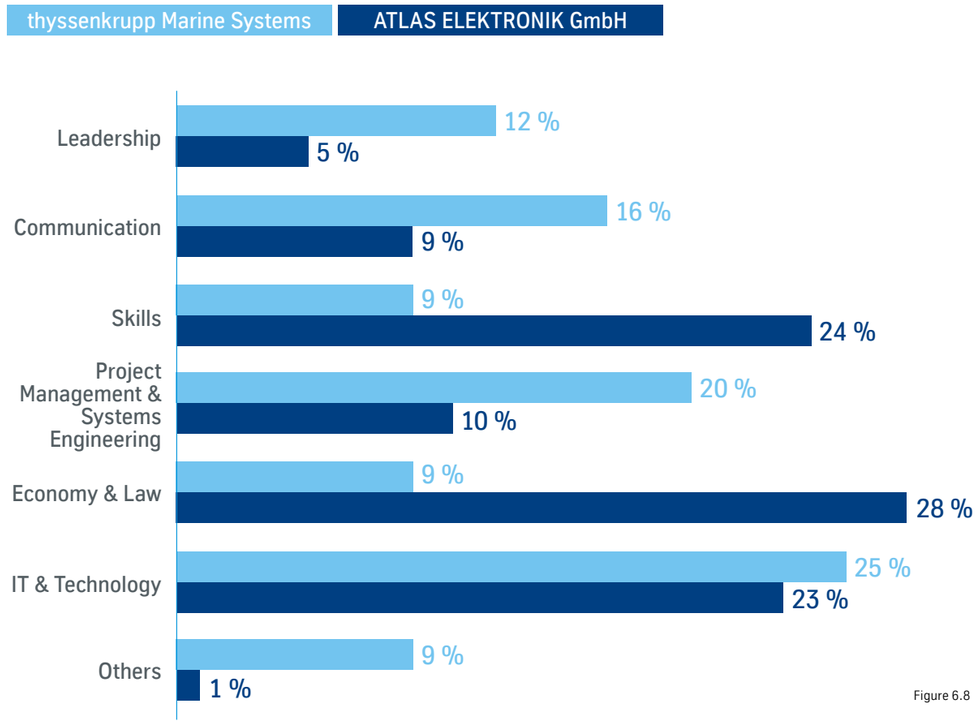


Figure 6.8

Moreover, an internal place where learning itself is the focus is being implemented – the "Learning Factory", an inspiring atmosphere with modern utilities in an environment close to the shipyard premises. The "Learning Factory" enables qualification in the areas of digitalization and lean management using modular practical stations. The aim is to train employees, suppliers, external craftsmen and customers in new techniques of working and at the same time to react to the special features of the company's products. In addition, the employees are offering support and advice in setting up new training courses or redesigning existing ones, including e-learnings.

Blue-collar workers are e.g. trained and qualified in new methods of working – augmented reality will be the future way of enhancing thyssenkrupp Marine Systems' daily work.

Concrete Initiatives for Personnel Development

- Internal training catalogue
- Internal and external trainings
  - Digital training platform "LinkedIn Learning" open to all employees
  - Digital language learning offer "Babbel" open to all employees
  - Implementation of a company-wide learning management system
  - Internal "Training House" (digital and non-digital) for engineering
- Employee dialogue (including feedback, assessment on competencies, agreement on development targets and measurements)
- Feedback app
- Implementing a "Learning Factory"
- Transformation of production to future-oriented and digital processes
- Identification of special training needs in production and transformation into a concrete database

Leadership Development

- Diagnostic tools for leaders and teams (360° Feedback, LINC Personality Profiler, Readiness Checks (RC), Assessment Centre (NES))
- Coaching offers for leaders (digital and one-to-one)
- Development Centre (DC), Assessment Centre (AC), Readiness Checks (RC) for (potential) leaders
- Lead2Perform: Assessment of top leaders including feedback, target agreements and development plans
- tk Talents: Nomination, development and promotion of emerging talents, management talents and senior management talents
- Grading of top leadership positions, nomination and development of high potentials
- Development programme for new leaders
- Succession Planning for Leadership functions

E-Learning: Babbel & LinkedIn Learning (LIL)

thyssenkrupp Marine Systems	Babbel Top 5 Languages	ATLAS ELEKTRONIK GmbH
English		English
Spanish		French
French/Danish		Italian/Spanish
Italian		Swedish
Swedish		Danish
Communication	**LIL Top 5 Skill Development**	**MS Excel**
Project Management		**Git**
MS Excel		**Programming**
Leadership		**MS Outlook**
Time Management		**C++**

Figure 6.9

Digital transformation simplifies the upskilling of employees on many levels and offers a variety of oppurtinities for involvement - like e-learning platforms.

Want to experience our involvement? Apply now https://www.thyssenkrupp-marinesystems.com/en/career

Environmental Impacts

The science is clear – to avert the worst effects of the rapidly changing climate, the world needs to transition to a net-zero carbon emissions economy latest by 2050.

7

The Paris Climate Agreement of 2015 is an important step towards keeping the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C. All states that signed the agreement are obliged to emit less greenhouse gases into the atmosphere than the amount that can be removed by sinks such as forests or by using future technologies. The objective is climate neutrality on national levels. In comparison to today, this means an almost complete reduction of greenhouse gas emissions – most of all of CO_2.

Research studies like the reports of the IPCC are increasing the awareness in politics and society for the necessity to act fast. thyssenkrupp Marine Systems aims to become net-zero according to SBTi standard by 2045 at the latest and has set ambitious targets for 2030, see figure 7.1. This ambition involves reducing the sum of direct emissions (scope 1) and of emissions from purchased energy (scope 2) by 30 % compared to 2018. In addition, the company aims to reduce the indirect emissions resulting from upstream and downstream actvities (scope 3) by 16 %.

The Science Based Targets initiative has assessed thyssenkrupp's climate targets on group level carefully based on the latest climate science and officially confirmed that they are in line with the goals of the 2015 Paris Agreement on Climate Change. The new SBTi Net-Zero Standard, along which the targets and strategy will be aligned, is the leading international standard for validation. It follows the 1.5 °C target of the Paris Agreement and requires at least a 90 % reduction of direct emissions (scope 1), from energy purchases (scope 2) and in the supply chain (scope 3) by 2050. thyssenkrupp Marine Systems is striving towards a commitment to the Net-Zero Standard and started to evaluate the requirements at the end of 2022.

To systemize efforts in pursuing climate targets, thyssenkrupp Marine Systems actively supports the group-wide Climate Action Program for Sustainable Solutions (CAPS). Furthermore, a group-wide Energy Efficiency Program (GEEP), including concrete measurable targets that are linked to board compensation, has been in place since 2013.

Reducing air, water and soil pollution to levels no longer harmful to health and natural ecosystems (with a final target of 0 %) is a further important task in reaching common environmental objectives. In line with these commitments, thyssenkrupp Marine Systems' teams and partners are committed to reducing and managing their waste, water and pollution levels significantly over the coming years.

