thyssenkrupp

Crafting a legacy for future generations

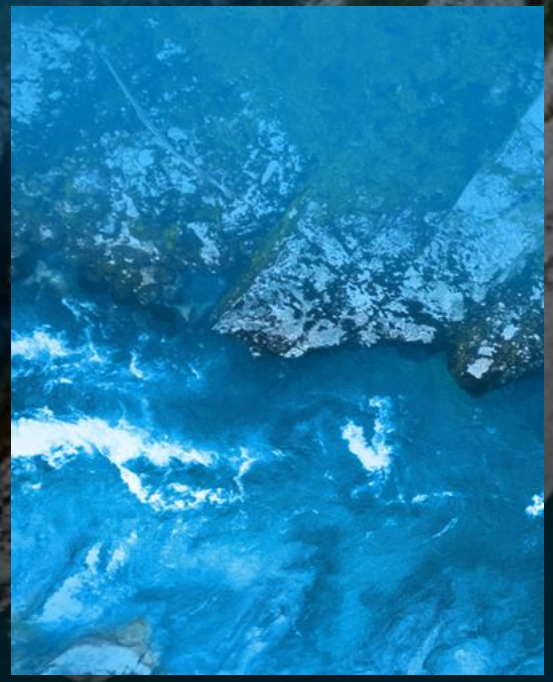
Technology drives Sustainability

I April 2026 I thyssenkrupp Decarbon Technologies
ESG Factbook

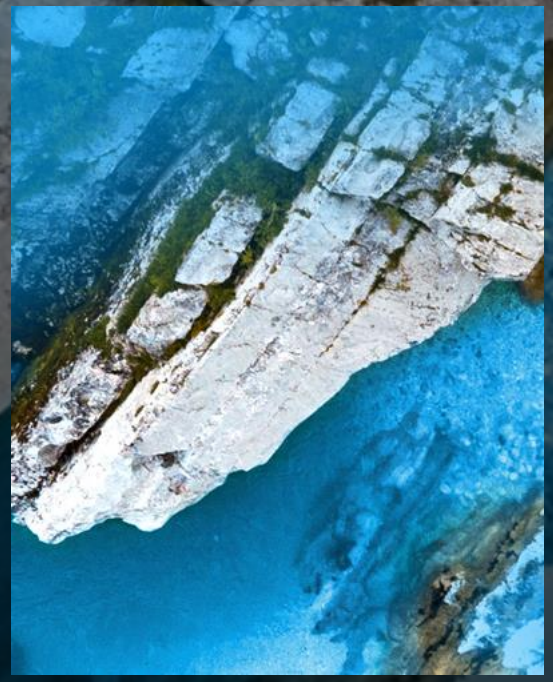
Table of Content

1. Independend stock-listed company

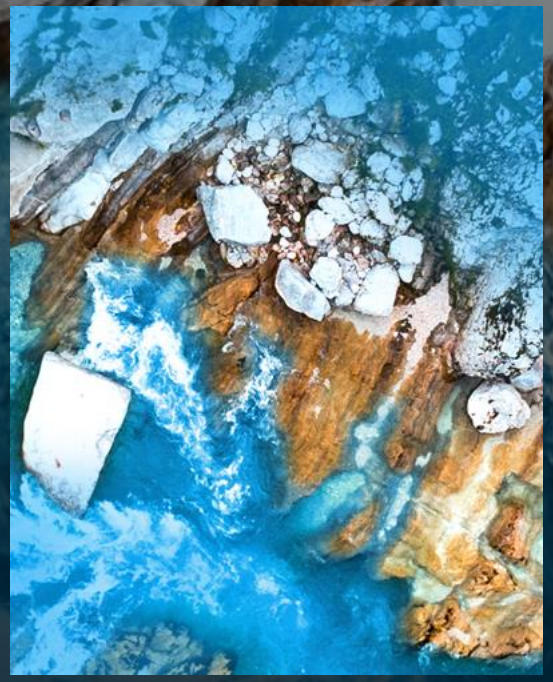
ESG @ Decarbon Technologies



ESG
Commitment



ESG
Targets and Ambitions



ESG
Ratings

ESG
Compliance

Crafting a legacy for future generations

At thyssenkrupp Decarbon Technologies, we are pioneering clean technologies that lead the way toward a sustainable and decarbonized future.

We are deeply committed to opening up the pathway to a green transformation across industries, including industries in which mitigation is difficult, such as cement, chemical, energy and oil & gas.

As a leader in sustainable innovation, we foster a culture of performance, diversity and teamwork; powering through the challenges of climate change to unlock a better tomorrow.

Through our efforts, we represent not just a company but a community, sculpting a legacy that promises a livable planet for generations to come.

Miguel Ángel López Borrego, CEO of Decarbon Technologies

We support customers across three impact areas

Decarbon & energy efficiency

Reaching net-zero is one of the greatest challenges of our time and industries worldwide must fundamentally transform the way they operate. thyssenkrupp Decarbon Technologies (DT) is driving this transformation.

With a comprehensive portfolio of solutions – from green hydrogen and sustainable process technologies to climate-friendly materials and resource efficiency – we enable our customers to decarbonize production processes, infrastructure and provide innovative products and technologies for wind energy generation.

By combining engineering excellence, cross-industry expertise and strong global partnerships, Decarbon Technologies helps to reduce emissions and enhance energy efficiency.

Resource efficiency & circularity

The global economy needs to transition from linear to circular models. Resource scarcity, waste generation and environmental pressures require industries to innovate and build resilience.

Decarbon Technologies helps chemical and process industries embrace circular business models. We develop processes for chemical recycling, sustainable fertilizers and renewable-based fuels, enabling the reuse of resources and decoupling growth from resource consumption.

By scaling circularity, we reduce environmental impact while opening new opportunities for innovation and value creation

People centricity & societal impact

Communities, cities and industries are undergoing profound change. Urbanization, climate change and the global demand for sustainable resources require solutions that improve quality of life.

Decarbon Technologies drives positive transformation by providing technologies for clean energy, green chemicals and sustainable industrial processes. We enable access to green ammonia for fertilizers, renewable methanol for fuels and advanced processes for clean water and environmental protection.

By connecting our engineering expertise with digital solutions, we ensure that our innovations create lasting value for people and the planet.

We help our customers to achieve a positive sustainability impact

Decarbon & energy efficiency

Resource efficiency & circularity

People centricity & societal impact

Rothe Erde

Mission critical wind energy components global N.1 supplier

>2,500 multimegawatt main bearings manufactured

Enormous opportunities from wind energy global expansion

Polysius

Paving the way for climate-neutral transformation of cement and lime industry via solutions to reduce CO_2 (e.g. carbon capture and clinker factor reduction)

>800 cement plants with installed equipment - huge potential for service and oxyfuel technology

Uhde

Technology leader and global plant engineering capabilities

Wide range of technology portfolio to support industrial green transition (ammonia, methanol, ammonia cracking)

>3,000 chemical & process plants built worldwide – know-how for growing hydrogen transport need and applications

thyssenkrupp nucera[1]

Technology leader in gH_2 electrolysis plants

Largest order book (>3 GW) for green hydrogen electrolysis plants in industry

Successful IPO underpins opportunities of hydrogen market growth prospects

1. Independend stock-listed company

Decarbonization as a driver of sustainable economic growth

Achieving net-zero urgently needed

Catastrophic consequences for economy and society already visible today.

- Climate change: Range between +1.2°C and +4.1°C until 2100 by IPCC
- Possible GDP loss: 18% until 2050
- Increasing mortality due to climate change

CO_2 neutrality is key

A. Avoidance

- Green electrons
- Green molecules (H_2 & derivates)

B. Minimization

- Monitoring
- Efficient technologies

C. Isolation

- Concentration (Oxyfuel)
- Capture
- Storage/utilization

Economic development must be ensured

The increasing population and energy demand puts additional challenges on the environment.

- Increasing population: >9.5 bn until 2050
- Energy demand: ~30% increase until 2050
  - Industry sector responsible for >50% of global CO_2 emissions

Need for decarbonizing the industrial sector is defining a completely new playground with high growth potential.

