2019

Wendel and Stahl:

building a world leader in responsible chemistry
for leather and performance coatings

stahl   W WENDEL

WENDEL

- Wendel is **one of Europe's leading listed** investment firms.
- Invests in **leaders** in their field, such as Stahl, Bureau Veritas and Saint-Gobain.
- Plans for **the long-term growth** and knows that a company's longevity depends on the balance between its **business model**, its **markets**, the **well-being of its people**, and its place in the **environment.**
- Listed on Eurolist by Euronext Paris.
- More than 310 years of history.

Management

100%

of companies have set up an environmental management system
(in particular through ISO 14001 certification of all or part of their business scope).

Health and Safety

100%

of companies have a dedicated policy
on employee health and safety, and hold training sessions.

Energy transition

80%

of companies have implemented measures to increase the share of renewable energy
in their energy consumption.

Wendel in brief

More than

€ 9 bn **in gross assets**

More than

6 **office locations**

More than

8 **main investments**

Employees

c. 100

Consolidated sales

€ 8,562.2 m

More than

€ 5 bn **of capitalization**

"Wendel is an invaluable partner in our efforts to expand our market share."

Huub van Beijeren
CEO of Stahl

If it can be imagined, it can be created

This document contains the information of the Stahl chapter (page 254 - 278) of the Wendel Registration document 2019, published by the Wendel Group

stahl

SHAREHOLDER GOVERNANCE

SHAREHOLDERS: WENDEL 67.5%, BASF 16.3%, CLARIANT 14.8% AND OTHER 1.4%

BOARD OF DIRECTORS:

9 members
(Stahl, Wendel, BASF, independent members)

22% of independent

11% of women

2019 REVENUE

€ 809 m

VISION

We provide high-performing, low-impact solutions to drive the transition to a fully transparent and sustainable supply chain and circular economy.

MISSION

"If it can be imagined, it can be created."

VALUES

- Cooperation
- Responsibility
- Initiative
- Imagination

KEY

- Key partners
- External resources
- Internal resources

ENVIRONMENTAL PERFORMANCE

VISION:

Responsible Chemistry: 3 pillars to improve its environmental footprint:

Low-impact manufacturing chemicals

Biotechnology

Circularity

TARGETS:

CO2 REDUCTION GOAL:

-10%
by 2020

2019 PERFORMANCE:

CO2 Target Achieved: -25% in 2019 versus 2015

0 coal used in Stahl plants in 2019

100% of green energy on the whole European plants / 36% of renewable energy on the total energy consumption

76% of coating solutions are water-based

INTERNAL RESOURCES

HUMAN CAPITAL

~**1,800** EMPLOYEES

76% men / 24% women

30% in technical activities

61 nationalities in 24 countries :

- 49% in Europe, Africa
- 21% in Pacific-Asia
- 15% in America
- 15% in India / Pakistan

INTELLECTUAL CAPITAL

100 PEOPLE working on innovation everyday

600 TECHNICAL EXPERTS

PROCUREMENT

Suppliers: large multinational chemical companies coming from 54 countries of which 85% (in production volume) are in very low, low or medium risk countries***

USE OF RESOURCES

PRODUCTION

11 manufacturing sites

9 Centers of Excellence

35 Application laboratories

DISTRIBUTION **35** sales support offices

OUTPUT

PRODUCTS

- Chemical product for leather
- High performance coatings and polymers

MARKETS

Main sectors

- Automotive
- Footwear, Apparel & Accessories

* 840 visitors x 10 people who they on average influence with the obtained knowledge
** including patent applications
*** Based on Global Risk Profile ESG Index

OPERATIONAL GOVERNANCE

EXECUTIVE CONTROL GROUP

MANAGEMENT TEAM:

9 members   **0** women

R & D

11 research centers

~100 chemists

- 15 training hours per FTE on average
- 840 interns followed Stahl Campus module, impacting a total of 8400 beneficiaries*
- 73 active patent families**

CERTIFICATIONS / MANAGEMENT SYSTEMS

93%

of production volume come from sites certified ISO 14001 and 99,7% from ISO 9001

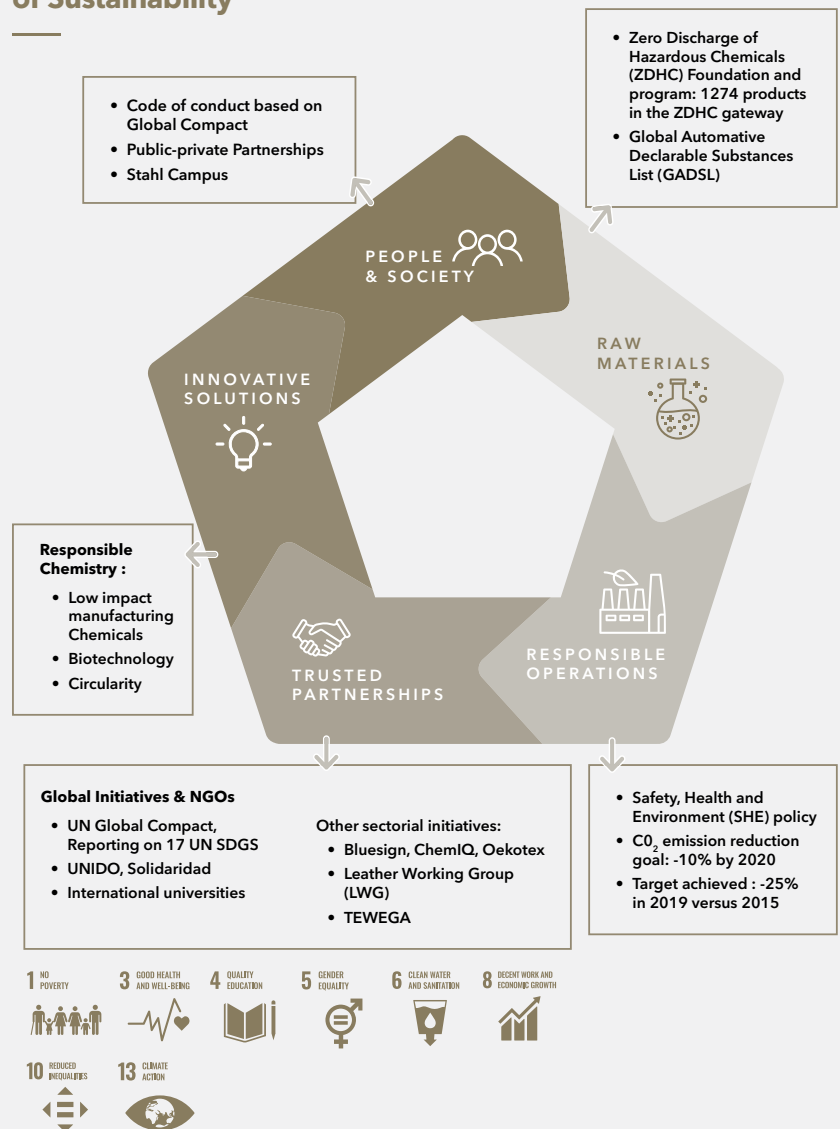|	
Europe	31%
Asia	40%
Middle East & Africa	5%
Americas	24%

OUTSOURCED PRODUCTION

Smart production combining in-house production of key technologies and outsourcing of larger volume products (approx. 40% of total) to trusted partners

Others

- Architectural & Interior Design
- Industrial Applications
- Leisure & Lifestyle
- Home Furnishing

5 focus areas of Sustainability

- Code of conduct based on Global Compact
- Public-private Partnerships
- Stahl Campus

- Zero Discharge of Hazardous Chemicals (ZDHC) Foundation and program: 1274 products in the ZDHC gateway
- Global Automative Declarable Substances List (GADSL)

PEOPLE & SOCIETY

RAW MATERIALS

INNOVATIVE SOLUTIONS

RESPONSIBLE OPERATIONS

TRUSTED PARTNERSHIPS

Responsible Chemistry :
- Low impact manufacturing Chemicals
- Biotechnology
- Circularity

Global Initiatives & NGOs
- UN Global Compact, Reporting on 17 UN SDGS
- UNIDO, Solidaridad
- International universities

Other sectorial initiatives:
- Bluesign, ChemIQ, Oekotex
- Leather Working Group (LWG)
- TEWEGA

- Safety, Health and Environment (SHE) policy
- CO_2 emission reduction goal: -10% by 2020
- Target achieved : -25% in 2019 versus 2015

1 NO POVERTY	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	8 DECENT WORK AND ECONOMIC GROWTH

10 REDUCED INEQUALITIES	13 CLIMATE ACTION

Stahl governance

The Stahl Board, its highest governance body, consists of members from its shareholders Wendel, BASF, Stahl plus two independent members. The Stahl Board meets five times per year and schedules additional conference calls to discuss any pertinent company matters, like the latest financial results.