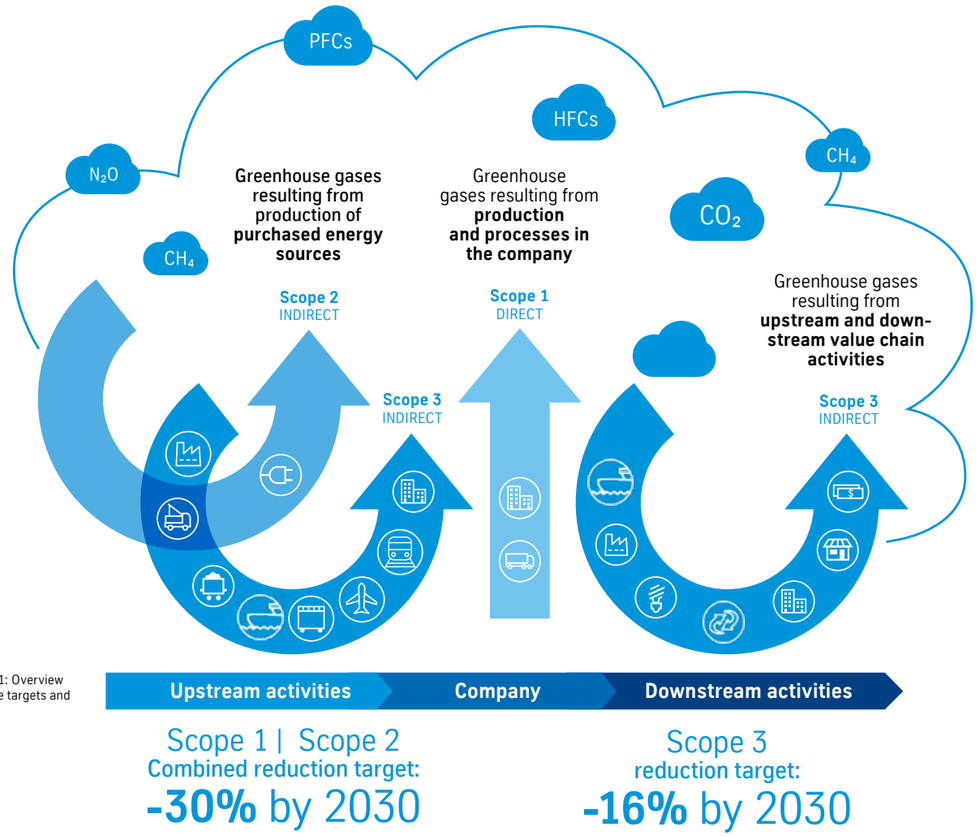


Figure 7.1: Overview of climate targets and scopes

thyssenkrupp Marine Systems' Kiel site holds a majority of GHG emissions.

GHG Emissions

A sound baseline against which to measure efforts needed to be established to achieve the ambitious targets. The baseline was established in 2018 for scope 1 and 2, and in 2021 for part of scope 3. For some specified categories, the information was only available for the calendar year 2021. Categories will be marked accordingly. The aim is to improve data availability to align all categories in the future.

Scope 1 & 2 Emissions
thyssenkrupp Marine Systems GmbH has the highest share (more than 60 %) in overall scope 1 and 2 emissions of the thyssenkrupp Marine Systems group including ATLAS ELEKTRONIK GmbH. Considering that the location in Kiel currently holds a majority (> 95 %) of these GHG emissions, the following figures will be focused on that production site. The calculation was performed with a location-based approach.