IPCC: Intergovernmental Panel on Climate Change

thyssenkrupp AG with climate targets following the 1.5 °C pathway of Paris Agreement

Near-Term and Net-Zero targets approved by Science Based Target initiative (SBTi)

Ambitious targets on our path to Net-Zero …

-50.4%

Scope 1 and 2 emissions from own processes outside SDA ‘Iron & Steel’

-30.1%

Scope 1, 2 and 3 emissions per ton of hot rolled steel inside SDA ‘Iron & Steel’

-30.0%

Scope 3 emissions in value chain outside SDA ‘Iron & Steel’

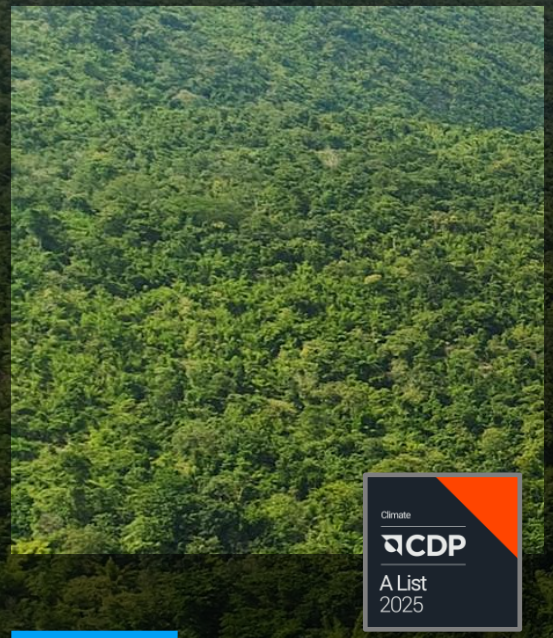
Net-Zero

by 2050 latest

Near-Term targets 2030

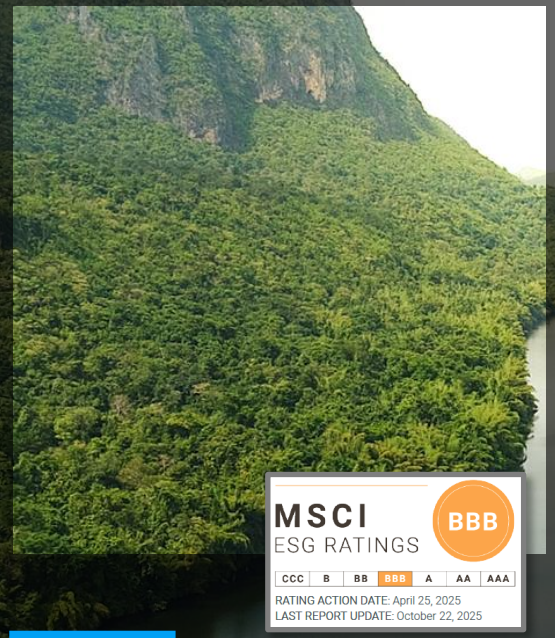
Remarks: All emission reductions from base year 2018; Market-based approach for Scope 2 emissions; SDA = Sectoral Decarbonization Approach (SBTi)
Not displayed here: Additional standalone Scope 3 target for emissions from use of sold products from sold fossil fuels 50.4% by 2030. Please note that some thyssenkrupp Segments/Group Companies have additional climate targets.

Ratings underline leading ESG position of thyssenkrupp group



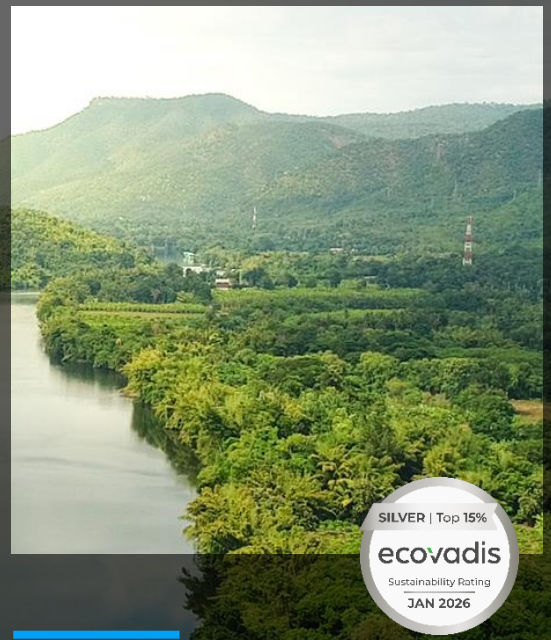
CDP A Rating

2025: On the A List for the tenth time in a row



MSCI rating “BBB“

Among the best 43 % of steel companies in 2025



Ecovadis

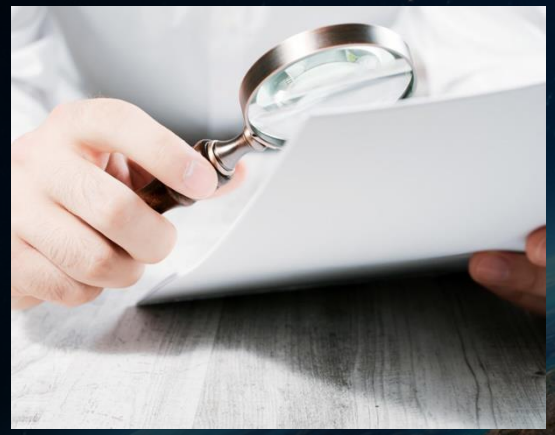
Among the top 15% of Companies assessed in 2025

Sustainalytics

2025 upper half of the industrial conglomerate sector

CSRD reporting increases the transparency of sustainability information and influences ESG ratings

Global risk-based compliance management system for responsible business practices



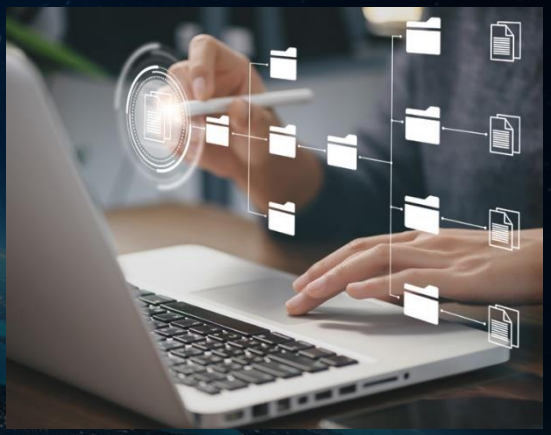
Violations of laws and internal rules will not be tolerated (zero tolerance).

Compliance is understood as part of our corporate culture, along with values such as reliability, honesty, credibility and integrity.

thyssenkrupp sees sustainability as an integral part of corporate management – with a focus on ecological, social and economic aspects.

thyssenkrupp aims to train all employees on relevant compliance topics.

The target completion rate is at least 97%.



Data protection is also an important asset for thyssenkrupp.

We are committed to protecting the privacy of our employees, customers and suppliers, including when developing new tools and solutions.

Your Data Security is our Highest Priority

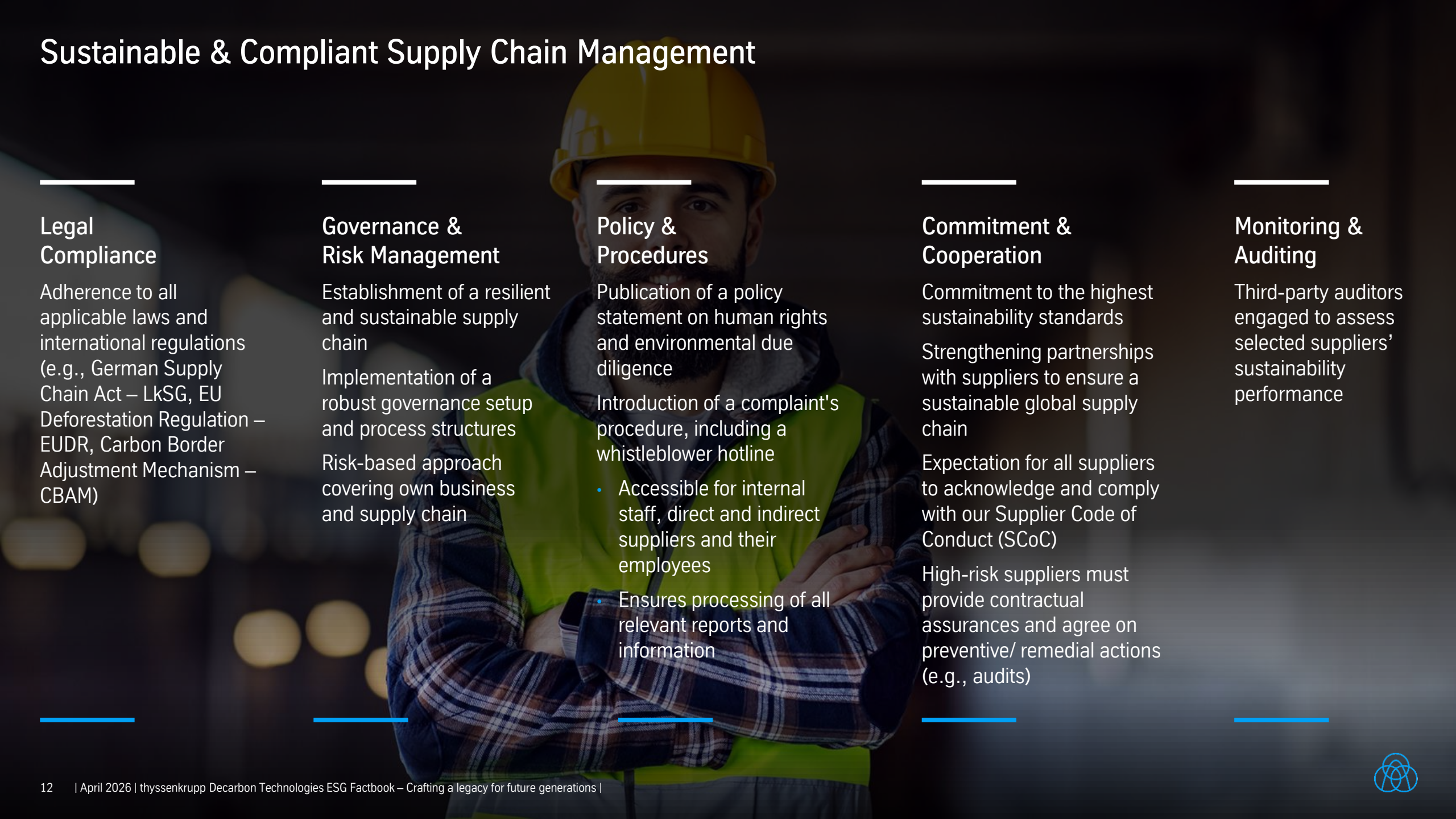
Our digital services are based on trust. Therefore, data protection is very importance to us. To ensure the highest possible security anywhere and at any time, we apply state-of-the-art security technologies:

- Access to the web applications for users and admins is secured by Multi-Factor Authentication (MFA). Passwords are securely stored as salted hash
- All data on our servers are protected by the latest encryption technology
- Data in transit between backend or frontend components is protected by TLS Edge Device communication is protected by SSH2
- As a German company we are subject to the law of the European Union, incl. one of the strictest data protection laws in the world
- Our standard platform is located in the European Union and fully meets the European GDPR
- We pursue the strategy of a strict logical separation. Customer data stored and processed is strictly separated, e.g. role and authorization concept
- Our data security standards and roadmap are regularly checked by internal auditors (CERT, ISO Team) and by external parties (KPMG), incl. ISO 27001 reviews, penetration tests, Red Teaming Measures

- ✓ Multi-Factor Authentication
- ✓ Encrypted data storage
- ✓ Protected data transmission
- ✓ Subject to European Data Protection Law
- ✓ All servers located in the EU
- ✓ Logical separation of customer data
- ✓ Regular security checks

CSA cloud security alliance℠ Azure Microsoft

Sustainable & Compliant Supply Chain Management



Legal Compliance

Adherence to all applicable laws and international regulations (e.g., German Supply Chain Act – LkSG, EU Deforestation Regulation – EUDR, Carbon Border Adjustment Mechanism – CBAM)

Governance & Risk Management

Establishment of a resilient and sustainable supply chain

Implementation of a robust governance setup and process structures

Risk-based approach covering own business and supply chain

Policy & Procedures

Publication of a policy statement on human rights and environmental due diligence

Introduction of a complaint's procedure, including a whistleblower hotline

- Accessible for internal staff, direct and indirect suppliers and their employees
- Ensures processing of all relevant reports and information

Commitment & Cooperation

Commitment to the highest sustainability standards

Strengthening partnerships with suppliers to ensure a sustainable global supply chain

Expectation for all suppliers to acknowledge and comply with our Supplier Code of Conduct (SCoC)

High-risk suppliers must provide contractual assurances and agree on preventive/ remedial actions (e.g., audits)

Monitoring & Auditing

Third-party auditors engaged to assess selected suppliers' sustainability performance

ESG @ Uhde

Company/ Product
Portfolio

ESG
Commitment & Strategy

ESG
Initiatives

ESG
Targets & KPI´s

thyssenkrupp Uhde: Uniquely positioned market leader in providing one stop shop solutions based on inhouse technology and EPx capability

Empowering customers with
cutting-edge technology
and **integrated project solutions**

1 Head-quarter

6 Key locations

13 locations

Leading global plant engineering company for a variety of chemicals such as ammonia & methanol, offering innovative technology portfolio & focus on developing and offering future leading clean technologies

Creating and realizing value through technology leadership and project-delivery expertise, supported by a global footprint and strategically positioned key locations.

Market leader with an installed base of >3,000 chemical & process plants built across 100+ years. Standardization & modularization of plants to improve project execution

With expertise in technologies and track record in the design and implementation of complex chemical plants

By providing efficient, reliable and sustainable engineering solutions and services

By delivering innovative solutions since our foundation by Friedrich Uhde in Germany in 1921

End-to-end business model

Unique, integrated portfolio

Technology licenses & EPx[1]

Supplier & EPC partnering

Critical equipment & construction/fabrication

Long-lasting partnerships

Creating value from design to maintenance

Digital growth

Enhanced customer experience throughout project lifecycle

EPx = Expanded EP-scope, for example EPF (plus module fabrication), or EPCm (plus construction management)

Product portfolio

Sustainable agriculture & NH_3 derivatives

Ammonia
Nitric Acid
Nitrates
Urea
UFT® Urea Granulation
Phosphates

Clean chemicals & energy vector

Ammonia Cracking
Biomass Gasification
Methanol
Methanol to X
Gas Treatment
SAF

Circular systems & emission reduction

EnviNOx®
Carbon Capture
Phosphogypsum
Coke Plants
Oleochemicals
Propylene Oxide
Polyamide
Polyester/recycle PET
Vinyl Chain
PLA/Bio Plastic
Iso Propyl Alcohol
High Pressure Eq.

ESG Commitment

At thyssenkrupp Uhde, we build on more than a century of engineering to support the sustainable transformation of industry and energy. Our technologies enable cleaner and more efficient production of fertilizers, fuels and base chemicals such as ammonia and methanol.

By combining advanced processes with proven project execution expertise and digital tools, we help customers worldwide achieve their decarbonization and efficiency goals. We deliver solutions with real impact for industry, society and future generations.

Nadja Håkansson, CEO of thyssenkrupp Uhde

Uhde ESG Strategy

Purpose

We pioneer chemical engineering solutions that respond to the challenges of industry, energy and the protection of our planet.

Vision

To lead in technology and innovation, integrating decarbonized solutions and creating sustainable impact for businesses, society and our planet.

Mission

We develop & construct innovative chemical plants that excel in environmental stewardship and operational efficiency, making thyssenkrupp Uhde the trusted technology integrator for a sustainable future.

Uhde ESG strategy house

ESG Vision

We create a sustainable impact for business, society and environment

ESG Mission

We develop & construct innovative chemical plants that excel in environmental stewardship and operational efficiency, making thyssenkrupp Uhde the trusted technology integrator for a sustainable future

Initiatives

Environment

- Procurement of green electricity
- Photovoltaic on Uhde roofs
- District heat
- Development of green and blue product portfolio
- Strategic Scope 3 reduction
- Transparency of customer emissions
- ISO 14001
- ISO 50001

Social

- Employee Assistance Program
- Great Place To Work
- Employer Branding
- Diversity & Inclusion Roadmap
- Healthy Leadership Program
- Line of Fire Campaign
- Increase share of females in talent programs
- International Leadership Development Program (ILDP)

Governance

- Regulatory Monitoring
- Compliance with ESG regulations
- Sustainability Council & function support
- Compliance with SCA and CSDDD, SCM and own business
- Legal Frameworks
- CPL trainings
- Whistleblower protection
- Internal & external communication

1. Supply Chain Act (LkSG); 2. Corporate Sustainability Due Diligence Directive; 3 Compliance & Policy Learning

Uhde ESG targets

	GHG emissions	Technology	Employees			Supply chain
	Scope 1 & 2[1]	Ratio of OI from clean technology	Employee net promoter score	Females in graded positions	Lost time injury rate (LTIR)	Supplier Code of Conduct Coverage
2030 Target	-79,5%	30%	10	22%	< 1,0	95%
Target FY25/26	-75,6%	20%	3	12,4%	< 1,0	95%
Actuals FY 24/25	-74,6%	10%	7	14,9%	0,4	95,1%[2]

1. To basis year 2017/18 2. Fluctuation of suppliers as challenge

Health, Safety, Security & Environment

Mission Statements

We develop a global generative HSSE culture and leadership with top priority

We take HSSE ownership and commitment among all employees, leaders and suppliers

We take pride in continuous improvements in HSSE & celebrating our achievements

Leadership & Culture

Develop leaders who actively promote HSSE values and lead by example through structured training and engagement formats

Health

Implement a company-wide health management system with a strong focus on mental health, preventive care and employee well-being

Safety

Strengthen hazard recognition and risk management through training, proactive reporting and alignment with safety-focused subcontractors

Security

Enhance employee awareness of threats and emergency procedures, with programs that promote security both at work and beyond

Environment

Drive sustainability through clean technologies, waste reduction, and employee engagement in environmental initiatives

People, Culture, Communication

Digitalization

Uhde-PV Employee Cooperative eG

- 2021: 135 Uhde employees in Dortmund founded the Uhde-PV Employee Cooperative
- 2022: Members subscribed cooperative shares → raised required capital
- Enabled purchase, installation & operation of first PV system (operational 05/2022)
- Business model
  - 100% of electricity sold to Uhde at reference market price
  - Revenue covers operating costs, taxes & reserves
  - Remaining profit distributed annually from 2nd year
  - 10% of profit donated to charitable causes
  - Cooperative run voluntarily by employee-members
- 2023: Members approved expansion → capital for 2nd PV system successfully raised
- 2025: Extension installed and fully operational (operational 01/2025)

Profile of the PV system

Realized in 2022 **99,9 kWp**

Financial requirements: 105 k€ brutto

Share per tk-MA: 500€ - 1.000€

Realized in 2025 **146 kWp**

Financial requirements: 161 k€ brutto

Share per tk-MA: Up to 4 k€ possible

Deep Dive (1/3): thyssenkrupp Uhde focuses on sustainable agriculture & NH_3 derivatives

Fertilizers help feed 50% of the world's population, though ammonia production contributes 1.2% of global CO_2 emissions, with carbon-free ammonia expected to meet 34% of demand by 2050