Stahl Board (2019)

Huub van Beijeren (Stahl CEO)

Frank Sonnemans (Stahl CFO)

Félicie Thion de la Chaume (Wendel)

Jérome Michiels (Wendel)

Claude Ehlinger (Wendel)

Bruno Fritsch (Wendel)

Anup Kothari (BASF)

Etienne Boris (Independent)

Pieter van der Slikke (Independent)

The Stahl Management team, as of January 2020, consists of the Stahl CEO, CFO, COO, the Director of R&D, Director of Corporate Affairs and the Leather Chemicals and Performance Coatings strategic Business Unit Directors respectively. This team meets monthly and determines the implementation of company strategy.

A wider governance body, called the Executive Control Group, includes Stahl Management team members as well as site managers, regional general managers, executives from the strategic business units, and marketing, communications, ESG, IT, legal & compliance, finance and SHE representatives. The Executive Control Group meets on a quarterly basis and reviews YTD (year to date) performance KPIs and decides on tactics for the upcoming business cycles.

Manufacturing, suppliers, customers

Stahl produces its portfolio of products either at its manufacturing sites around the world or at outsourced locations *via* service agreements. Stahl's suppliers are generally large multinational chemical companies.

Most of Stahl's customers are either leather tanneries or manufacturers of textiles, coated fabric and synthetic materials (known as converters or mills).The company also supplies shoe factories and paint & coatings manufacturers. Stahl's customers range from large corporations to medium and small sized operations. Smaller customers are typically handled by Stahl's significant network of agents and distributors around the world.

4.3.4.2 Environment, Social and Governance (ESG)

Goals and Strategy

Stahl's ESG goal is to achieve a transparent supply chain that continuously reduces its environmental footprint. The company's strategy to achieve this goal is to promote transparency and provide environmental solutions for the supply chain to allow for continuous reductions in environmental footprint. Stahl's influential position as a provider of products and services to manufacturers of materials used in the automotive, apparel, home furnishing, footwear, garment and other related industries, is a determining factor in the implementation of this strategy. Stahl also recognizes that sustainability represents a significant opportunity, to gain competitive advantage and to drive the operational excellence that creates long term value.

CSR and ESG

Corporate Social Responsibility (CSR) describes a company's efforts on having a positive impact on the environment, employees, consumers and the wider community. ESG measures CSR activities to give a precise assessment of a company's actions, and is used as a key marker for investors. Stahl's ESG reporting looks at how the company is responding to external influences, risks and trends like climate change and decarbonisation, but also how it treats its workers, manages its supply chains etc.

At the corporate level, Environment, Social & Governance (ESG) is represented in Stahl's Senior Management and Executive Management teams, which meet monthly and set the Company strategy. The Corporate Affairs and ESG team meets regularly with finance, legal counsel, sales and product managers, researchers, product stewardship and operations staff to monitor the implementation of its strategy and to discuss progress on new initiatives related to ESG performance. The ESG team also supports commercial activities initiated by customers that are related to sustainability. KPIs (key performance indicators) related to safety, health and environment are measured and reported monthly by regional operations staff at Stahl manufacturing sites around the world. These KPIs are consolidated into a global report which is sent to the Stahl Board each month.

ESG risks from external trends

Climate change, environmental impact measurement

Much of Stahl's research and applications development is focused on reducing the environmental impact of its own products and that of its customers. 18% of Stahl's basic research projects are linked to the elimination of restricted substances (eg: ZDHC, Bluesign®, ChemIQ, Reach) and new raw materials to replace them. With regard to natural products, there are currently 20+ projects in R & D specifically focused on finding natural resource alternatives to petroleum based polymers for polyurethanes, a core technology for Stahl. With regard to water, significant research time is spent on developing waterbased products (already a large portion of the portfolio) or on products that reduce water pollution originating from Stahl's customers' factories. The long term market switch from solvent to water is a key driver in product development, particularly in the Performance Coatings market segments.

Stahl is investing in Life Cycle Assessment (LCA) methodology to quantitatively measure the impact of its products on the environment, and to express it in language that its supply chain stakeholders can recognize (*e.g.*, the impact on ozone depletion, toxicity, climate change and land use). This LCA commitment is part of the Responsible Chemistry Initiative, described later in this report, which is designed to mitigate the impact on the environment of Stahl's products. The principle is that in order to reduce environmental impact, it first must be measured using a recognized methodology.

De-carbonization and Renewable Carbon

Renewable Carbon is the terminology used by the chemical industry to describe the de-carbonization movement away from using fossil fuels and towards using resources that have not been extracted from the earth's surface (geosphere), like bio-based materials, biomass or recycled plastics. Stahl's research into natural resource-based products, like Proviera® Probiotics for Leather and bio-based polyurethanes, is linked to this movement and is described in the Responsible Chemistry segment of this chapter (see later).

Lifestyle Choices

Stahl respects consumer lifestyle choices with respect to veganism, leather, plastics and other materials used in its target segments. While it actively supports and is part of industry initiatives to improve the environmental footprint of leather, synthetics and textile manufacturing, Stahl is also involved in the development of alternatives materials, like those made from pineapple leaves, fruit waste, mushrooms and laboratory-grown protein for example. Stahl respects the choices of brands, such as Tesla, in the automotive industry or Stella McCartney, in the luxury ready-to-wear sector to not use leather, and has adopted a transparent approach on the benefits and drawbacks of leather alternatives. Indeed, the movement towards alternative materials is seen as an opportunity by Stahl, who believes it is well positioned to adapt to such macro lifestyle trends. At the same time Stahl is convinced that leather will continue to be a material of choice for consumers in the future, given its longevity and inherent sustainability.

ESG Risk Mapping for Extra-Financial Performance Declaration (EFPD)

Stahl has performed a detailed review of its risk assessment in and control policies, in accordance with the requirements of the Extra-Financial Performance Declaration (EFPD), on environmental, social, human rights and corruption risks resulting from its activities. This review covers the risks linked to its employees, suppliers, and to the external supply chain that it serves. Stahl has adopted due diligence policies covering health, safety, environment and human rights that mitigate the risks identified in this review. The results of Stahl's risk analysis were cross-checked with two types of organizations, used as reference sources:

- independent standards: MSCI (Morgan Stanley Capital International) and SASB (Sustainability Accounting Standards Board);

- companies comparable to Stahl in terms of sector of activity, operating in several countries, and disclosing on their CSR risks and materiality method.

The risks identified with the highest gross risk level[1], as agreed in preliminary work and audited at site and corporate level, are presented below. The table presents a short summary of the risks, the policies implemented by Stahl to mitigate the risks identified, the Key Performance Indicators (KPIs) defined to monitor the policies, and the results corresponding to these indicators for 2019. The table also indicates the paragraphs where further information can be accessed.