Scope 1, 2, 3 for FY 2020/2021

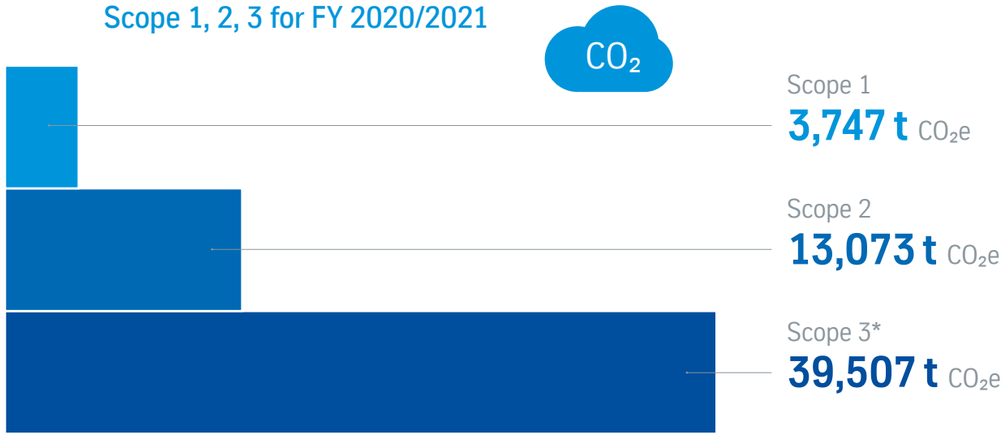


Figure 7.2

* calculated by 5 of 15 categories of GHG protocol

Shares of CO_2e at the Sites

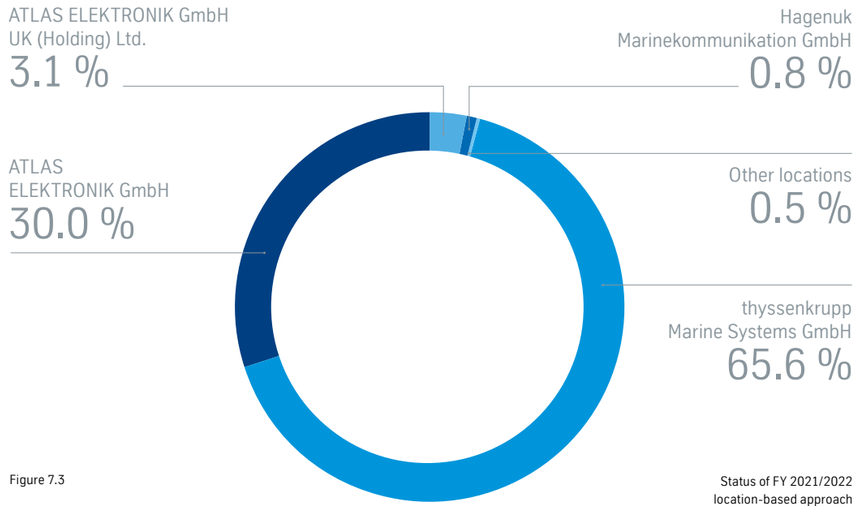


Figure 7.3

Status of FY 2021/2022
location-based approach

CO_2e at the Kiel Site

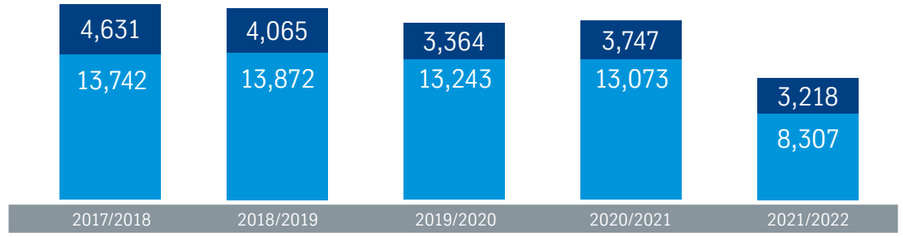


Figure 7.4

location-based approach

Share of GHG Emissions in t CO_2e per Energy Source in FY 2021/2022

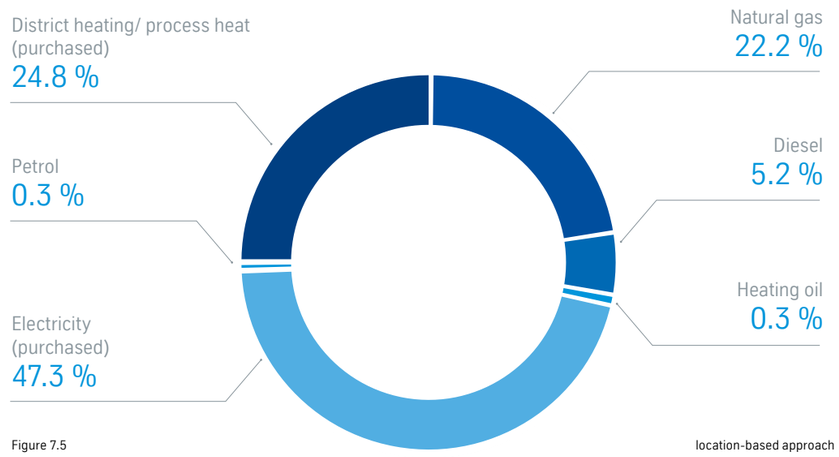


Figure 7.5

location-based approach

Scope 3 Emissions
The first scope 3 assessment in 2022 focused on five of the 15 GHG Protocol categories at the location in Kiel. This choice was guided by the a priori estimated order of magnitude of these categories, as well as the availability of the needed information. The category “use of products” is excluded at this point due to the fact that it is subject to extremely high confidentiality of national concern. In the next years, the assessments will be expanded to other sites and more scope 3 categories mentioned in table 2. More information on the GHG emissions of ATLAS ELEKTRONIK UK has been available since 2022, because the company took on a pioneering role with a carbon reduction plan to comply with UK laws.

Purchased energy (scope 2) is the most significant part of the emissions caused by the use of energy on site. As these are indirect emissions introduced outside of thyssenkrupp Marine Systems’ sites, the company is currently discussing the situation with its energy suppliers. The reduction of GHG emissions is more directly accelerated by influencing energy usage as a result of active measures taken under the energy management policy and strategy. Such efforts can be witnessed with the continuous decrease of the scope 1 and 2 emissions since the baseline year 2017/2018.

Among the computed emissions, purchased goods constitute the greatest source, which is to be expected for a manufacturing company. This is addressed by the procurement department, engaging with the suppliers to select less emissive materials, as well as by the research and development (R&D) activities, as part of low-carbon emission R&D programmes – see chapter Sustainable Innovation.

“The first scope 3 assessment has been a great achievement to understand the company's carbon footprint. It is a good start for us to derive effective measures.”

Head of ESG

Scope 3 emissions upstream		2021
Purchased goods or services	Emissions “cradle to gate” of goods and services purchased by thyssenkrupp Marine Systems	31,220 t CO_2e
Emissions related to fuels and energy (not included in scope 1 and scope 2)	Emissions related to energy use, but not occurring within the operational boundaries; this includes the explorations, extraction, transformation and transportation of fuels	2,217 t CO_2e
Upstream freight and distribution	Emissions related to the transportation of goods from suppliers to thyssenkrupp Marine Systems	248 t CO_2e
Business travel	Emissions related to trips made by thyssenkrupp Marine Systems' employees relative to their occupation at thyssenkrupp Marine Systems	3,659 t CO_2e
Scope 3 emissions downstream		
Downstream freight and distribution	Emissions related to the transportation of goods from thyssenkrupp Marine Systems to its clients	2,162 t CO2e
Scope 3 total	**Total of assessed scope 3 emissions**	**39,507 t CO_2e**

Table 1: GHG Protocol reporting table

Share of Scope 3 GHG Emissions in t CO_2e per Computed GHG Protocol Category

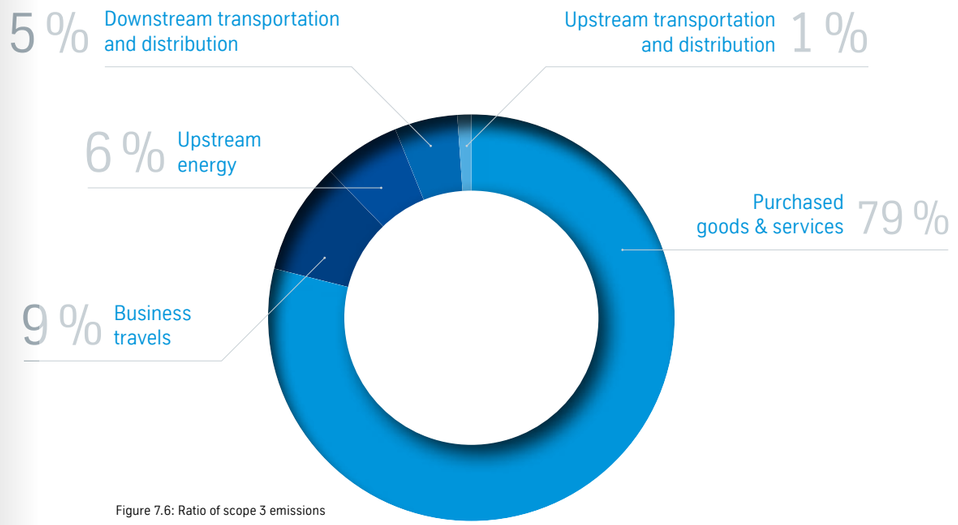


Figure 7.6: Ratio of scope 3 emissions

Scope 3 emissions upstream	
Capital goods	All upstream (cradle-to-gate) emissions of purchased capital goods (final goods that are not immediately consumed or further processed by the company)
Waste generated	The scope 1 and scope 2 emissions of waste management suppliers that occur during disposal or treatment
Employees commuting	The scope 1 and scope 2 emissions of employees and transportation providers that occur during use of vehicles (e.g. from energy use)
Upstream leased assets	The scope 1 and scope 2 emissions of lessors that occur during the reporting company’s operation of leased assets (e.g. from energy use)
Scope 3 emissions downstream	
Transformation of sold products	The scope 1 and scope 2 emissions of downstream companies that occur during processing (e.g. from energy use)
Use of sold products	The direct use-phase emissions of sold products over their expected lifetime (i.e. the scope 1 and scope 2 emissions of end users that occur from the use of: products that directly consume energy (fuels or electricity) during use; fuels and feedstocks; and GHGs and products that contain or form GHGs that are emitted during use)
End-of-life of sold products	The scope 1 and scope 2 emissions of waste management companies that occur during disposal or treatment of sold products
Downstream leased assets	The scope 1 and scope 2 emissions of lessees that occur during operation of leased assets (e.g. from energy use).
Franchises	The scope 1 and scope 2 emissions of franchisees that occur during operation of franchises (e.g. from energy use)
Investments	Company’s investments in the reporting year: • Equity investments • Debt investments • Project finance • Managed investments and client services