Industry leading

ammonia and urea granulation plants operating at the highest capacities, optimizing economies of scale for our customers

Low-carbon

ammonia plants with up to 99% CO_2 capture and capacities up to 6,000 tpd

Flexible green ammonia

technology to match renewable intermittency - built to unlock economic value

Highly efficient

nitric acid plants with the lowest ammonia consumption and minimal catalyst losses, maximizing yields and energy efficiency

Advanced processes

for producing ammonium nitrate (AN) solution and melt, serving as feedstock for all AN production methods

Deep Dive (2/3): thyssenkrupp Uhde enables clean chemicals and energy vector solutions

Aviation and maritime fuels contribute 5% of global GHG emissions,
with methanol-based fuels expected to capture 12-15% of these markets by 2050

Biofuel & SAF

derived from biomass utilizing our mature and proprietary Prenflo® gasification process

uhde® green methanol

technology produces methanol from CO_2 and hydrogen, reducing emissions by using renewable energy and captured CO_2

Clean ammonia

as a fuel and hydrogen transport vector

Highly efficient

ammonia cracking to convert renewable and low carbon ammonia to hydrogen

Gas treatment

processes employ high-performance state-of-the-art equipment and equipment components that ensure efficient, reliable operation of the plants and minimize their environmental impact

Deep Dive (3/3): Uhde provides circular systems and emission reduction solutions

The steel, cement and chemical industries emit over 11.9 gigatons of CO_2 annually & only 9% of plastics are currently recycled, highlighting the need for progress in the circular economy

Advanced

NO_x abatement solutions with our EnviNOx® technology

Recycling & repurposing

phosphorgypsum to prevent contamination from landfill, while recovering valuable residual elements

Armine-based

CO_2 recovery from both process and flue gas, supporting government decarbonization targets in hard-to-abate sectors

PLAneo®

Polylactic acid (PLA) technology for bio-based, biodegradable plastics

FTR® PET recycling

process for up to 50% recycled material into virgin PET production, delivering food-grade quality

Cutting-edge technology

for coke plants, offering highest env. performance & the capability to revamp less eco-friendly plants

Specialized

high-pressure solutions for producing solar panel coatings, supercritical fluids and high-pressure pasteurization to enhance shelf life

Case Study (1/2): Supercharging the world's largest ammonia plant by boosting capacity w/o increasing energy use, changing urea output or extending downtime

Al Jubail, Saudi Arabia

- **Safco/SABIC** One of the world's largest ammonia and urea producers, ensuring food security while leveraging economies of scale for cost efficiency
- **Safco 4 Plant** Initially commissioned in 2006 with a capacity of 3,300 tpd, already benefiting from large-scale operations
- **Opportunity** Additional natural gas availability provided a chance to scale up operations and further capitalize on economies of scale for higher profitability
- **Challenge** Uhde's expertise enabled a seamless scale-up to 3,670 tpd, maintaining energy efficiency and urea output, optimizing cost per ton and minimizing downtime
- **Execution** In four years, Uhde successfully scaled the world's largest ammonia plant, demonstrating unmatched expertise in large-scale plant upgrades
- The flawless startup after a 70-day shutdown and four million LTI-free manhours showcases Uhde's ability to deliver large-scale projects with precision

Case Study (2/2): EnviNOx® contributes to a 11% reduction in GHG emissions from Australia's chemical sector, advancing the nation's industrial sustainability

Newcastle, Australia

- Orica, the world's largest provider of commercial explosives, is a global leader in nitric acid and ammonium nitrate production
- Its two key sites in Australia – Kooragang Island and Yarwun – contribute about 37% of the country's industrial chemical emissions
- The Kooragang Island project, one of Australia's largest emissions reduction efforts, cuts 567,000 tCO_2-e annually, reducing site emissions by 45% and national chemical sector emissions by 11%
- Cutting-edge EnviNOx® technology was installed, eliminating nearly all nitrous oxide emissions
- The retrofit was completed in 15 months, with a safe and flawless startup, and additional units were installed in Canada, Indonesia and Australia
- The European Union authorities declared this technology to be Best Available Technique (BAT) for permitting purposes within the EU

Ammonia cracking: The last piece of the hydrogen value chain

Gelsenkirchen Scholven, Germany

- The ammonia demo cracker highlights the benefits of cross-industrial partnerships, where different industries such as developers, operators and buyers collaborate
- Demo cracker with full flexibility in operation, design and firing and easy up numbering to large scale application
- Together with our partner Uniper, we enable our customers to decarbonize hard-to abate sectors and serve the commodity market with green H_2
- The demo plant is a “cut out element” of future large-scale crackers with up to 5,000 mtpd ammonia feed
- Our ammonia cracking technology is based on our patented steam methane reforming technology with more than 100 large-scale installed units
- EnviNOx® as best available technology is used for tail gas cleaning

Carbon2Chem®: Transforming emissions from hard to abate industries into valuable and sustainable chemicals

Gefördert durch:
Bundesministerium für Forschung, Technologie und Raumfahrt

Duisburg, Germany

- This lighthouse project shows how Carbon Capture Utilization (CCU) solutions can open new revenue streams for the industry
- Carbon2Chem® is an example of the need for collaboration between academia, industry and government bodies, to drive common research and development
- Uhde's CO_2 capture and green methanol technologies, together with gas treatment technologies are demonstrated and further optimized at the site
- The technologies and processes developed in Carbon2Chem® can be scaled up and transferred for use in other carbon-intensive industries, like cement
- Together with thyssenkrupp nucera's alkaline water electrolysis, the entire value chain from CO_2 and green hydrogen to green methanol is demonstrated in one place and the value chain will even be further extended by the addition of a sustainable aviation fuel pilot plant

BioTfueL®: A milestone for climate protection and first reference for entrained flow gasification

Dunkirk, France

- We partnered with well-known companies namely Avril, Axens, CEA, IFP Energies Nouvelles and TotalEnergies
- The allocated budget was 190 million € of which 33.2 million € were from government subsidies
- In 2010 the BioTfueL® project was launched and aimed to test, validate & optimize an integrated chain for producing advanced, sustainable biofuels
- Thanks to Uhde's entrained flow gasification process (Prenflo® PDQ) different biomass types can be used, thus maximizing commercial viability
- After start-up in 2019, the gasifier was operated successfully with 100% of biomass
- The BioTfueL® technology is a prime option for producing Sustainable Aviation Fuels (SAF)
- This could potentially lead to a reduction of GHG emissions of over 90%

ESG @ Rothe Erde

Company/ Product

Portfolio

ESG

Commitment & Strategy

ESG

Initiatives

ESG

Targets & KPIs

Product portfolio

Today, we are manufacturing slewing bearings with a diameter of up to 25 meters and a unit weight of around 190 tons and seamless rolled rings with a diameter of up to 8 meters.

Ball bearings I Roller bearings I Wire race bearings

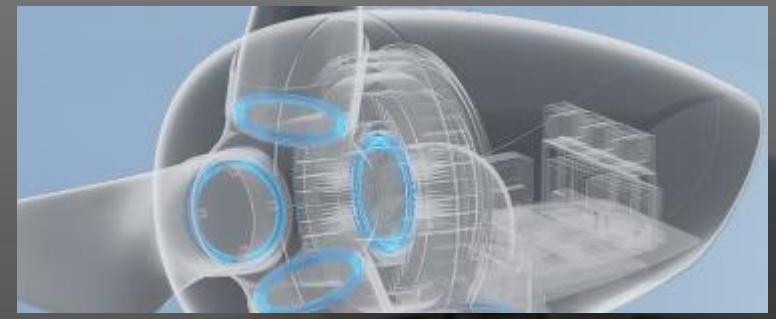
up to 25 meters, flexible & individual

- 14 production sites worldwide
- Induction hardened raceways
- Wide range of applications
- Customized solutions

Raw rings I Machined rings I Structure rings

up to 8 meters, up to 30 tons

- Wide variety of material goods
- Seamless rolled finish
- Normalized or quenched and tempered
- Various heat treatment options
- Raw or finished products



rothe erde® main bearings

up to 6,5 meters

- Efficient torque transmission
- High force resistance
- Custom solutions
- Advanced hardening options
- Comprehensive testing

ESG Commitment

At Rothe Erde, sustainability is the foundation on which we build our future. For us, it is not just about meeting standards – it is about taking responsibility. We are committed to reducing our environmental footprint, driving innovation in materials and processes and ensuring that our products enable our customers and partners to reach their own sustainability goals.

Together, we create solutions that are not only efficient and reliable but also aligned with the needs of a more sustainable world.

Lisbeth Jacobs, CEO Rothe Erde

ESG Strategy

Purpose

As a market leader in slewing bearings with over 160 years of experience, we develop sustainable solutions for the future and revolutionize industries as pioneers of our time.

Vision

Forming sustainability at every rotation.
To lead the transformation toward a sustainable and socially responsible future by empowering innovation, efficiency, and positive impact across industries and communities.

Mission

As a market leader in slewing bearings with over 160 years of experience, we develop sustainable solutions for the future and revolutionize industries as pioneers of our time.

Rothe Erde ESG strategy house

ESG Vision

Forming sustainability in every rotation

ESG Mission

We enable customers to transform their industries with sustainable innovation and strong partnerships!