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(1) *Gross risks are the risks for similar companies and activities (that impact both the company and the external stakeholders) in the same geographic area, without the effects of mitigation. Stahl explains how it manages and mitigates these risks in each chapter of this report. Note: Because of the nature its activities (leather chemicals, coatings and polymers), Stahl believes that some identified risks do not represent critical extra-financial risk for Stahl and do not need to be developed further in this report. These less critical risks are: fight against food insecurity; respect of animal welfare, responsible, fair and sustainable food production.*

Gross Risks, mitigation policies & KPIs

CSR Topics	Extrafinancial Risk	Description	Mitigation policies and actions	KPIs	Related paragraph
HEALTH AND SAFETY (Wendel historical priority)	Occupational health and safety.	Chemical industry: Risks related to occupational health and safety, including: ■ Chemical contact or exposure to hazardous substances for health); ■ Risk of chronic (serious) illness linked to chemical exposure; ■ Slips, trips and falls; ■ Fatal and serious incidents.	SHE policy Training R20 (Road-To-Zero) Program	TRI Frequency rate. LTI Frequency rate (accidents with lost work time). Severity rate of accidents.	4.3.4.4
ESG PERFORMANCE OF PRODUCTS AND SERVICES (Wendel historical priority)	Increasing demand and regulation for sustainable chemical products.	■ Products not aligned to the requirements of brands, NGOs & consumers. ■ Customers causing environmental contamination with Stahl's chemicals. ■ Unavailability of chemical raw materials due to regulation related to environmental or human health.	Regulatory watch & product stewardship. Industry governance and initiatives (like ZDHC). Stahl's Responsible chemistry policy. R&D	ZDHC compliant products (number of products in the ZDHC gateway), highest conformance level. Share of finishing and coatings-related products that are water based. Share of R&D projects on the elimination of restricted substances (% total projects).	4.3.4.5.4
ENVIRONMENT	Lowering GHG emissions that contribute to climate change.	Stahl recognizes that reductions in global CO_2 emissions will be required in order to achieve the goals outlined in the Paris Climate Accord established in 2015.	Reduce CO_2 emissions. Energy reduction. Focus on energy self-sufficiency.	Share of renewable energy. Energy intensity (TJ consumed/ton produced). CO_2 intensity Scopes 1 & 2 (tCO_2-eq/ton produced).	4.3.4.5.1
	Impact on water resources.	Risk of insufficient water for the process and water supply cuts from local network.	Water management.	Water intensity (m^3 consumed/ton produced).	4.3.4.5.2
	Hazardous waste management.	Risk of significant increases in hazardous waste generated at Stahl sites and inadequate management of their end-of-life.	Waste reduction Circularity	Waste Water sent to external treatment (ton). Waste intensity. Provision for land pollution (M€).	4.3.4.5.3
SOCIAL	Attractiveness & talent retention.	Risk of losing qualified and talented employees from the company. Risk of not attracting qualified and talented employees to the company.	HR Strategy Company leadership model. Employee Engagement Platform (EEP) & training.	Turnover rate. Turnover rate – resignations only. Training hours per employee (FTE).	4.3.4.3.1
GOVERNANCE	Corruption and bribery.	Risk of corruption, bribery, modern slavery in Stahl's supply chain. Risk of corruption, bribery, modern slavery in Stahl.	Code of Conduct. Due diligence questionnaire. EcoVadis Business Sustainability Ratings (for suppliers).	Share of employees trained on these subjects. Whistle blowing – Number of cases treated.	4.3.4.6.1 4.3.4.6.1

Materiality matrix

Stahl reports regularly on ESG in order to promote transparency and to assess the progress made on its CSR activities and KPIs. To make sure that it reports on the topics that are material for the company, Stahl developed a materiality matrix to give insight into the priorities faced by the company and its stakeholders. Stahl's latest materiality matrix (below) confirms that the focus on safety, water effluent, emissions and energy, is aligned with what its key stakeholders believe is Stahl's priority. The matrix is also aligned closely to the outcome of the extra financial risks, presented in the Extra-Financial Performance Declaration.

Fig. 1: Materiality Matrix

33 economic, environmental & social aspects defined by GRI are plotted. Those that matter the most (highest impact), to both Stahl and its stakeholders, are plotted in the right top corner of the matrix. In the middle section those that score medium are shown. 'Other topics' are those that had the lowest relative score.

2019 ESG Highlights

■ Economic: 2019 was a year of slightly lower volume production levels at Stahl's factories, which had an impact on KPIs that are measured "per tons produced", like C02, water, energy and waste. This lower volume was caused by softer demand across Stahl's end market segments. Despite the volume impact, Stahl's environmental KPIs remained on a continuous improvement path.

■ ESG Performance: Stahl launched its Responsible Chemistry Initiative in 2019 (see section 4.3.4.5.4), in which its technology and product development activities are categorized into three levels of environmental impact reduction. Stahl also achieved Level 3 status in the ZDHC Gateway conformance module, for its global leather chemicals product range.

■ Health & Safety: Stahl implemented new criteria for governing and reporting SHE and process safety, in order to reflect the occurrence of safety incidents more accurately. The company also embarked on

a new safety awareness campaign, called R20 (Road To Zero). Total recordable incidents (TRI) Frequency rate showed improvement in 2019 vs 2018. Lost Time Incidents (LTI) Frequency rate and Severity rate in 2019 were both slightly higher than in 2018, but lower than 2017.

■ Social: Stahl implemented a new Employee Engagement Platform (EEP) in 2019, which is partly designed to encourage higher employee participation and to foment commitment to the company culture (see section 4.3.4.3). Stahl employees completed e-learning modules on corruption and bribery as part of this new EEP.

■ Environment: Climate change has been identified as a critical external risk for Stahl and the company met its 5-year goals for a 10% C02 emissions reduction by the end of 2019. The on-site generation of solar energy at the Stahl Brasil site was an example of the company's commitment – solar panels are already supplying 50% of the factory's energy needs.

4.3.4.3   HR – Enhancing company attractiveness, maximizing employee engagement

4.3.4.3.1 Attractiveness & talent retention

Risk	Risk Description	Mitigation policies and actions	KPIs	2018	2019
Attractiveness & talent retention	Risk of losing qualified and talented employees from the company	HR Strategy	Turnover rate	10.58%	8.71%
		Company leadership model	Voluntary staff turnover rate – resignations only	5.05%	4.24%
	Risk of not attracting qualified and talented employees to the company	Employee Engagement Platform (EEP) & training	Training hours per employee (FTE)	22.30	15.32
		Stahl values and DNA, shared with employees			
		Succession Planning – new leaders in key positions			

Stahl believes the future workplace will be defined by personalized solutions, wellbeing and a focus on diversity. New generations already expect companies to "walk the talk" on environmental, social and governance topics. Rigid and complex hierarchies will be a thing of the past, and leadership will require emotional intelligence and cross functional team skills. Organisations will become flatter, with more power devolved to teams. In order to prepare for this, the company is focusing on ensuring the company remains attractive for all generations.

HR activities in 2019 have therefore been focused on addressing the identified risks with regard to talent retention and ensuring the company remains Stahl's attractive for potential and new employees, by:

■ focusing on employee engagement, diversity management and equal opportunity;

■ further developing and establishing Stahl's culture and DNA;

■ transferring knowledge and information effectively within the company;

■ hiring and coaching people in line with current and future business goals;

■ creating an open, transparent and fair management style; and

■ emphasizing the benefits of Stahl's truly international team.

The focus of the Stahl HR Team is to ensure that each employee has a great experience in the company through employee engagement, ie: enhancing the emotional commitment an employee makes to the organization and its goals. Employee engagement is therefore about Stahl employees feeling pride and loyalty to the company and being an advocate for the organization to customers, colleagues and potential candidates.

EEP (Employee Engagement Platform)

Stahl launched its Employee Engagement Platform in October 2019 for all Stahl employees. The purpose of this platform is to:

- create a digital library for HR activities and employee engagement development;

- achieve more efficient and effective learning and employee training;

- organize department-specific compliance regulations;

- enhance the "on-boarding" process for new employees;

- track progress with employee learning and measure their performance;

- provide statistics on training (eg: for external auditing); and

- integrate social learning experiences.

An employee e-learning course was implemented in 2019 as part of the new EEP, and was targeted at all Stahl employees. This e-learning centred on Stahl policy with respect to mitigating risks of bribery, corruption, modern slavery, diversity, equality etc. within Stahl and in its supply chain. By the end of 2019, 90.4% of employees had successfully completed the course, which includes a minimum grade examination requirement.

Stahl values & DNA

Stahl believes that its four core values (Co-operation, Imagination, Initiative, Responsibility) are the pillars of its success and should be applied by all employees. The company therefore created a video as part of its on-boarding plan (also published on the Stahl website – career section) which reinforces these core values and company DNA. The video features:

- Stahl as an international player with a global mind-set;

- Stahl as an organization that holds customers at the core with a market and entrepreneurial culture always focused to get results;

- Stahl's Global structure, with strategy is defined at corporate level and deployed at local level *via* local best practices; and

- Stahl's entrepreneurial spirit and the emphasis on individual freedom to bring forward great ideas and business development opportunities.