Table 2: Overview of further GHG scope 3 categories to be assessed in the future

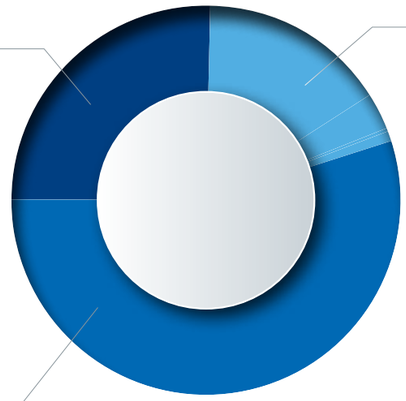
Reduction Targets and Main Actions Taken
Ambitious targets on the reduction of emissions were set, and structured by an approach along several categories:

Environmental Sustainability Management
- Targets validated and cascaded to all operating units (scope 1 and 2 by 30 %, and scope 3 by 16 % in 2030 compared to the baseline of 2018)
- Baseline measurement and continuous improvement
- Strong sustainability governance in place, with all functions involved to monitor the efforts
- Expansion of energy management systems to all sites and buildings (current implementation status: four of seven locations, covering all main production sites)

Sustainable Mobility
- Initiatives to promote the use of bicycles for commuting, such as participation in public bike sharing and collaboration with health insurances in summer 2022
- Public transport commuter tickets for employees
- Commuter app to organize car sharing for employees
- Use of company bikes within thyssenkrupp Marine Systems' premises
- Increasing number of electric vehicles in the company fleet
- Implementation of remote working since 2022
- Reduction of business trips and adaptation of business travel policy
- Planned implementation of electric company cars and recharging infrastructure on thyssenkrupp Marine Systems' premises

Reduction Measures for Scope 1 and 2

Heat
- Investment in more economical heating systems
- Switch to alternative heat supply technologies, e.g. geothermal energy where possible
- Electrical heating in combination with photovoltaic for buildings
- Maximization of buildings' energy efficiency



Gas and Fuels
- Reinvestment in more fuel-efficient vehicles
- Conversion of the combined heat and power plant in Kiel to hydrogen
- Investment in company vehicles (incl. industrial trucks) with sustainable drive systems

Purchased and Consumed Electricity
- Reduce consumption (e.g. LED-lighting, intelligent control systems for machinery and lighting, reinvestment in more fuel-efficient equipment)
- Photovoltaic
- Connection of battery and fuel cell test facilities to shipyard network

Figure 7.7

Energy Management & Sources of Energy

Energy management is one of the pillars on which the carbon reduction strategy is based. Therefore, all main production sites from thyssenkrupp Marine Systems and ATLAS ELEKTRONIK GmbH in Kiel, Bremen, Wedel and Wilhelmshaven have an ISO 50001-certified energy management system. The new location in Wismar was certified under the former owner and this certification will be updated soon. The main focus is on the continual improvement of energy performance for the scope of electrical power and heating consumption. thyssenkrupp Marine Systems implements direct and immediate energy management actions and relies on a long-term energy strategy. Measuring infrastructure to control, evaluate and derive data results in improvements on a regular basis guarantee transparency in energy consumption. In Kiel, this infrastructure comprises more than 500 measuring points. In recent years (2018 to 2021), a large amount of electrical energy – no less than 5,100 MWh – has been saved thanks to several measures taken at the shipyard in Kiel. Figure 7.8 shows a Sankey diagram for the various energy consumers in Kiel. The electricity is used for shipbuilding works, lighting and machinery, and the district heating is used for buildings as well as for manufacturing processes. The figures 7.9 till 7.14 give a clear overview on energy consumption at various sites.

> "Energy Management is one of our powerful tools to tackle climate change and act responsibly with given energy sources."
>
> Head of Production & Company Infractructure

Sankey Diagram of Energy Use in Kiel

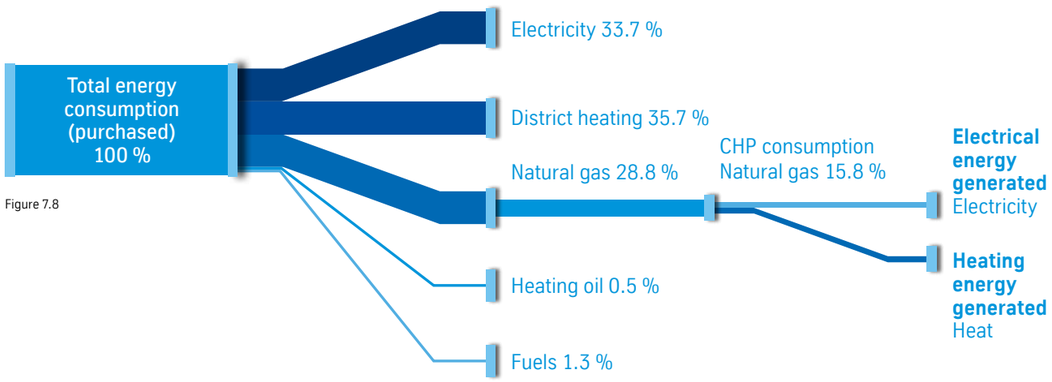


Figure 7.8

	2018 [GWh]	2019 [GWh]	2020 [GWh]	2021 [GWh]	2022 [GWh]
Electrical power	23.2	21.4	19.8	18.1	15.9
Heat consumption	16.4	15.5	17.2	19.2	15.3
Total	39.6	36.9	37.0	37.3	31.2

Figure 7.9: Energy consumption in Kiel

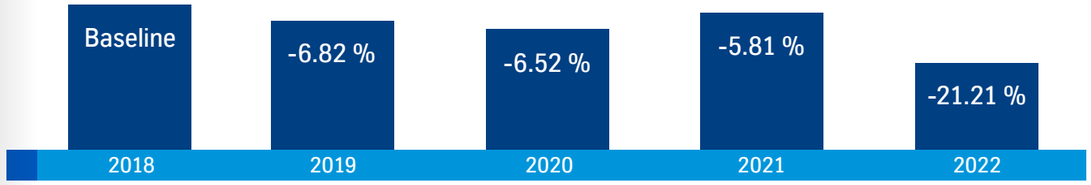


Figure 7.10: Variation in energy consumption in Kiel

The following actions improve energy efficiency in Kiel:

- 100 % of the purchased electrical power in Kiel has come from renewable energy sources since January 2022
- Replacement of heating oil-powered boiler with natural gas-powered combined heat power plant in 2019
- Replacement of conventional lighting for LED lighting and motion detectors as an ongoing measure
- Modernization of heating systems and renewal of air conditioning systems starting in 2023
- Implementation of heat recovery
- Raising of employees' awareness with regard to energy consumption and environmental aspects in regular trainings since 2022
- Ongoing modernization of the company's production equipment by using innovative technologies and digitalization
- Pilot project in 2022 to evaluate the energy efficiency and CO_2 footprint of company buildings and generate Real Estate CO_2 certificates
- Roll-out of Real Estate CO_2 certificates to all owned equities started end of 2022

Besides controlling the energy consumption through efficiency, the impact of purchased energy is limited by procuring more renewable energies and entering into power purchase agreements to reduce the carbon intensity.

Data on energy management will be further improved. Stay curious for the next reporting period.