Initiatives

Environment

- Scope 1 reduction
- ISO-Certification
- Scope 2: Global switch to green electricity
- Continuous energy efficiency measure implementation
- Scope 3 baseline & targets
- Reduction of water usage
- PCF calculation automation & validation
- Reduction of non-recyclable waste

Social

- Increase ratio of women in leading positions
- Support in safety culture development of focus sites
- Analyze potential in employer branding and recruiting
- Global standards on OSH key topics
- Empowerment of young talents
- Development and support for mental health and employability
- Identification of focus topics and measure implementation

Governance

- Compliance with German SCA[1] & CSDDD[2] for supply chain
- Compliance with German SCA[1] and CSDDD[2] for own organization
- CPL Trainings Legal framework
- Compliance with governmental sanctions (GER)
- Internal and external ESG communication
- Support of operating functions
- Increase CO_2 transparency in supply chain
- Rothe Erde Insights Podcast
- Whistleblower protection
- CBAM[3] Compliance
- EUDR[4] Compliance

1. Supply Chain Act (LkSG); 2. Corporate Sustainability Due Diligence Directive; 3. Carbon Border Adjustment Mechanism; 4. EU Deforestation Regulation

Rothe Erde ESG targets

	GHG emissions	Energy usage	Employees		Supply Chain	Compliance
	Scope 1 & 2[1]	Green Scope 2	Women in graded positions	LTIR	Share of High-Risk Suppliers (HSR)[2]	Share of anti-corruption trained employees[3]
Target 2030	-50%	100%	10%	1,2	<8%	100%
Target FY25/26	-25%	42%	8%	2,1	**<8%**	100%
Actuals FY24/25	-18%	40%	8%	2,5	3,9%	100%

1. To basis year 2017/18; 2. Abstract KPI based on indices (risk of suppliers based on country & industry); 3. Considering other trainings to be included

Renewable energies for a better world

Wind energy

Tidal energy

Solar energy

Gearbox construction

50+ years of experience and innovative solutions for the wind industry

While fossil raw materials are becoming increasingly scarce, the demand for energy is growing - worldwide. To meet this challenge, wind energy plays a key role in the global transition towards decarbonization. Our high-performance slewing bearings ensure the reliability of wind turbines for a sustainable future.

Lighthouse projects

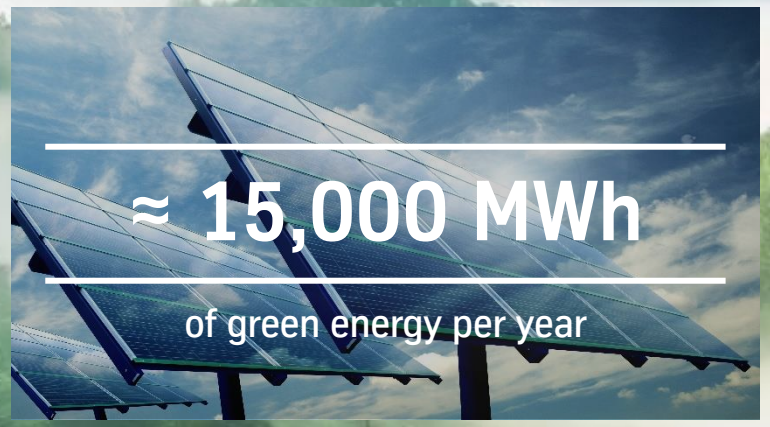
SIEMENS Gamesa RENEWABLE ENERGY · Vestas · 上海电气 SHANGHAI ELECTRIC · ENERCON ENERGIE FÜR DIE WELT · WE WIND TO ENERGY · NORDEX · acciona Windpower · SUZLON · MINGYANG SMART ENERGY 明阳智能

Green electricity for our production

Approximately

36,000 solar panels

are producing



≈ 15,000 MWh

of green energy per year

This way, we will be saving approx.

7,800 tons of CO2

per year.

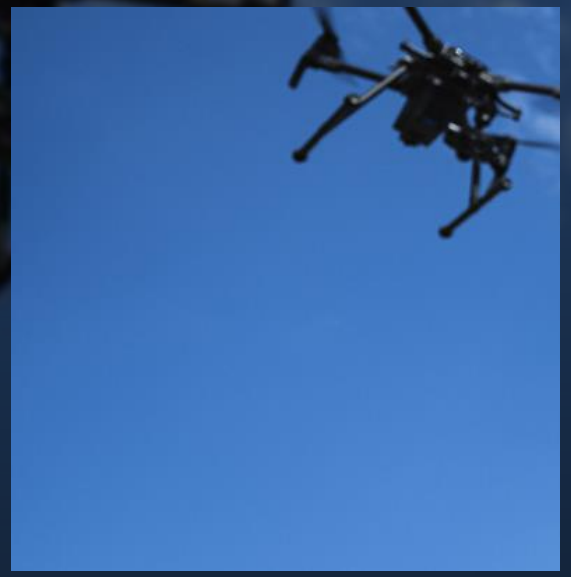
Installed solar panels in our plants in

China
India
Japan
Germany
Italy
Slovakia
Spain

Solar energy as a pioneer for sustainability and clean energy

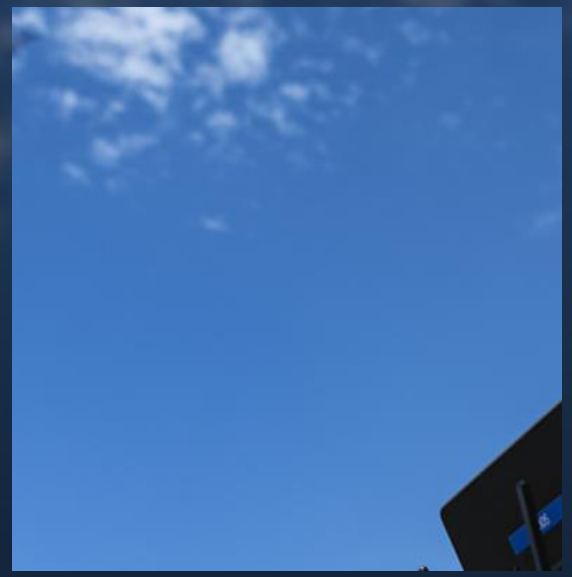
Solar energy is an inexhaustible source of clean energy that helps Rothe Erde make an important contribution to the energy transition.

ESG @ Polysius



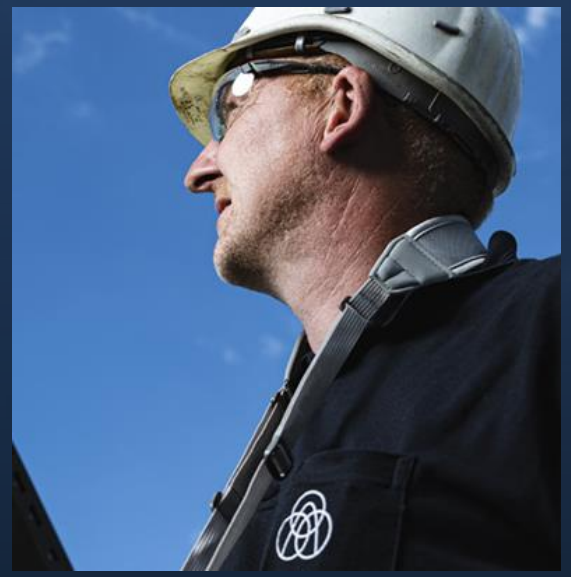
Company/ Product

Portfolio



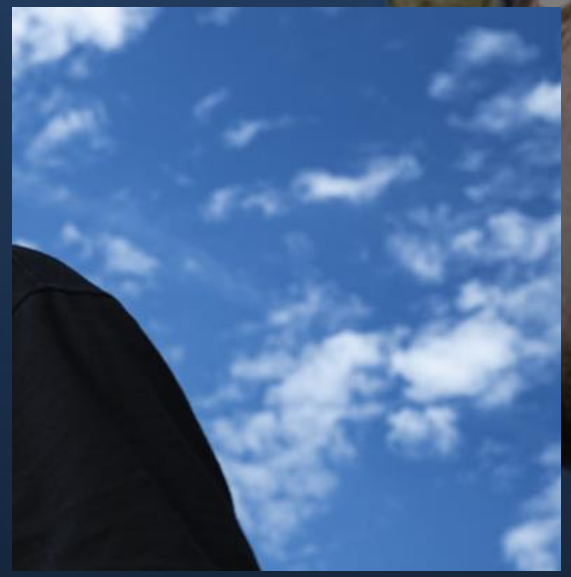
ESG

Commitment & Strategy



ESG

Initiatives



ESG

Targets & KPIs

More than 160 years of technical excellence

thyssenkrupp Polysius – a global leader in process technology and services for the cement industry and beyond, equipping one in three cement plants worldwide.