Succession Planning – new leaders in key positions

Some senior executives were hired or promoted within the company in 2019 to ensure business continuity and leadership, while maintaining the Stahl culture and values as pillars. This has allowed for changes in the current organization to be made in order to meet future business requirements and to streamline the organization.

Stahl merged sourcing, procurement, operations and supply line under one director as per January 1, 2020. A new Chief Operating Officer was hired as a result, who will organize the new team with the purpose of streamlining the group supply chain process.

On February 1, 2019, a new Chief Financial Officer joined the company. The organization was also expanded with the newly created role of Group Director M&A (mergers and acquisitions) as of February 1, 2019, reporting to the CFO.

The company has also begun to evaluate the quality of its middle management, including recruiting some young talent to fill the pipeline for the future. Internal candidates are favoured by Stahl for future career movements, replacements and promotions.

4.3.4.3.2 Employment

The total number of employees (headcount) at 2019 year-end was 1,847, which is a decrease of 150 employees compared to the end of 2018. The reduction is linked to the completion of the complexity reduction and value improvement project implemented in the Leather organization, which aims to streamline the business complexity that accompanied the company's recent acquisitions. The reduction also reflects the consolidation of Stahl's manufacturing sites in 2019, in Spain (from 2 sites to 1) and in India (also from 2 sites to 1) respectively.

The breakdown of FTE's (full-time equivalent) as of December 31, 2019 and the change compared to the prior year-end per region is as follows:

Region	12/31/19	12/31/18	Change
EMEA	901.6	962.5	(60.9)
Asia-Pacific	384.0	387.0	(3.0)
India and Pakistan	274.0	317.0	(43.0)
North and South America	267.0	305.6	(38.6)
	1,826.6	**1,972.1**	**(145.5)**

87.6% of Stahl's employees are on permanent contracts. Its workforce is 76% male and 24% female.

Total Full-time Employees (FTE) leaving (dismissals, resignations and other) during 2019 were 258.9 and 113.8 joined over the period (excluding internal transfers). These ratios are in line with the market for the activities and location in which they take place. The turnover rate in 2019 was 8.71% compared to 10.58% in 2018. Voluntary staff turnover rate in 2019 was 4.24% compared to 5.05% in 2018.

4.3.4.3.3 Working Organization

Stahl operates through a complex international organization in order to effectively serve its diverse customer base. Stahl has 11 manufacturing sites, 11 R&D labs, 35 application labs, 35 sales offices and 9 Centres of Excellence. Working practices differ by region.

The majority of the Stahl units have a 5 day working week, with exception of India and Pakistan where they also work on Saturday mornings. Working hours and incidents are recorded, depending on the site, by either electronic or manual systems.

All Stahl units report absenteeism (which includes absences for sickness and work accident) as required by local legislation but also in a way that can be reported at the corporate level.

The global absenteeism rate in 2019 was 1.76%, compared to 1.70% in 2018.

4.3.4.3.4 Labour relations

Given the international set up of Stahl and the relatively small dimension of the local units, there are 4 collective agreements in place. Salary levels and other means of remuneration depend on the individual countries. They are centrally coordinated, to ensure Stahl remains competitive in the respective markets. Some employees in the Company, mainly in management and sales, enjoy a bonus scheme based on annual quantitative objectives. This bonus scheme is coordinated centrally to ensure proper alignment and consistence with local practices.

4.3.4.3.5 Compensation

Total compensation excluding bonus, paid in respect of 2019 was €114 million, approximately 0.84% below 2018.

4.3.4.3.6 Training and education

In order to mitigate the risks identified in this report, Stahl gives priority to ESG training, which includes safety, health, environment and social compliance. More specifically every new employee receives updated safety training and instructions in line with their position. This is followed by more specific job-related training to ensure the best use of the information, resources, products and capabilities at their disposal. In the case of Stahl technicians, there is a strong emphasis on training designed to provide practical and innovative technical solutions for customers.

Individual training programs

All employees that have worked for the Company more than four months are eligible to participate in external training programs individually or in teams. Stahl encourages employees and managers to consider different types of training, like workshops, e-learning, on-line courses, lectures etc.

Corporate training programs

Stahl has defined a corporate training catalogue in which the following topics are covered:

- compliance, anti-bribery and anti-corruption and modern slavery;

- workplace diversity and inclusion;

- security awareness and GDPR training;

- leadership (Management Training and Masterclass);

- induction program for new employees;

- team-based training on company-related issues (*e.g.* new systems or policy changes);

- preparation training for individual promotions, transfers or new responsibilities.

The indicator of total hours of training is tracked locally by each Stahl unit and it is consolidated at group level. The number of hours received per employee in 2019 was 15.32 hours per full-time equivalent (FTE) compared to 22.30 hours per FTE in 2018.

4.3.4.3.7 Equality, Diversity & Inclusion

Stahl's Diversity and Inclusion Policy, published on www.stahl.com, expresses the company's commitment to embedding equality, diversity and inclusion across the organization. Equal treatment is at the heart of the organization and Stahl believes this will produce a more innovative and responsive organization. Stahl also believes that there is much more to diversity than age, gender, race and cultural background. A diverse workplace includes people who can offer a range of different viewpoints and ideas.

Consistent with its strategy of growing its leadership talent, Diversity and Inclusion principles are also embedded within its core leadership development programs to encourage managers to demonstrate them as part of their leadership behaviour. Stahl also builds cultural intelligence and equality into its performance review, hiring and talent identification processes.

Stahl tracks the ratio of male/female employees and the number of female employees in supervisory positions (employees with direct reports and/or holding a management position). In 2019 there were 90 women in supervisory positions, which is 23.38% of total supervisory positions.

The need to respect strict security and emergency measures, limits the opportunities to employ a high number of disabled employees. There are currently 13 employees in this category, compared to 12 in 2018.

4.3.4.4 Safety & Health – addressing occupational safety risks

CSR Risk	Description	Mitigation policies and actions	KPIs	2018	2019
Occupational health and safety	Chemical industry: Risks related to occupational health and safety, including: - Chemical contact or exposure to hazardous substances for health); - Risk of chronic (serious) illness linked to chemical exposure; - Slips, trips and falls; - Fatal and serious incidents.	SHE policy SHIRAM (Stahl Hazard Identification and Risk Assessment Methodology) Training R20 (Road-To-Zero) Program	TRI Frequency rate	7.662	5.444
			LTI Frequency rate (accidents with lost work time)	1.035	1.134
			Severity rate of accidents	0.018	0.031

The risk of accidents and illnesses related occupational safety have been identified by Stahl as a gross risk, as shown in Table 1 (section 4.3.4.2) of this report. All its activities, policies, monitoring and reporting and training are consequently aimed at creating a true safety culture and mitigating these risks, which include:

- chemical contact or exposure to hazardous substances;
- risk of chronic (serious) illness linked to chemical exposure;
- slips, trips and falls;
- accidents with irreversible consequences.

Stahl believes that the protection of health and safety of people and the preservation of the environment will always be its highest priority and that this mindset (and policy) is rooted in the employee culture. Stahl's focus with respect to SHE & Process safety management is on enforcing the knowledge and

responsibility for decision making. In 2018 a Behavioural Safety Program was defined by Stahl and piloted in the Parets, Spain production facility. This program has been rolled-out to Waalwijk and Palazzolo in 2019. Called R20 (Road-To-Zero), the pillars of this program are:

- safety culture is not achieved by the big efforts of a small group, rather by the small efforts of a large group of people;
- a true safety culture defines an attitude to life, at the workplace and at home;
- the consequences of injuries in the workplace affect people's lives at home.

To underline the strategic and critical importance of a common behaviour on safety, and to demonstrate the commitment of the management to it, a Zero Tolerance safety policy was established, and rolled-out globally, in 2019.

Health & Safety principles

The key principles of Stahl's Safety and Health policy are:

- a strong safety culture involving the whole organization;

- safety, health and environment as the top priority;

- safety is more important than a short term result;

- implementing best industrial practices in addition to compliance to all legal requirements;

- knowledge as the basis of all decisions. Stahl will require that employees are trained in the skills necessary to carry out their duties and make decisions ensuring safety.