ATLAS ELEKTRONIK GmbH Bremen

	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Electrical power [MWh]	10,767.74	10,482.64	10,496.26	10,169.89	9,746.22
Heat consumption [MWh] District heating	6,884.98	6,634.76	6,641.81	8,078.16	7,319.42
Heat consumption [MWh] Heating oil	421.33	447.73	444.83	395.45	402.54
Total [MWh]	18,074.05	17,565.13	17,582.90	18,643.50	17,468.18

Figure 7.11

ATLAS ELEKTRONIK GmbH Wedel

	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Electrical power [MWh]	1,607.02	1,414.70	1,324.33	1,269.23	1,362.68
Heat consumption [MWh] Gas	2,253.09	2,339.09	1,937.20	2,977.99	2,767.94
Total [MWh]	3,946.11	3,753.79	3,261.53	4,247.22	4,130.62

Figure 7.12

ATLAS ELEKTRONIK GmbH Wilhelmshaven

	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
Electrical power [MWh]	126.28	148.20	153.62	155.57	149.22
Heat consumption [MWh] Gas	223.04	214.51	216.90	249.11	195.15
Total [MWh]	349.32	362.71	370.52	404.68	344.37

Figure 7.13

Heat Consumption Compared to Baseline 2017/2018 in kWh per m² Netto Area

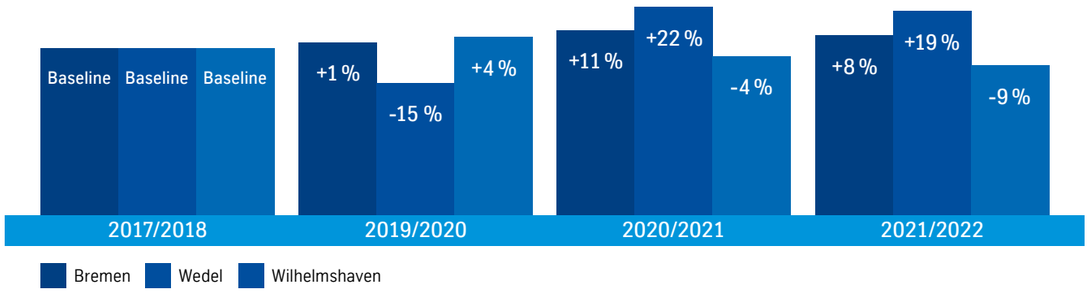


Figure 7.14

Waste Management Including Hazardous Materials

Every year, the world issues eleven billion tons of waste, according to the United Nations Environment Programme. This tremendous amount of waste – originating from the way products and materials are designed, produced, consumed and disposed of in general – pollutes lands and waterways, depletes natural resources and contaminates breathing air. Besides the clear need to protect the world's ecosystems, thyssenkrupp Marine Systems considers that significant economic and environmental benefits can be obtained by taking a more circular approach to materials management, which reduces waste and keeps products and materials in use.

For a shipbuilding company, avoiding waste is a major challenge due to state-of-the-art production processes. However, an important principle applies here:
Waste avoidance always has priority over recycling, and recycling over removal (compare with figure 7.15).

thyssenkrupp Marine Systems' products are designed for a long life cycle. Furthermore, the company provides services for the refitting and modernization of existing vessels to extend the products' life cycles. These are important measures in terms of avoiding waste.

thyssenkrupp Marine Systems follows the European waste hierarchy

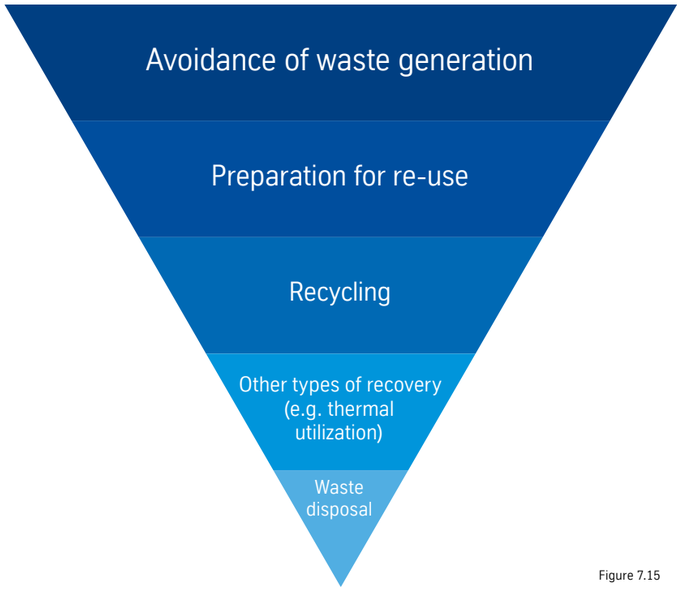


Figure 7.15

The following table shows the waste generation trend over the past few years:

	2019	2020	2021	2022
Total waste generated [t]	3,496	3,138	3,011	3,036
Total waste recovered [t]	3,430	3,046	2,927	2,890
Total waste recovery index	98 %	97 %	97 %	95 %
Total non-hazardous waste [t]	2,894	2,549	1,963	2,272
Non-hazardous waste recovered [t]	2,871	2,532	1,945	2,252
Total hazardous waste [t]	602	588	1,049	763
Hazardous waste recovered [t]	560	513	982	638

Waste avoidance has priority over recycling, and recycling over removal.

Reduction Measures for Waste:
- Reducing paper consumption within administration, design and production by 50 % through digitalization and the use of modern printing technology (see chapter Sustainable Innovation)
- Installing water dispensers for re-usable water bottles facilitates the reduction of non-returnable packaging: each employee in Kiel received re-usable water bottles for free
- Minimizing non-returnable "to-go" packaging in canteen operations, e.g. re-usable cups
- Improving the employees' awareness for the environment via internal communication channels
- Reducing electronic waste such as notebooks in preparation for re-use (re-selling)
- Continuous improvement and restructuring of the existing waste management

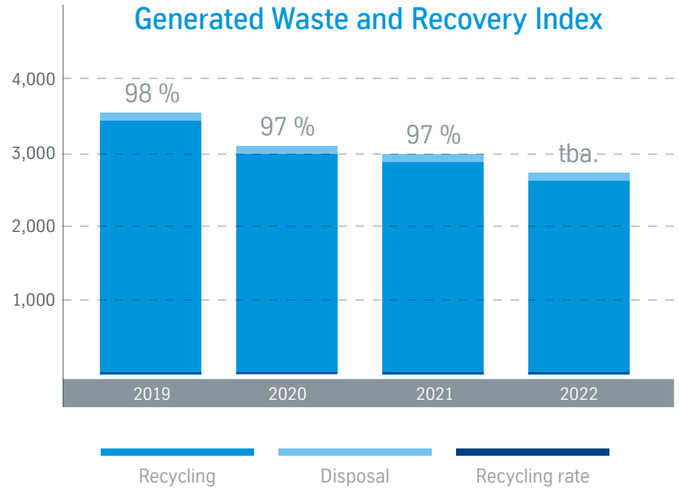


Figure 7.16

Management of Water Resources

Increasing global water demand and the effects of climate change lead to the overuse of water resources in many regions. Getting ahead of the world's imminent water crisis will require a reduction in the amount of water used to operate economies and societies while ensuring sufficient and clean water for everyone. One strategy to meet these challenges is to implement an integrated industrial water management system, e.g. the re-use of water or tapping into alternative water resources. For thyssenkrupp Marine Systems' activities in particular, extra attention is given to water usage and the risk of water pollution at the design, production and end-of-life management stages.