>17.600

machines and systems in use worldwide

equipment in more than

800

installed cement lines worldwide

more than

160

years engineering excellence

Innovation leader with

>1.100

patents

Product portfolio

CO_2 cost reduction | Product. cost optimization | Plant availability

polysius® pure oxyfuel	Clinker production under pure oxygen environment	
polysius® SOC²	Separate oxyfuel calciner for revamp solutions	
Eco Kiln	Lime production under pure oxygen environment	
polysius® MeCa clay	Mechano-chemical activated clay replaces clinker in cement	$
polysius® Calc. clay	Thermal activated clay replaces clinker in cement	$
booster mill	High fine grinding of materials for clinker factor	$
Prepol® SC	Burning of low grade, lumpy alternative fuels instead of primary fuels	$
Grey Build	The technology is the polysius core grinding and pyro grey portfolio	$

Minerals	Audits, spare and wear parts and modernizations	$
Single machines	Grinding, crushing, cooling & pyro-processing for cement and other industries	$
Lab Automation	Quality control for cement prod. & autom. measurement of quality parameters	$
POLCID Automation MS	Process control systems originating in cement but also for other industries	$
Modernizations	For Polycom, Crusher, Cooler, Preheater and Kiln	$
Field Service	Service for all kind of technology to all Polysius and 3rd party techn.	$
Spare parts	Spare parts for almost all Polysius products from the last 160 years	$

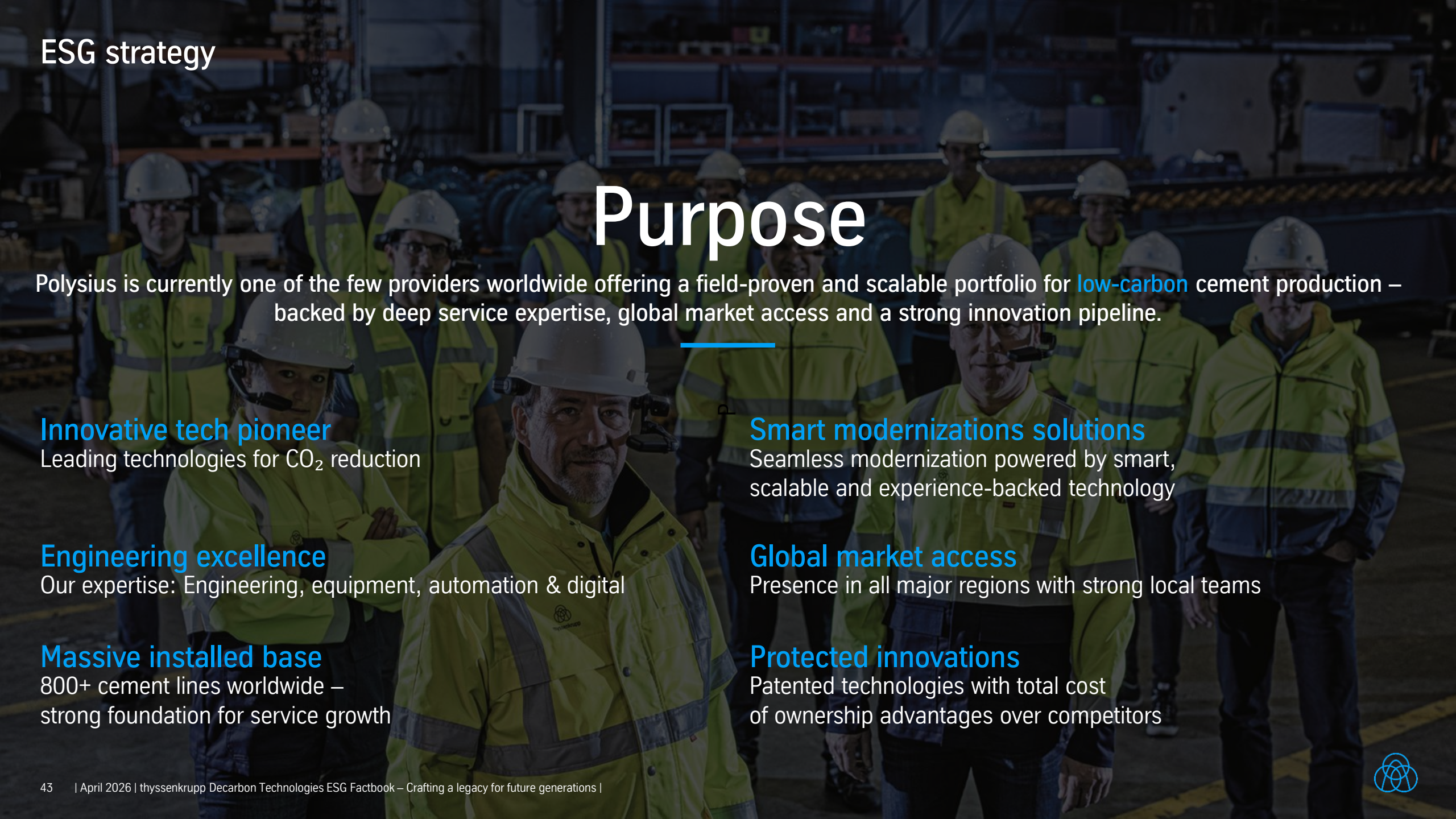
ESG Commitment

At thyssenkrupp Polysius, we are committed to making industries like cement, lime and beyond greener. Sustainability is not just a target; it is woven into the way we think, act and innovate.

Our ambition is to be the leading technology provider for the decarbonization of hard-to-abate industries. As part of Decarbon Technologies, we embrace responsibility for driving sustainable transformation and empowering our customers on their path toward low-carbon production.

Together, we are shaping a cleaner, more livable future.

Christian Myland, CEO of thyssenkrupp Polysius



Purpose

Polysius is currently one of the few providers worldwide offering a field-proven and scalable portfolio for low-carbon cement production – backed by deep service expertise, global market access and a strong innovation pipeline.

Innovative tech pioneer
Leading technologies for CO_2 reduction

Engineering excellence
Our expertise: Engineering, equipment, automation & digital

Massive installed base
800+ cement lines worldwide –
strong foundation for service growth

Smart modernizations solutions
Seamless modernization powered by smart, scalable and experience-backed technology

Global market access
Presence in all major regions with strong local teams

Protected innovations
Patented technologies with total cost of ownership advantages over competitors

Mission

With the excellence of our people, we deliver cutting-edge technologies and lifecycle services that drive the green transformation of industries. By aligning with our customers business models, we create future-proof solutions that maximize efficiency and sustainability.

Vision

We maximize the performance and sustainability of industrial plants by combining service excellence, deep process expertise and lifecycle-driven modernization. With a strong focus on efficiency, reliability and long-term value creation, Polysius enables its customers to continuously improve operations and reduce emissions across the full lifecycle of their assets.

Through smart modernizations and technology-driven optimization, we drive decarbonization where it matters most – embedded in everyday operations, existing plants and future-ready performance.

Polysius ESG Strategy House

ESG Vision

Driving sustainable transformation across essential industries such as cement, lime and beyond with pioreering technology

ESG Mission

We deliver integrated low-carbon solutions that empower our customers to build a better, greener future

Initiatives

Environment

- Reduce Scope 1&2
- Continuous improvement of Scope3 emissions
- Transparency of Technology impact on Environment
- Continuous Energy Efficiency mgmt. of own operations
- Development of customer-oriented ESG KPIs
- Project Carbon Footprint

Social

- Diversity tracker for women in leading positions
- Diversity program
- Continuous safety culture assessment
- Global OSH organization
- Gemba Walk Culture
- Leadership principles and ways of working
- Leadership Quality by 360° Feedback
- Implement global Skill Mgnt.

Governance

- Measure for compliance
- Compliance with SCA[1] and CSDDD[2]
- Compliance with EUDR[3] and CBAM[4]
- Continuous improvement of procedures
- Internal and external ESG communication
- CPL training & Whistleblower protection
- Empowerment of first line for compliance
- Align ESG roadmap with selected partners

1. Supply Chain Act (LkSG); 2. Corporate Sustainability Due Diligence Directive; 3. EU Deforestation Regulation; 4. Carbon Border Adjustment Mechanism

Polysius ESG targets

	GHG emissions	Energy usage	Employees		Supply Chain	Compliance
	Scope 1 & 2[1]	Green Scope 2	Women in graded positions	LTIR	High-Risk Suppliers (HSR)[2]	Share of anti-corruption trained employees[3]
Target 2030	-50%	80%	15%	<1,0	25%	100%
Target FY25/26	-50%	70%	12%	1,0	43,9%	100%
Actuals FY24/25	-54,5%	71,7%	12,5%	0,4	30,3%	97,5%

1. To basis year 2017/18; 2. Abstract KPI based on indices (risk of suppliers based on country & industry); 3. Considering other trainings to be included

Industry expertise at a glance – Tailored solutions for efficiency, sustainability and future readiness

Cement
800+ cement lines worldwide with reliable polysius® equipment.

Lime
Efficient lime production with solutions from Maerz Ofenbau.

Mining & Minerals
Equipment and service for the mining and minerals industry.

Aggregates
Equipment and service for the aggregates industry.

Energy
Equipment and service for the energy industry.

Steel
Equipment and service for the steel industry.

Sugar
Rotary drums and dryers for sugar production.

Asphalt
Upgrades and spare parts for mixing plants and recycling drums.

Expanded clay
Service for crushers, mills, drums and kilns.

Hazardous waste
Rotary kilns and combustion chambers for safe waste treatment

Chemical industry
Equipment and service for chemical and agrochemical plants.

Recycling
Maintenance services for washers, dryers, and debarking drums.