Stahl's safety policy establishes the need to:

- implement safety principles through process conception, facility design, operation specification and behaviour of people;

- identify and assess all hazards;

- define safety measures to prevent incidents and accidents;

- define safety measures to limit the potential consequences of incidents and accidents;

- report and investigate all incidents, take the necessary actions & share and learn from them;

- monitor safety performance with metrics and indicators;

- audit and review hazards periodically;

- be open to improvements made available in the industry;

- ensure good practices in emergency response and crisis management preparedness;

- success in safety performance shall be celebrated and rewarded;

- consider safety responsibility as a mandatory individual responsibility to be spread throughout the entire organisation;

- contribute to continuous improvements in safety by making viable suggestions.

Safety culture pillars

Stahl's safety culture is based on 4 pillars: Processes, Assets, Operations, Behaviour.

Safety ultimately relies on human factors, given that any facility, building, equipment or process is conceived, designed, built, installed, operated, maintained and finally dismantled by humans. The responsibility for decisions and actions taken along that life cycle therefore lie with the decision makers or their successors.

SHE Governance

Each Stahl site has a dedicated SHE Manager responsible for ensuring that the organization is pursuing best practices. Being a SHE manager does not mean responsibility for SHE: the responsibility is distributed throughout the organization and there is no job position without a degree of SHE responsibility for SHE. The SHE Manager reports to the Local Manager and has the direct support of the Global SHE&PS Manager.

Reporting Criteria & SHIRAM

In 2019 Stahl reviewed and implemented new criteria for reporting and governing SHE and Process Safety. New KPIs according to industry best practices and criteria were defined. A systematic reporting system was put in place in order to analyze key factors on reported events and allow management to identify trends and take decisions based upon objective criteria. Historical data was reviewed and introduced in this system so that trends and KPIs could be traced back to 2012.

In terms of Process Safety, the Stahl Hazard Identification and Risk Assessment Methodology (SHIRAM) was rolled out worldwide and became Stahl's standard methodology for risk assessment. This methodology has been designed to fit Stahl's operations and processes, and to integrate best practices for Risk Assessment and Management.

Global Safety performance and related KPIs are reported and monitored monthly and annually. The Company tracks progress on safety indicators and reports different categories of injuries and incidents including lost time injury (LTI), first aid, medical treatment and irreversible injuries. Each month it reports injuries, incidents, audits, trainings, engineering projects and other prevention methods both internally and externally. The Safety reporting procedure is defined by Stahl policy on SHE&PS, in which KPIs, criteria and reporting tools are defined.

Safety KPIs

The table below shows KPIs related to work injuries.

	2019	2018	2017	2016
TRI Frequency rate	5.444	7.662	6.641	7.261
LTI Frequency rate	1.134	1.035	1.771	1.613
Severity rate	0.031	0.018	0.059	0.016

Details on the calculation of the KPIs above are described in the Safety indicators point of Reporting Methodology.

4.3.4.5 Environment – mitigating risks by lowering environmental footprint

As part of the aforementioned EFPD risk assessment realized by the company, several environmental gross risks were identified by Stahl:

■ hazardous waste management;

■ impact on water resources;

■ greenhouse gas (GHG) emissions contributing to climate change; and

■ the increasing demand and regulation for sustainable chemical products.

The company has implemented a corporate strategy, with associated KPIs and policies, in order to mitigate these risks.

Corporate Strategy

The company's commitment begins with its widely communicated corporate strategy on ESG, *i.e.*: to promote greater transparency throughout the whole supply chain, leading to a more sustainable industry and a progressively lower environmental footprint. This includes reducing the environmental impact of its own operations (including purchased raw materials) as well as that of the supply chain into which is provides its products and services.

Stahl is committed to global initiatives like The 2015 Paris Climate Accord (on reducing CO_2), the UN Global compact (included in the Stahl Code of Conduct for Business Partners), the UN Sustainable Development Goals and the OECD – Organisation for Economic Co-operation and Development. For reporting, Stahl discloses information in its annual ESG report according to the Global Reporting Initiative (GRI) guidelines.

Stahl is continuously upgrading its manufacturing sites and laboratory facilities in order to achieve energy, waste and water efficiencies and to reduce its environmental footprint. To monitor the effectiveness of these mitigation activities, the company reports on the following KPIs each month and annually:

■ CO_2 and energy;

■ water;

■ waste.

A highlight from 2019 was the contribution of energy generated from solar panels at the Stahl manufacturing site in Portao, Brasil. This solar energy investment resulted in a significant drop in CO_2 emissions for the site in 2019, and represented 42% of the electricity consumed at that facility. The company is planning to introduce solar and/or other renewable energy alternatives at its other manufacturing sites in the coming years.

4.3.4.5.1 Climate Change risk – Carbon Dioxide (CO_2) emissions

CSR Risk	Description	Mitigation policies and actions	KPIs	2018	2019
Lowering Greenhouse Gas (GHG) emissions that contribute to climate change	Stahl recognizes that reductions in global CO_2 emissions will be required in order to achieve the goals outlined in the Paris Climate Accord established in 2015	Reduce CO_2 emissions: internal target Energy reduction Green energy sourcing Focus on energy self- sufficiency (Technology investments)	Share of renewable energy	34%	36%
			Energy intensity (TJ consumed/ton produced)	0.00166	0.00182
			CO_2 intensity Scopes 1 & 2 (tCO$_2$-eq/ton produced)	0.106	0.120

Stahl recognizes that reductions in global CO_2 emissions will be required in order to achieve the goals outlined in the Paris Climate Accord established in 2015. Stahl set an internal target to reduce CO_2 emissions by 10% by 2020 (scope 1 and 2, using 2015 as a baseline) and met that target by the end of 2019. Stahl's improvements in CO_2 emissions are driven by sourcing green energy at is European sites and by technology investments that lead to long term efficiencies at its manufacturing sites. The company is now considering new goals for 2030, including stepping up investments into renewable energy at its sites, with a view to eliminating the need for network electricity sourcing.

Stahl estimates and reports also on the scope 3 indirect emissions since 2016. Scope 1 are direct emissions from owned or controlled sources, *e.g.* fuel combustion. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

The below tables shows the different sources of CO_2 emissions calculated by Stahl, as per the Green House Gas (GHG) protocol.

Carbon Dioxide (CO_2) emissions

Scope 1 (direct)	Scope 2 (indirect)	Scope 3 (indirect)
Fuel combustion Company vehicles	Purchased electricity, heat and steam	Purchased goods and services (including packaging) Capital goods Waste Use of sold products Transportation and distribution (up- and downstream) End of life treatment of sold products Leased assets and franchises

Scope 1 and 2 emissions

	2019	2018	2017	2016
Scope 1: direct GHG emission (metric tons CO_2-EQ.)*	18,380	17,114	16,915	16,924
Scope 2: electricity indirect emission sources (metric tons CO_2-EQ.)*	6,585	7,119	8,984	18,595
CO_2 emission scope 1+2 (in tons)	24,966	24,232	25,898	35,519
Total production volume (in tons)	208,114	228,440	238,590	207,923
CO_2 intensity[1]	0.1200	0.1061	0.1085	0.1708

(*) Scope 1 and 2 CO_2 emission/production volume.
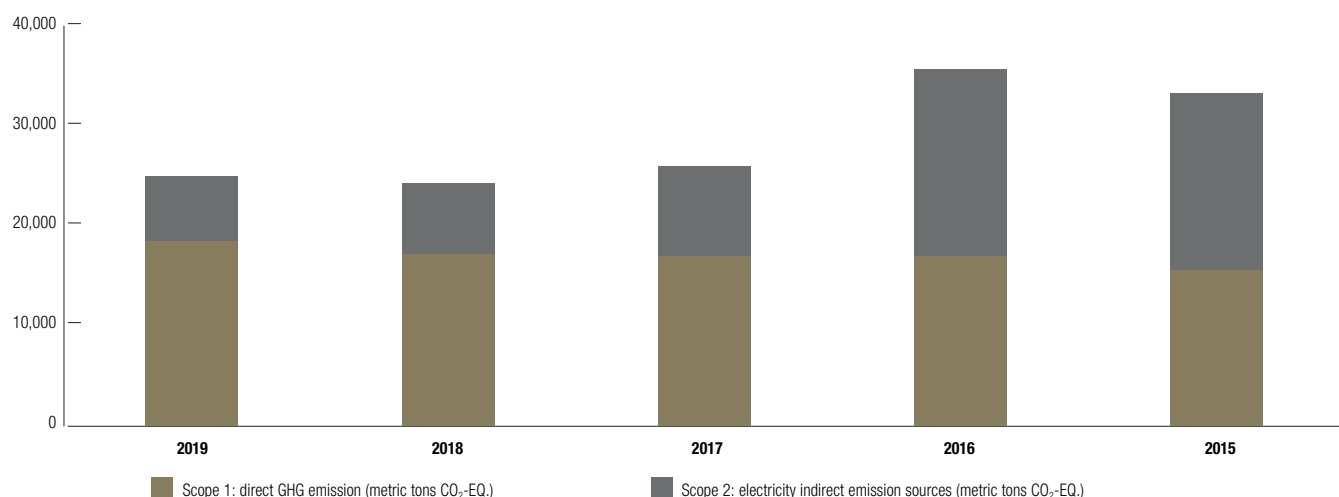
Scope 3 Greenhouse Gas (GHG) emissions