Schleswig-Holstein extracts 100 % of its drinking water from groundwater sources. In addition to this, the site in Kiel borders directly on the Kiel Fjord. It is mandatory that the quality of these water sources be preserved. Freshwater is generated on own premises from groundwater in Kiel and this is monitored continually. The freshwater consumption was 186,697 m³ in FY 2020/2021 and 154,073 m³ in FY 2021/2022.

The usual water withdrawal is caused by sanitation requirements and production needs such as tank tightness tests, cooling and warming purposes as well as industrial cleaning. The main purpose is to be compliant with applicable legal regulations, standards and norms for hygiene and environmental aspects, in close cooperation with local authorities. Constant monitoring and operational control measures, such as improvements in water supply and drainage networks, are part of activities for enhancing water management. Sampling and laboratory analysis are used to monitor and evaluate the quality of discharges at specific points throughout the shipyard.

Industrial, sanitation and rainwater discharges are disposed of the public wastewater network or surface water in accordance with local law and authorities.

To enhance water protection, diverse measures were implemented.
Preventing of pollution:
- Oil barrier system including leakage prevention equipment for vessels during shipyard lay days
- Modernization of wastewater treatment plant for dry docks
- Modernization of grease separator for canteen
- Modernization of filling station (heating oil and diesel)
- Improvements to water supply and drainage network systems
- Inspection and enhancement of hazardous substances warehouses aimed at water protection

Reduction of fresh water:
- Implementation of chiller units running in a closed-circuit arrangement to cool submarine systems during dockyard periods
- Implementation of water-saving sensors on water taps

Raising awareness:
- Implementation of regular employee information service about environment protection and saving energy

"Under the water, above the surface or on shore – efficient water management has highest priority to protect water as source of life."

Expert Corporate Communications

Annual Fresh Water Consumption Kiel

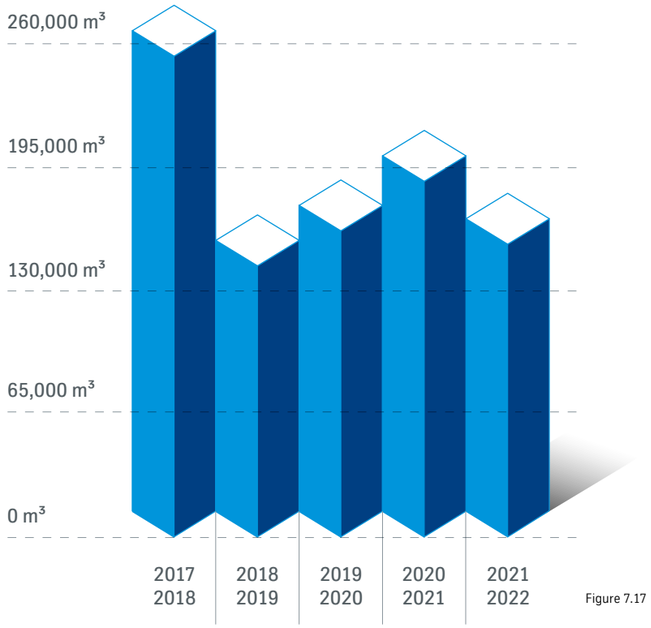


Figure 7.17

Annual Fresh Water Consumption Bremen

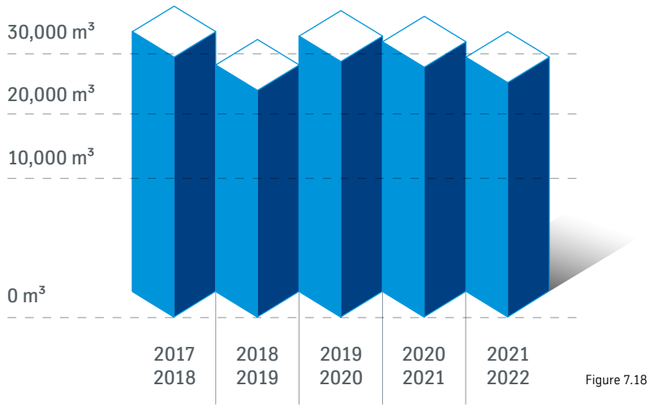


Figure 7.18

Annual Fresh Water Consumption Wedel

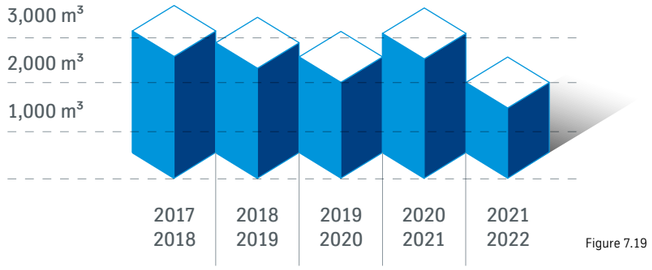
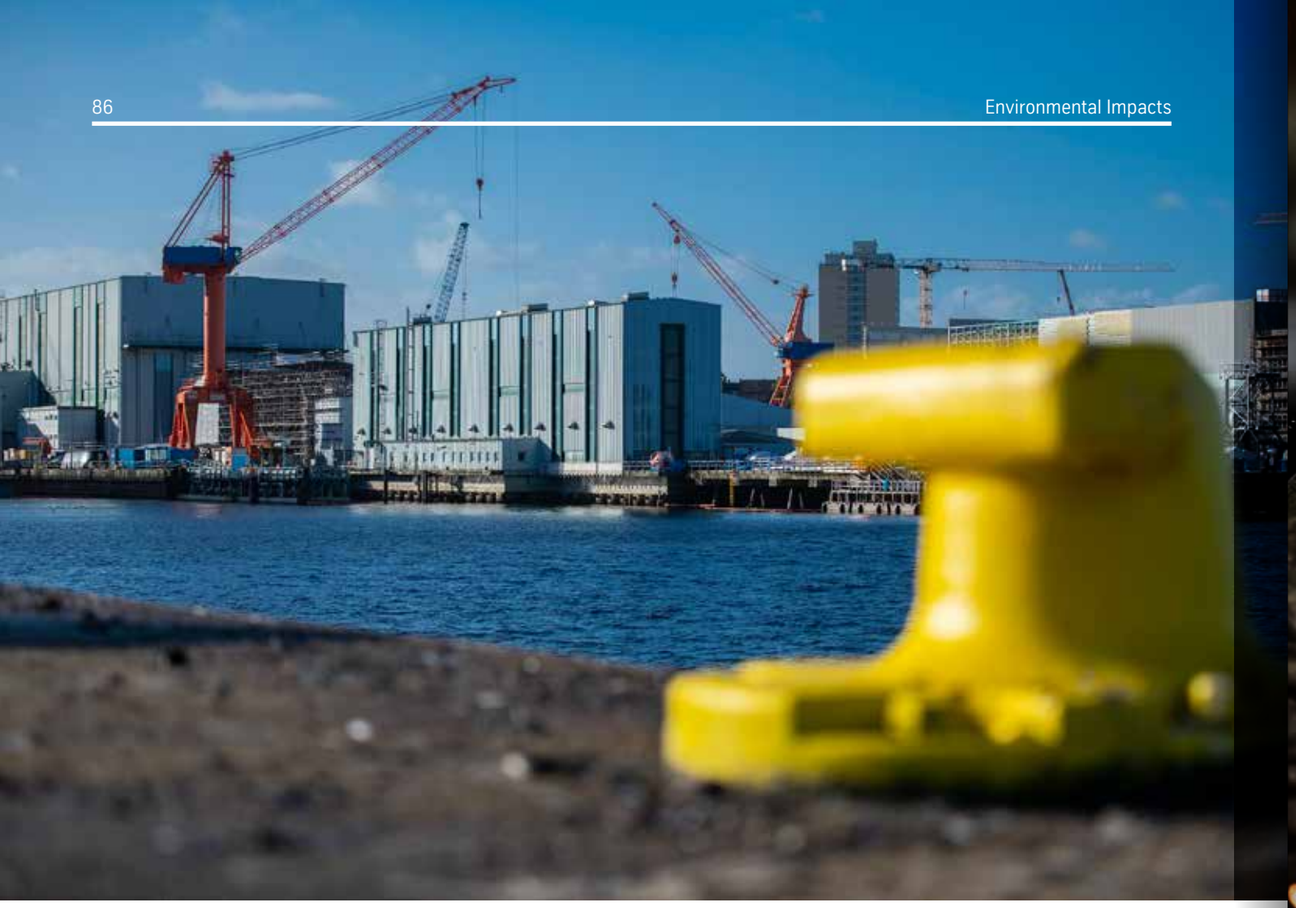