Polysius® pure oxyfuel/Oxyfuel 2nd Generation – C4IC pilot plant under construction

Mergelstetten, Germany

- 450 t/day semi-industrial scale
- >€100 mill. invested by C4IC consortium
- Construction started May 2022
- Commissioning in 2025

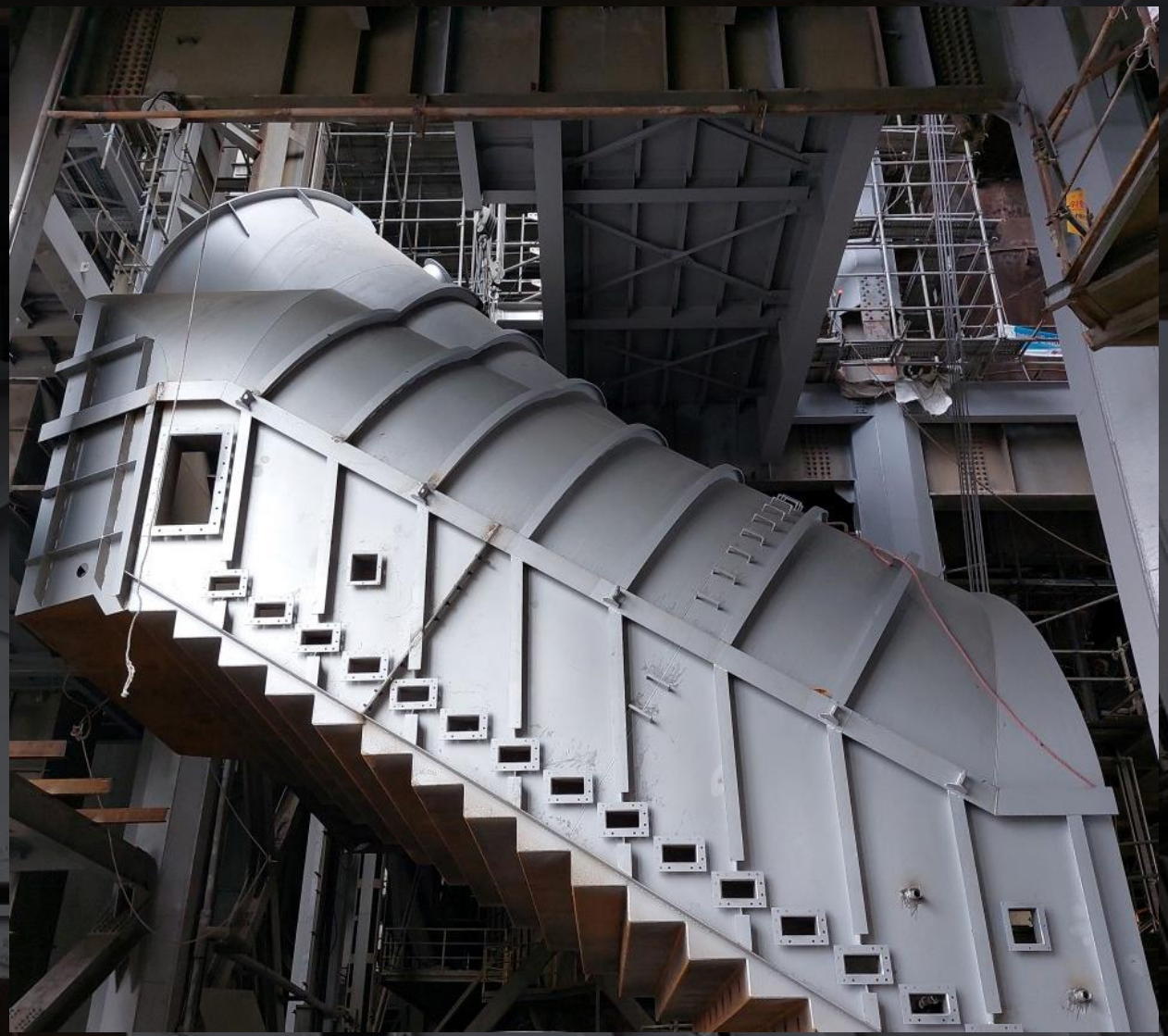
Expected CO_2 concentration in the off-gas >90% leads to an efficient down-stream capture process

prepol® Step Combustor – combustion grate

Danyang, South Korea

- Cement line capacity – 5800 tpd
- Completion: July 2024
- Thermal Substitution Rate (TSR PC) – 85% (110 MW / 31 tph of AF[1])
- NOx emissions < 190 mg/Nm³
- THC[2] emissions < 20 mg/Nm³

A field-proven modernization solution offering high flexibility even for low-quality alternative fuels, enabling high fuel substitution, lower emissions and improved operational performance in existing cement plants



1. AF: Alternative Fuel; 2. THC: Total Hydrocarbons at 10% O_2

Polysius® pure oxyfuel/Oxyfuel 2nd Generation – Pure oxyfuel & Oxyfuel kiln line Titan Cement

IFESTOS project

- 1,9 million tons of CO_2 per year to capture (biggest carbon capture project in the EU)
- Started May 2022
- Since Q4-2024 in FEED study phase
- Start operation in 2029

Flash Calciner Plant for activated clay production

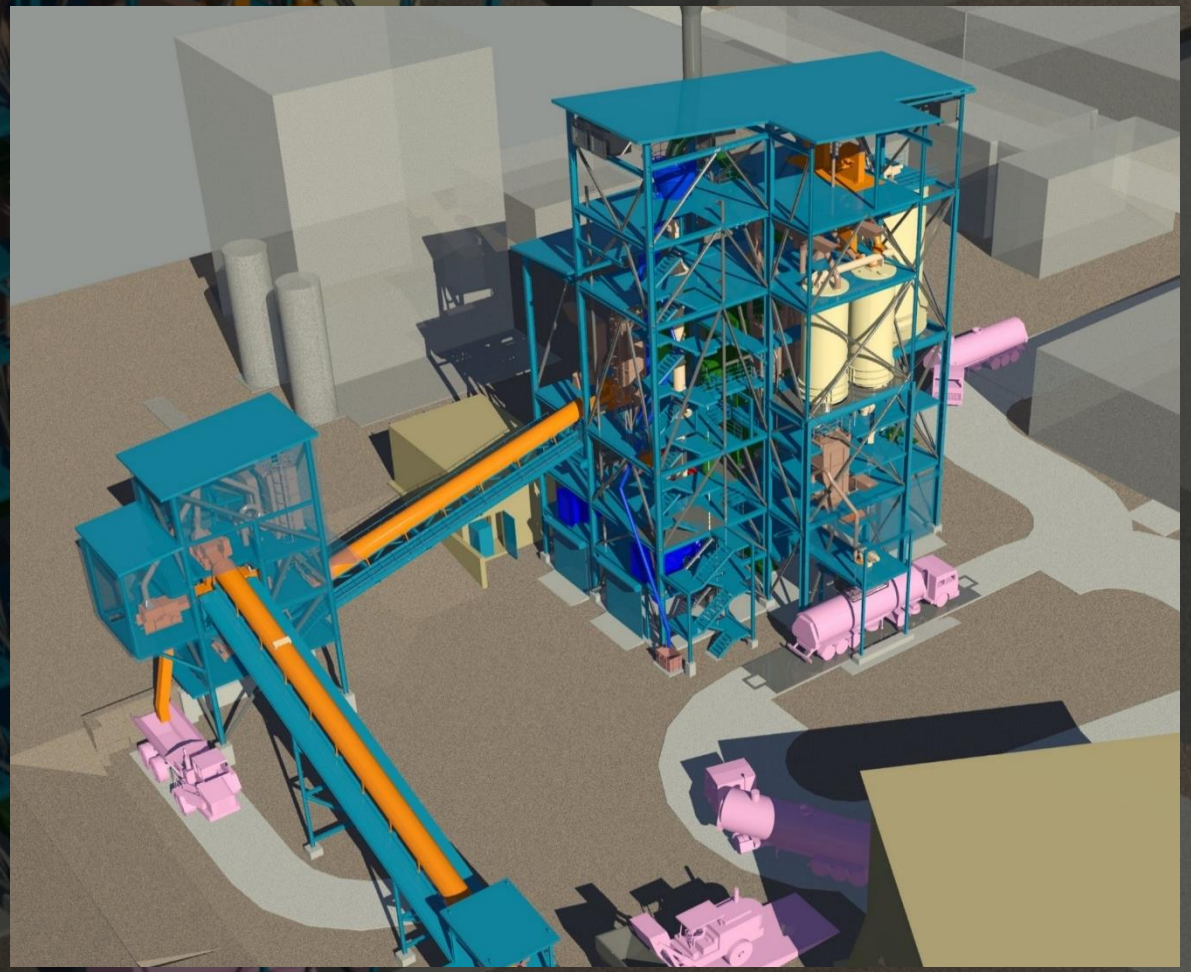
Cribi, Cameroon

- Customer: Cimpor Global Holdings
- Capacity: 720 t/day of activated clay
- Activated clay can play a crucial role to reduce the clinker factor for Cement producers. Reduces CO_2 during production process by ~30%
- First activated clay plant on an industrial scale