In 2017 Stahl made its first assessment of scope 3 emissions as per the GHG Protocol Corporate Value Chain Accounting and Reporting Standard. This exercise is designed to understand the full value chain impact of its activities and will help to focus efforts on significant sources of Greenhouse Gas (GHG) emissions. In 2018, Stahl updated the material categories and their estimated CO_2 emissions.

	2019	2018	2017	2016	2015
Scope 3: estimation of the other indirect emission sources (million TCO_2-EQ)***	500-530	560-590	560-590	500-530	N/A

Scope 3 GHG emissions per category

	2019	2018	2017	2016	2015
Cat 1: Purchased goods and services	60%	62%	63%	59%	N/A
Cat 12: End-of-life treatment of sold products	25%	24%	23%	26%	N/A
Cat 4: Upstream transportation and distribution	10%	9%	9%	10%	N/A
Other (e.g. Capital goods, Downstream transport. and distribution)	5%	5%	5%	6%	N/A

Scope 3 GHG emissions – mitigation

Purchased goods and services (60% in 2019) and 'end-of-life treatment of sold products' (25% in 2019) remain the largest sources of indirect (scope 3) CO_2 emission. Both categories are related to the input and output of materials in the production process. Opportunities to reduce these emissions are:

■ selecting (base) chemicals with a lower CO_2-footprint;

■ increasing the renewable carbon content of the materials that are being used[1];

■ increasing longevity of end products that could reduce lifecycle CO_2-emissions of end products.

Transportation of purchased goods is the third largest source of scope 3 emissions. Transportation of goods (Cat. 4) accounts for around 10% of Stahl scope 3 emissions. Based on the assumptions in the calculation of transport emissions, the major part of these emissions is air and road transport. Reducing these emissions could be achieved by:

■ choosing a different mode of transportation. Road transport emits 10 times more CO_2-emission per tkm than marine transport. Air freight emits 100 times the emissions associated with marine transport. In particular, Stahl is actively looking for ways to minimize air freight shipments in favour of marine transport;

■ stimulate transportation with cleaner vehicles (e.g. select transporters based on their sustainability achievements such as Dutch "Lean & Green" star rating);

■ reduce transporting small quantities of goods. In 2019 Stahl consolidated its distributor network significantly, which means larger shipments to a smaller number of distributors.

Energy

Stahl's energy consumption is the sum of electricity, gas, oil, steam, renewable briquettes and high speed diesel, consumed at their manufacturing sites (see below pie chart). Energy is reported as the total energy consumed in TJ and per production volume: the energy intensity.

There are many ongoing energy efficiency projects towards the Stahl goal of self-sufficiency and renewable energy sources. As production volume decreased in 2019 (ie: like for like), the energy per tons produced slightly increased, while to total energy consumption in TJ is stable.

Energy consumption

	2019	2018	2017	2016
Energy (TJ)	380	380	390	319
Share of renewable energy	36%	34%	34%	-
Total production volume	208,114	228,440	238,590	207,923
Energy intensity (TJ)*	**0.00182**	**0.00166**	**0.00163**	**0.00153**

*   Total energy consumption/total production volume.

(1) Biogenic materials does not necessarily lead to a lower carbon footprint from a life cycle perspective, because production and processing of biogenic materials in some cases can be more (fossil) energy intensive.

4.3.4.5.2 Water

CSR Risk	Description	Mitigation policies and actions	KPIs	2018	2019
Impact on water resources	Risk of insufficient water for the process and water supply cuts from local network	Water management	Water intensity (m³ consumed/ton produced)	1.510	1.588

Water is a strategic focus for Stahl and the company dedicate significant resources into researching the reduction of water use, the introduction of water-based products, improving the quality of water effluent and reducing water pollution.

Stahl's objective is to enhance the quality of water and avoid water pollution linked to its products.

Stahl uses water for 2 main reasons:

■ commercial Stahl products using water based technology (where water replaces petrochemical-based solvents);

■ water used by Stahl manufacturing sites (cleaning tanks, pipes and for processing, heating & cooling), as well as labs and offices.

Stahl uses water from the municipality (public water) and ground water. The company also invests significantly into projects and technology designed to reduce water consumption and water pollution in the supply chain, in particular the customers' supply chains.

Stahl consumed less water in 2019 because production volumes were slightly lower but also because of efficiencies at the sites. Water consumed per tons produced decreased, so water efficiency improved.

Water consumption

	2019	2018	2017	2016
Water consumption (m³)	330,649	344,922	370,855	355,041
Other water use (m³)	460,097	456,820	561,788	506,056
Total water used (m³)	790,746	801,742	932,643	861,097
Total production volume (tonnes)	208,114	228,440	238,590	207,923
Water intensity*	**1.588**	**1.510**	**1.554**	**1.708**

*   *Total water consumption/total production volume.*

4.3.4.5.3 Waste

CSR Risk	Description	Mitigation policies and actions	KPIs	2018	2019
Hazardous waste management	Risk of significant increases in hazardous waste generated at Stahl sites and inadequate management of their end-of-life	Waste reduction	Waste Water sent to external treatment (ton)	15,620	14,397
		Waste management strategies	Waste intensity	0.056	0.062

Stahl policy is to reduce the impact of its operations and products on the environment by preventing pollution through waste management strategies that promote waste minimization, re-use, recovery and recycling, as appropriate. Waste reduction and finding useful outlets, especially avoiding waste, are important from an economic and environmental point of view. The circularity approach is getting more and more attention and Stahl's ambition for waste and water is to achieve a high level of circularity. Circularity is based on the principle that a closed loop system requires (no or less) resources, since "waste" is input (raw material) instead of waste.

Disposal of waste is considered only as a last resort for Stahl and it has begun to regard waste more and more as a by-product, with value for other uses. It is also installing water treatment facilities at manufacturing sites which do not have such them. This will effectively reduce the amount of wastewater (classified as hazardous waste) sent to third parties for treatment.

Stahl reports and actively aims to reduce both hazardous waste and non-hazardous waste. Hazardous waste originates from rejected products/raw materials, waste from process installations (eg sludge from waste water treatment), waste from laboratories and empty used packaging. Non-hazardous waste includes glass, paper, wood, plastic, domestic and demolition waste.

The slight increase in waste intensity is caused by the decrease in production volumes.

	2019	2018	2017	2016
Hazardous waste (tons)	11,302	10,962	10,538	9,748
Non-hazardous waste (tons)	1,521	1,807	1,584	1,476
Total waste (tons)	12,824	12,769	12,122	11,224
Total production volume (tons)	208,114	228,440	238,590	207,923
Waste (total) intensity*	**0.062**	**0.056**	**0.051**	**0.054**

*   Total waste (hazardous + non-hazardous)/ total production volume.

	2019	2018	2017	2016
Waste water send to external treatment (tons)*	14,397	15,620	18,124	15,038

Environmental provisions

At end of 2019, Stahl's environmental provision for land pollution was €0.64 million.