Figure 7.19



Noise Management

In the harbour of Kiel, the shipyard is located centrally in a well-populated area. Business activities can be challenging within the vicinity of residential areas. Ambient noise arises from activities such as shipbuilding work, material transportation, machinery, sand blasting and more. Thanks to careful handling, however, no neighbourhood complaints were raised in recent years.

The generation of noise during the construction of new factory buildings must be prevented as far as possible. The same applies for major modifications to existing installations or factory plants. Close cooperation with local authorities is mandatory in accordance with the German Federal Immission Control Act. Minimizing the noise of machinery to offer employees a safe workplace in terms of occupational safety and health is a matter of course.

Measures to further improve noise emissions:

- Reducing night-time operations to a minimum
- Consideration of potential noise emissions in the technical design phase of factory construction
- Demand-based noise impact assessment and noise measurements

Silence is not only important to stay hidden under water but also to lower impact on the production environment.

Nomenclature

8

Terms

Climate Change
Climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity. This usage differs from that in the United Nations Framework Convention on Climate Change (UNFCCC), which defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

Climate Neutral(ity) or Net-Zero CO_2 Emissions
Net-zero carbon dioxide (CO_2) emissions are achieved when anthropogenic CO_2 emissions are balanced globally by anthropogenic CO_2 removals over a specified period. In other words, it consists of (1) reducing scope 1, 2, and 3 emissions to zero or to a residual level that is consistent with reaching net-zero emissions at the global or sector level in eligible 1.5 °C-aligned pathways as well as (2) neutralizing any residual emissions at the net-zero target year and any GHG emissions released into the atmosphere thereafter.

CSRD – Corporate Sustainability Reporting Directive
The Corporate Sustainability Reporting Directive (CSRD) is the new EU legislation requiring all large companies to disclose in their management reports information on their environmental impact and social activities. The new rules and standards (ESRS) aim at helping investors, consumers, policy-makers and other stakeholders evaluate large companies' non-financial performance, and serve as a minimum set of (standardized) requirements across the EU.

DMM – Double Materiality Matrix
Financial materiality and impact materiality, considered together under the umbrella of "double materiality", are the only relevant forms of materiality, with both perspectives needed in a two-pillar structure – for financial and sustainability reporting – with a core set of common disclosures and each pillar on an equal footing. The DMM is a visualization of the double materiality assessment.

- Financial materiality: "A sustainability impact may be financially material from inception or become financially material when it becomes investor relevant, including due to its present or likely effects on cash-flows, development, performance and position in the short-, medium- and long-term time horizons. Irrespective of their being financially material, impacts are captured by the impact materiality perspective." (ESRS 1)
- Impact materiality: "A sustainability matter is material from an impact perspective when it pertains to the undertaking's material actual or potential, positive or negative impacts on people or the environment over the short-, medium- and long-term time horizons. Impacts include those caused or contributed to by the undertaking and those which are directly linked to the undertaking's own operations, products, or services through its business relationships. Business relationships include the undertaking's upstream and downstream value chain and are not limited to direct contractual relationships." (ESRS 1)

ESRS – European Sustainability Reporting Standards
The EU Sustainability Reporting Standards (ESRS) are a set of standards that outline the mandatory concepts and principles with which companies reporting under the Corporate Sustainability Reporting Directive (CSRD) must align their sustainability statements.

GHG – Greenhouse gases
GHG are gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds. This property causes the greenhouse effect. Water vapour (H_2O), carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), and ozone (O_3) are the primary greenhouse gases in the Earth's atmosphere. Moreover, there are several entirely human-made greenhouse gases in

the atmosphere, such as the halocarbons and other chlorine- and bromine-containing substances which are dealt with under the Montreal Protocol. Beside CO_2, N_2O, and CH_4, the Kyoto Protocol deals with the greenhouse gases sulphur hexafluoride (SF_6), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).

Impact of greenhouse gases is caused by addition of GHGs to the athmosphere by deliberate human activities, i.e. in addition to the removal that would occur via natural carbon cycle processes. GHG emissions can be accounted in the direct emissions of a company when they physically occur within the operational scope of the company (scope 1). They can also be accounted in the indirect emissions of the company, whether they arise from the emissions occurring at the site of the production of the energy purchased by the company (scope 2), or they arise from other upstream and downstream value chain activities (scope 3).

Method for scope 2 accounting:

- Location-based: A method to quantify scope 2 GHG emissions based on average energy generation emission factors for defined locations, including local, subnational or national boundaries.
- Market-based: A method to quantify scope 2 GHG emissions based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity, whether bundled with instruments or not.

Principle of Materiality
Materiality is an accounting principle which states that all items that are reasonably likely to impact investors' decision-making must be recorded or reported in detail in a business's financial statements using GAAP standards. Essentially, materiality is related to the significance of information within a company's financial statements. If a transaction or business decision is significant enough to warrant reporting to investors or other users of the financial statements, that information is "material" to the business and cannot be omitted.

Science Based Targets initiative
Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping to prevent the worst impacts of climate change and to future-proof business growth. More than 4,000 businesses around the world are already working with the Science Based Targets initiative (SBTi).

SDGs – Sustainable Development Goals
The Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations General Assembly in 2015. The SDGs aim to address crucial global challenges such as poverty, inequality, climate change and environmental degradation. The overarching goal of the SDGs is to provide a blueprint to achieve a better and more sustainable future for all.