First Reference Plant – An industrial break-through in the SCM market

Allmendingen, Germany

- Mechano-chemical activation meca-clay is a technical revolution to further reduce the carbon footprint of activated clay
- Fully electrified activation process
- Next evolution step with electrified drying entered FEED study. By that entire meca-clay process leads to an emission free processing plant
- Meca-clay demo-scale plant in close collaboration with SCHWENK - under construction in Allmendingen, Germany Production start in 2026



ESG @ thyssenkrupp nucera[1]

Company/ Product

Portfolio

ESG

Commitment & Strategy

ESG

Initiatives

ESG

Targets & KPIs

1. Independent stock-listed company

Product portfolio

Green Hydrogen

- Green hydrogen at industrial scale based on proven track record in the chemical industry
- scalum® | Efficient and reliable large-scale alkaline water electrolysis (AWE) technology
- Strategic partnership with Fraunhofer IKTS to industrialize SOEC technology

Chlor-Alkali

- More than 60 years experience in electrolysis, market leader with more than 10 GW electrolyzer capacity installed
- Chlor-alkali solutions with integrated process solutions
- Hydrochloric acid solutions
- Fully customized, efficient, reliable

Service & Digitalization

- 360° service approach along the entire plant lifecycle
- From spare parts to long-term service agreements
- Cell refurbishment promotes circularity and sustainability

World-leading electrolysis technologies

A global technology leader
in large-scale electrolysis

Global organization
with reputable and long-standing partners

Advanced bankability
through solid track record

Full fledged service
offering along the entire plant lifecycle

Strong R&D focus
to drive innovations

Best-in-class
safety standards

Proven GW-scale
supply chain already in operation

thyssenkrupp nucera key facts

10
locations

1.000+
employees worldwide

600+
successful electrochemical projects worldwide

>10 GW
electrolyzer capacity installed

3 GW+
contracted green hydrogen capacity

>1.5 GW
manufacturing capacity p.a. today

Our proven experience in CA business provides a strong technology basis for AWE scale-up

CA: Over 600 projects, 240,000 cell elements, >10 GW of capacity installed

Market Readiness

- Industrial-scale installations
- Quality proven supply chain of 1 GW cell manufacturing capacity p.a.

Product

- A technology leader for electrolysis
- Handling of hydrogen as a by-product

Organization & Network

- Holistic life cycle services
- Global network with partners

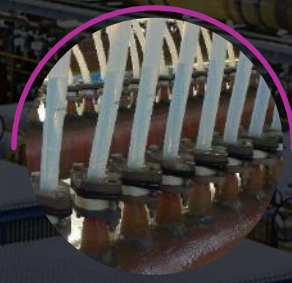
AWE: Building on CA leadership

- Industrial-scale hydrogen plants
- Standardized AWE product with leading TCO[1]
- Hydrogen as the main product
- Mature service portfolio
- Automation and digitalization

Key enabler of hydrogen production

1. Total cost of ownership

thyssenkrupp nucera makes a difference across every step of the industrial electrolysis value chain

	Engineering	Cell fabrication	Modularization	Piping	Handling	Services
						
Application	More than 600 electrochemical projects realized in the world	Cell and electrolyzer design, manufacturing and assembly	Plant construction and logistics	High quality products in a highly corrosive environment	Handling and use of chlor-alkali products	Full lifecycle service and digital solutions
thyssenkrupp nucera value add	Design most efficient plants and modules with best-in-class safety standards	"IP of Design"[1] of cells and electrolyzers and integrated manufacturing with long-time supplier and partner	In addition to small skid mounted AWE plants, also larger plants in synergy with partner Uhde	Proprietary technology incl. own trademarks	>30 years of experience in handling with H_2	Existing service organization with long-standing suppliers and partners

thyssenkrupp nucera provides leading in-house experience along each step of the electrolysis value chain

1. The cell and electrolyzer shape and structure are designed for best utilization of key electrochemical components (anode and cathode coatings, separator), in terms of efficiency, products quality, durability/longevity, safety. By developing optimization of: Gas liquid fluids handling, distribution, control of pressure fluctuations; uniform electrical current distribution and low ohmic drops; selection of corrosion-resistant materials; serviceability

ESG Commitment

We live in a time of profound global challenges, where natural disasters, inequality and rising geopolitical tensions remind us of the need for collective action. At thyssenkrupp nucera, we recognize businesses' role in fostering innovative energy solutions and building a more resilient future.

As a company with decades of experience in industrial electrolysis, we are uniquely positioned to contribute to decarbonization and the energy transition.
Our technology is central to producing green hydrogen at an industrial scale, ranging from hundreds of megawatts to the gigawatt level. We take this responsibility seriously and we are committed to advancing meaningful change.

Werner Ponikwar, CEO of thyssenkrupp nucera

thyssenkrupp nucera ESG strategy

Vision

We drive innovation for a high performing and clean technology worldwide

Purpose

We shape the new era

Mission

Empowering renewable energy and industry for future generations

First public Sustainability Policy to improve ESG Ratings

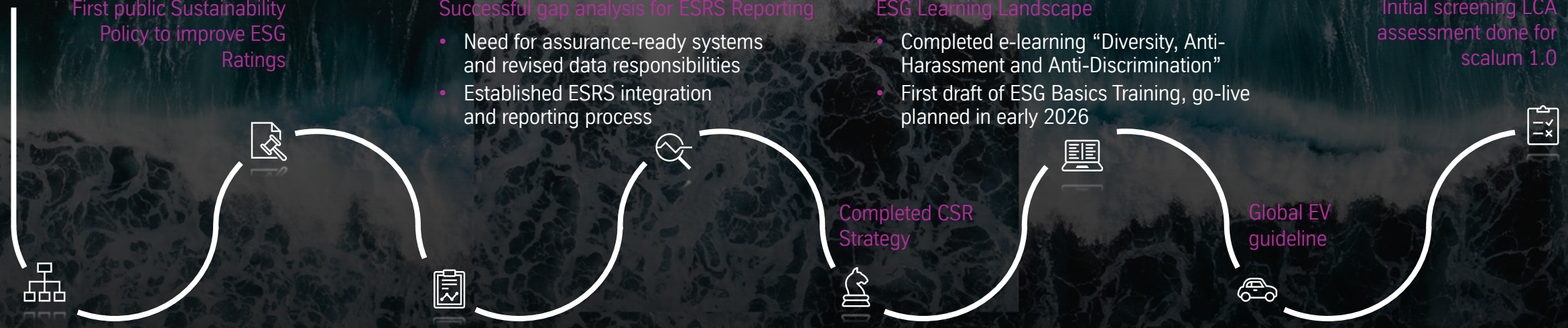
Successful gap analysis for ESRS Reporting

- Need for assurance-ready systems and revised data responsibilities
- Established ESRS integration and reporting process

ESG Learning Landscape

- Completed e-learning “Diversity, Anti-Harassment and Anti-Discrimination”
- First draft of ESG Basics Training, go-live planned in early 2026

Initial screening LCA assessment done for scalum 1.0



Completed CSR Strategy

Global EV guideline

Strategic Governance & Organizational Structure

- The ESG function has matured into a structured, multi-tiered governance model.
- This structure has enabled better alignment of policies, targets, responsibilities across global & local levels.

Public Sustainability & EU Taxonomy Report FY 24/25 to satisfy regulatory and stakeholder expectations as a listed company

Energy consumption reported externally in both usage and emissions perspective

thyssenkrupp nucera ESG targets

thyssenkrupp nucera's key non-financial performance indicators[3]

	KPI	Actuals FY 24/25	Target FY 25/26
Greenhouse Gas Emissions	• Scope 1 emissions [tCO_2e[1]] • Scope 2 emissions [tCO_2e[1]]	• Scope 1: 276 tCO_2e[1] (FY 23/24: 286 tCO2e) • Scope 2 (location-based): 612 tCO_2e[1] (FY 23/24: 561 tCO2e)	• Scope 1+2 net zero[2] by 2030
Sustainability Requirements in Supply Chain	• Selected suppliers signed supplier code of conduct [%] • High risk supplier reduction [%]	• Selected: 98,2% (FY 23/24: 84%) • High-risk: 14% (FY 23/24: 58%)	• Selected: >97% (FY 24/25: >97%) • High-risk: <43,9% (FY 24/25: <54%)
Diversity, Inclusion, Non-discrimination	• Proportion of women in leading positions [%]	• Proportion: 16% (FY 23/24: 17%)	• 25% of management positions in German office with women by 2028

1. CO_2e = CO_2-equivalents; 2. We have committed to reach net zero greenhouse gas emissions across the value chain by 2050, meaning we will reduce our Scope 1 and 2 emissions by 100% in 2030 and scope 3 emissions by 100% in 2050. Scope 1 refers to greenhouse gas emissions that come from sources thyssenkrupp nucera directly controls, e.g., emissions from on-site vehicles. Scope 2 refers to indirect greenhouse gas emissions caused by purchased electricity, heat or steam for our headquarters, offices and other owned and operated facilities. Scope 3 covers other indirect emissions, including greenhouse gas emissions from the manufacturing and transportation of materials and finished goods that go into our products; 3. This KPI´s and targets refers to thyssenkrupp nucera and are independent from the group-wide ESG reporting of thyssenkrupp AG.


Thank you
for your attention.
engineering.tomorrow.together.
thyssenkrupp

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