4.3.4.5.4 Responsible Chemistry

CSR Risk	Description	Mitigation policies and actions	KPIs	2018	2019
Increasing demand and regulation for sustainable chemical products	Products not aligned to the requirements of brands, NGOs & consumer Customers causing environmental contamination with Stahl's chemical Unavailability of chemical raw materials due to regulation related to environmental or human health.	Regulatory watch & product stewardship Industry governance and initiatives (like ZDHC) Stahl's Responsible chemistry policy R&D	ZDHC compliant products (number of products in the ZDHC gateway), highest conformance level	N/A	1,274
			Share of finishing and coatings-related products that are water based	85%	76%
			Share of R&D projects on the elimination of restricted substances (% total projects)	25%	18%

Stahl has identified risks linked to innovation and the ESG performance of its products due to the increasing demand and regulation for more sustainable chemistry With many R&D centres around the world, employing over technical staff, Stahl's product research is aimed at providing high performance solutions that reduce environmental impact Stahl introduced its Responsible Chemistry Policy in 2019, which is aimed at fulfilling the requirements of consumers and brands on product environment footprint and mitigating the identified risks related to ESG performance listed in table 1 of this report.

Fig.2: Responsible Chemistry
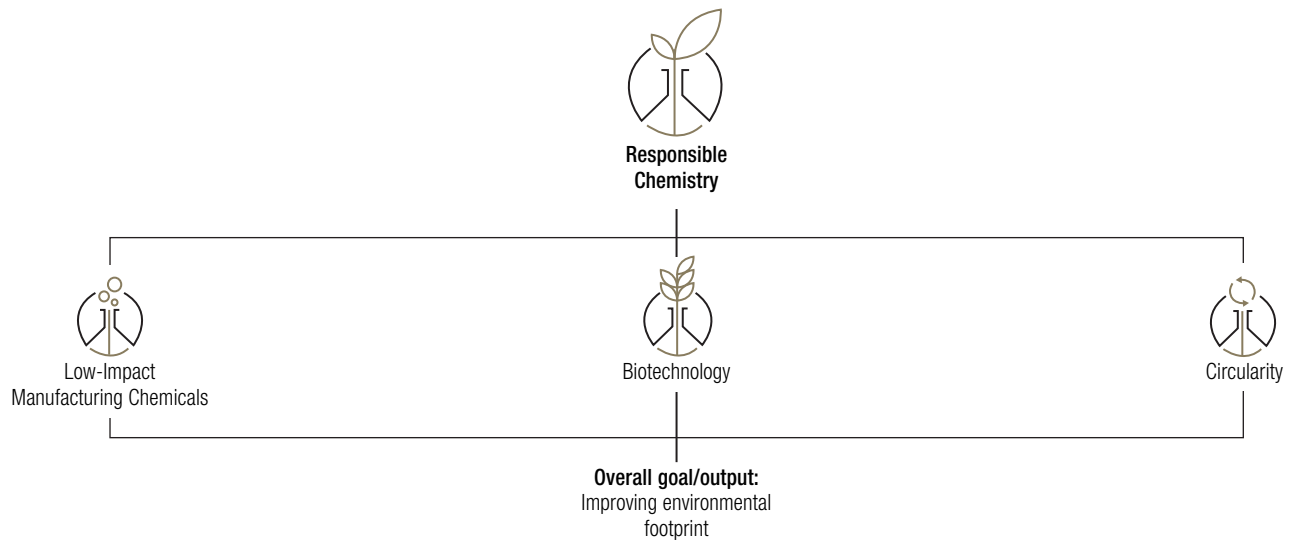
Responsible Chemistry classifies the environment benefits of Stahl technology into three categories:

■ low Impact Manufacturing Chemicals: refers to the impact of chemicals on human health and the environment. For example, chemicals compliant to the ZDHC Manufactured Restricted Substance List fall into this category, as measured by their level of compliance in the ZDHC Gateway® portal. Other products that represent an environmental footprint reduction for Stahl and its customers are also included in this group, for example *via* reduced water pollution or energy consumption. KPI;

■ biotechnology: refers to chemistry derived from bio-based or renewable carbon resources (as opposed to fossil-fuel based or depleting resources). Stahl's bio-based polyurethanes and the Proviera Probiotics for Leather® portfolio, both fall into this category;

■ circularity: refers to products or technologies that contribute to the repair and prolongation of materials, and products derived from waste or by-products which would otherwise be thrown away. Products that allow for successful composting and biodegradation of materials would also be included in this category.

The number of Stahl products listed (publicly) at Level 3 in the ZDHC Gateway portal (as of January 2020) is 1274, which represents all products in the (non-automotive) global Leather Chemicals portfolio, and a large share of Stahl's total product portfolio. Level 3 is the highest level of compliance defined and represents a significant milestone for Stahl.

4.3.4.6   Governance

4.3.4.6.1 Human rights, modern slavery, corruption, bribery risks

CSR Risk	Description	Mitigation policies and actions	KPIs	2018	2019
Corruption and bribery	Risk of corruption, bribery, modern slavery in Stahl's supply chain Risk of corruption, bribery, modern slavery in Stahl	Stahl Code of Conduct and Stahl Business Partner Code of Conduct Whistleblower policy E-learning training programs Due diligence questionnaire EcoVadis Business Sustainability Ratings (for suppliers)	Share of employees trained on these subjects	Compliance training > 50% Course corporate policies: n/a	Compliance training, only new employees Course corporate policies: 90.4%
		Accounting procedures for anti-corruption	Whistle blowing – Number of cases treated	100% (2 cases)	100% (5 cases)

Stahl has identified corruption, bribery and modern slavery as a CSR risk in Stahl's operations and supply chains, as described in Table 1 of this report. Stahl's Code of Conduct ensures that human rights and the environment are respected by those parties with whom Stahl does business. Related to this, a whistle blower policy is in place with clear rules that allow employees to report suspicious behaviour that could be in conflict with the Code of Conduct, with the necessary protection guarantee for the whistle blower in question.

Stahl executed e-learning training programs in 2017 and 2018, focused on anti-bribery, anti-corruption and modern slavery in which special attention was given to awareness and red flags that can indicate non-compliant behaviour in the company or in the supply chain. Further mandatory training on Stahl's Compliance policy took place in 2019 thanks to the new EEP described in the Human Resources chapter of this report.

Stahl's Business Partner Code of Conduct is agreed and signed annually with commercial business partners like suppliers and distributors and agents. In 2019 Stahl began due diligence on the Code of Conduct by auditing selected suppliers on its implementation. The scope of Stahl's supplier due diligence will be amplified in 2020 by using the Ecovadis ratings system, which is already used throughout much of the chemical industry supply chain.

In 2019, Stahl published accounting procedures for anti-corruption for all Stahl locations around the world. This document covers best practices to be adopted for prevention and detection of corruption with regard to finance and payments.

4.3.4.6.2 United Nations Sustainable Development Goals

Stahl is committed to the guiding principles of UN Global Compact, the world's largest corporate sustainability initiative. With this commitment Stahl confirms the alignment of its strategy and operations with the universal principles of human rights, labour, environment and anti-corruption. Stahl is also committed to the 17 Sustainable Development Goals (SDG's) announced at the UN General Assembly in 2015. Its activities link to the SDG's are listed below.

■ Poverty: In addition to local community philanthropy, Stahl is involved in wider industrial development in emerging regions with NGOs and governments. As an example, a Public Private Partnership between Stahl, Solidaridad and PUM that was launched in 2017, in Kanpur, India, is progressing well. The five-year project is focused on reducing water pollution, and its success will have an impact on securing jobs linked to the local leather industry in Kanpur, which has been severely threatened by forced closures in 2019 due to non-compliance with respect to environmental pollution.

■ Good health: Stahl has committed to initiatives that will eliminate restricted substances from the supply chain, like the Zero Discharge of Hazardous Chemicals foundation, of which the company is a member since 2016.In January 2020 Stahl confirmed the highest (Level 3) level compliance for its leather chemicals portfolio to the ZDHC Gateway conformance standard for restricted substances.

■ Education: Stahl Campus® was established to promote good practices throughout the supply chain (see the section Education & Training). Stahl also actively promotes the safe handling of chemicals and conducts seminars on this topic in emerging regions. The company holds regular Sustainability Seminars on CSR topics at leather manufacturing clusters around the world or to groups of stakeholders in the supply chain. In 2018 Stahl Campus® India (Kanpur) was opened to support the Public Private Partnership focused on water pollution reduction in the Ganges.