Uncertainty
An expression of the degree to which a value (e.g. the future state of the climate system) is unknown. Uncertainty can result from lack of information or from disagreement about what is known or even knowable. It may have many types of sources, from quantifiable errors in the data to ambiguously defined concepts or terminology, or uncertain projections of human behaviour. Uncertainty can therefore be represented by quantitative measures (e.g. a range of values calculated by various models) or by qualitative statements (e.g. reflecting the judgement of a team of experts).

Figure 8.1: UN sustainable development goals

Abbreviations

Abbreviation	Description
BMBF	Federal Ministry of Education and Research
BU MS	Business Unit Marine Systems
CAPS	Climate Action Program for Sustainability
CESNI	Comité européen pour l'éboration de standards dans le domaine de la navigation intérieure - European Committee for drawing up Standards in the field of Inland Navigation
CMS	Corporate Governance and Compliance Management
CoC	Code of Conduct
CSRD	Corporate Sustainability Reporting Directive
DCGK	German Corporate Governance Code
DMM	Double Materiality Matrix
DRC	Democratic Republic of Congo
ESG	Environment, Social and Governance
ESRS	European Sustainability Reporting Standards
FAT	Factory Acceptance Test
FPE	Use of External Personnel (Fremdpersonaleinsatz)
FY	Fiscal Year
GEEP	Group-wide Energy Efficiency Program
GHG	Greenhouse Gas
HAT	Harbour Acceptance Test
HSE	Health, Safety and Environment
HSSE	Health, Safety, Security and Environment
IFA	International Framework Agreement
IG Metall	Industriegewerkschaft Metall (Trade Union)
ILO	International Labour Organization
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
KPI	Key Performance Indicators
LkSG	Lieferkettensorgfaltspflichtengesetz – Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains (Supply Chain Act)
MARPOL	International Convention for the Prevention of Pollution from Ships
ME System	Manufacturing Execution System
OSH	Occupational Safety and Health
R&D	Research and Development
REACH	Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals
RMS	Risk Management System
SAT	Sea Acceptance Test
SBTi	Science Based Targets initiative
SCA	Supply Chain Act
SCoC	Supplier Code of Conduct
SDGs	Sustainable Development Goals
TFCD	Task Force on Climate-related Financial Disclosures
TSC	Technical Screening Criteria
tk Marine Systems	thyssenkrupp Marine Systems
UN	United Nations

Imprint

Published on 31st March 2023 by
thyssenkrupp Marine Systems GmbH
Werftstraße 112-114
D-24143 Kiel, Germany
www.thyssenkrupp-marinesystems.com

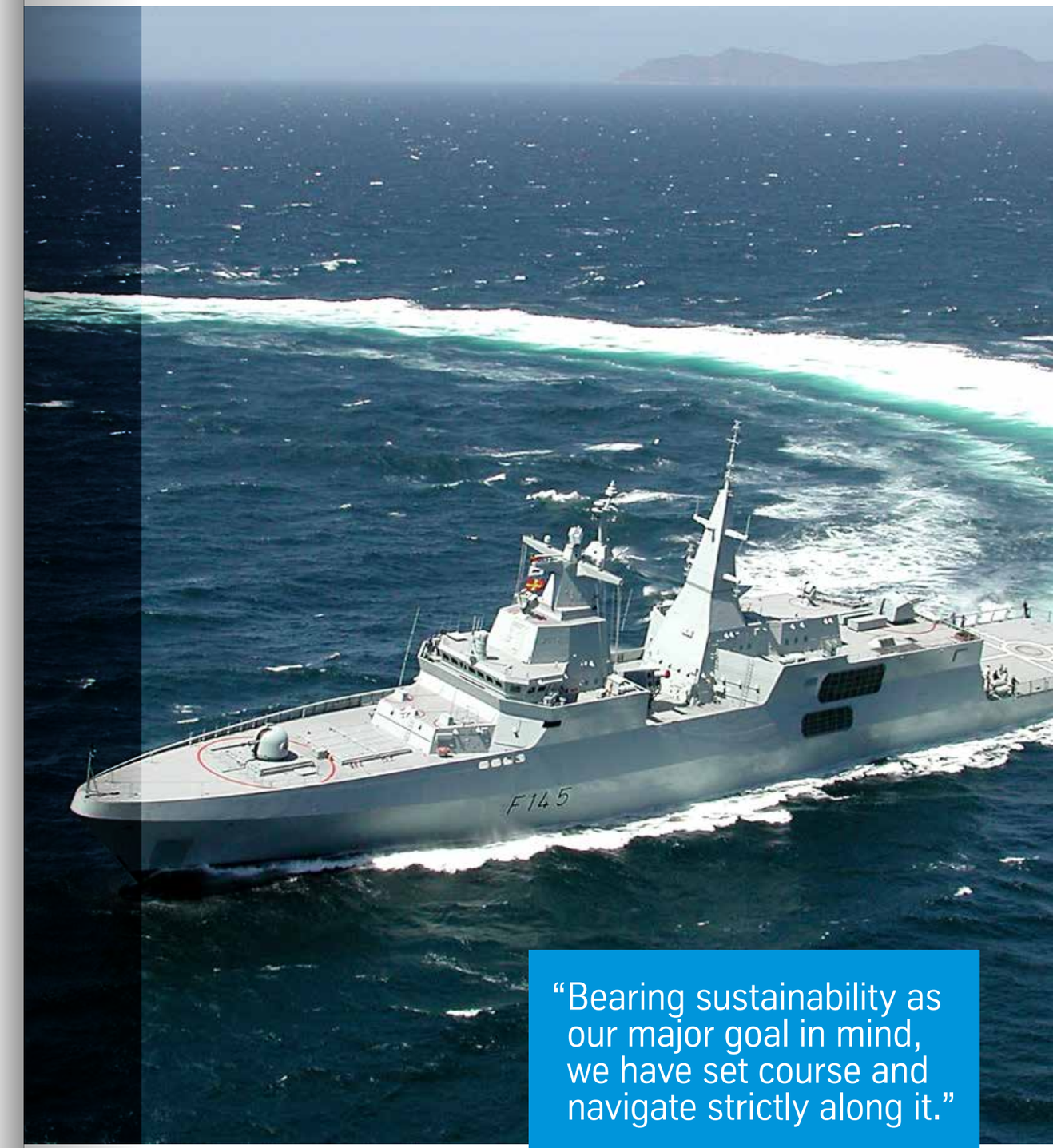
Contact:
Dr.-Ing. Marlene Fischer
Head of ESG
T: +49 431 700 -126219
marlene.fischer@thyssenkrupp.com

Stefan Ettwig
Head of Communications
T: +49 431 700 2610
stefan.ettwig@thyssenkrupp.com

Susanne Schmidt
Corporate Communications
susanne.schmidt2@thyssenkrupp.com

Consulted by:
eolos GmbH
Exerzierstraße 24
D-13357 Berlin, Germany
https://de.eolos.org/

Design & Illustration:
André Illing
Grafik & Design
Köster-Klickermann-Weg 28
D-18055 Rostock, Germany
T: +49 171 9 70 70 11
buddelfisch@andre-illing.de
www.andre-illing.de



“Bearing sustainability as our major goal in mind, we have set course and navigate strictly along it.”

CEO

thyssenkrupp Marine Systems GmbH

Werftstraße 112-114
D-24143 Kiel, Germany
www.thyssenkrupp-marinesystems.com

engineering. tomorrow. together.