- Gender Equality: Stahl's Diversity and Inclusion policy was communicated in 2018 and is summarized in this report.

- Clean Water & sanitation: The company has successfully introduced effluent-reducing technologies like Proviera® – Probiotics for Leather™, Stahl NEO, Stahl EVO and Catalix® as well as water-reducing technologies like Easy White Tan®. The Public Private Partnerships launched in Kanpur, India and Ethiopia are also driven by a strong desire to reduce water pollution in the markets that the company serves.

- Renewable Energy and Climate Action: Stahl's goal of a 10% reduction in CO_2 emissions by 2020 (in line with the 2015 Paris Climate Agreement) was achieved in 2019. This implies the adoption of renewable energy sources and raw materials, as well as energy efficient technologies at its sites. Beyond this, Stahl has begun to use solar panels at its site in Brazil as part of a longer term goal of sourcing from on-site renewable energy, not only from the green electricity network.

- Jobs, economic growth: The Public Private Partnership in Kanpur, India, is one example of its commitment to sustainable economic growth. The EU funded project aimed at promoting efficient technologies for the Ethiopian leather industry is another. Both projects are focused on reducing pollution which has a direct connection with securing sustainable economic development and therefore jobs for the local industries. Without such pollution control initiatives, companies in these sectors would fail and eventually be forced to close.

- Reduced Inequalities: Stahl's Code of Conduct was implemented in 2015 and the Stahl Diversity and Inclusion policy was implemented 2018. E-training courses were conducted and completed by all employees in 2019 on diversity and anti-corruption.

4.3.4.6.3 Trusted Partnerships

The company is proactively involved in many industry ESG initiatives, like the Leather Working Group (LWG), a multi-stakeholder association which develops and maintains an audit protocol that assess the environmental compliance and performance capabilities of leather manufacturers and promote sustainable and appropriate environmental business practices within the leather industry. The mission of the LWG is to raise the bar of environmental stewardship through its audit protocol for tanneries, to allow better choices to be made about sourcing leather. Audit implementation and its maintenance is the LWG's main activity and Stahl is a member of the Executive Committee, which currently consists of four clothing/footwear brands (Wolverine, VF Corporation, Louis Vuitton and Clarks), four leather manufacturers and one chemical supplier (Stahl).

Stahl is an active value chain affiliate of the Zero Discharge of Hazardous Chemicals (ZDHC) foundation, and became a bluesign® system partner in 2017.

4.3.4.6.4 Non-profit activities in emerging countries

- A five-year Public Private Partnership (PPP) between Stahl, Solidaridad, and PUM was launched in 2017, in Kanpur, India (see SDGs).

- A PPP in Ethiopia, with several partners and NGOs, including is focused on pollution reduction in the tanning sector. Stahl's contribution to this project is training in cleaner technologies, *via* Stahl Campus® training on the relevant modules for workers and management at the tanneries.

- In 2019 a project was initiated in Bangladesh by three key members of the TEGEWA group of chemical suppliers (Stahl being one of them) and the Dutch NGO Solidaridad. Officially kicked off in Q1 2020, the project is focused on practical way to improve the safe handling of chemicals in the leather manufacturing cluster of Savar, in Dhaka, and is focused on the well-being of factory workers in the cluster.

4.3.4.6.5 External education and training (Stahl Campus®)

Stahl is committed to filling the talent gap observed in some of the markets that the company serves by actively seeking ways to educate and train university students, NGOs, brands, suppliers, distributors, customers and other stakeholders in the supply chain. Stahl Campus® is the global knowledge center established by Stahl to achieve this. Started in 2014 in Waalwijk (Netherlands) & extended to León (Mexico) in 2015 and Guangzhou (China) in 2016, a new Stahl Campus® Center of Excellence was opened in Kanpur, India in 2019. The goal of Stahl Campus is to promote good practices and transparency throughout the supply chain by hosting trainees in Stahl's state-of-the-art laboratories to strengthen their knowledge *via* theoretical and practical training modules. Stahl Campus® is a key element of the company's strategy of promoting transparency throughout the supply chain.

In 2019, 842 people attended Stahl Campus® training courses around the world. Notably in 2019, the Automotive Leather Finishing Post Graduate Certificate course was held for the second time in Stahl Campus® Mexico – a six-week course (3 x 2-week modules held over the academic year) developed in collaboration with the University of Northampton (UK), in which students receive an official Post Graduate Certificate upon completion. This 2nd course will be completed in Q2 2020.

4.3.4.7 Duty of Care

Stahl carried out a review of its risk assessment and control policies within the scope of the French laws on Duty of Care. This review covered the risks linked to its employees, suppliers and customers/external markets. Stahl has adopted governance policies covering health and safety, environment, human rights in order to mitigate such risks. These policies are included in the risk mapping section below.

4.3.4.7.1 Vigilance Plan

Stahl's vigilance plan corresponds to the French law 2017-399 (March 2017) on Duty of Care. The vigilance plan identifies and aims to prevent the risk of serious violations of human rights and fundamental freedoms as well as harm to human health, safety and the environment. The Stahl Vigilance team meets periodically to monitor the effectiveness of the Vigilance plan.

1. **Risks linked to human rights and the societal impact of Stahl's activities, *e.g.* forced labour, freedom of association, modern slavery, discrimination, diversity and inclusion.**

Stahl recognizes that modern slavery, corruption, diversity and discrimination need to be eliminated from its industry at all levels.

Mitigating the risk:

- Stahl's Code of Conduct for employees (introduced in April 2013) describes its commitment to a working environment where equal opportunity and respect are prioritized. The Stahl Employee Code of Conduct has chapters on modern slavery, conflicts of interest, business practices, data and IP protection, financial reporting and also outlines the whistleblower rules;

- the Stahl whistleblower policy allows employees to report suspicious behaviour, by e-mail or phone, which could be in conflict with the Code of Conduct, with the necessary protection guarantee for the whistleblower in question. An email address dedicated to report suspicious behaviour by external parties is publically available on the website;

- Stahl introduced a Code of Conduct policy in 2015 for its business partners, and it initiated supplier audits in 2018 as a means to mitigate the risks of non-compliance with the Code of Conduct. This supplier auditing process will be upgraded and formalized in 2020 using the Ecovadis system of self-assessment. The Code of Conduct is already standard part of all commercial agreements and contracts with third parties doing business with Stahl. Both Codes of Conduct are discussed during the monthly Management Team and quarterly meetings with the Quarterly Executive Control Group;

- the company implements a separate policy on diversity and inclusion in the workplace (Stahl group Diversity and Inclusion Policy). The policy commits to embedding equality, diversity and inclusion across the organization rather than viewing it as an abstract principle. Equal treatment is at the heart of the organization and Stahl believes that this will produce a more innovative and responsive organization. The company also believes that there is much more to diversity than age, gender, race and cultural background. A diverse workplace includes people who can offer a range of different viewpoints and ideas;

- consistent with its strategy of growing its leadership talent, Diversity and Inclusion principles have also been embedded within its core leadership development programs to encourage managers to demonstrate them as part of their leadership behaviour. Stahl has also committed to build cultural intelligence and equality into its performance review, hiring and talent identification processes;

- the company runs online training courses to ensure that employees understand the issues of modern slavery, diversity, discrimination, equal treatment, sexual harassment etc., with regard to their own behaviour and that of the company's business partners. To complete the e-learning training, participants are required to study the material and take a test at the end. Special attention is given to awareness in these programs, and to the red flags that can indicate non-compliant behaviour in the supply chain. All employees received further compliance training in 2019 as part of the Employee Engagement Platform (EEP) as described in the HR chapter of this report.

2. **Risks linked to the health and safety of employees & contractors, including accidents, injuries, illness, exposure to chemicals.**

The risks in this category range from injuries to employees from slips or falls, to more significant accidents involving chemical spills, machinery operations or exposure to dangerous substances. These are well known in the (heavily regulated) chemical industry and Stahl holds itself to the highest health and safety standards in this respect.

Mitigating the Risk:

- Stahl is confident that the residual risk specific to its own activities related to safety and health is low, given the highly regulated nature of the chemical business and additional actions taken by Stahl to mitigate these risks;

- the chemical industry is governed by strict legislation, permits and licenses. External organizations, including governmental bodies, ISO and many industry initiatives, visit and audit Stahl on a regular basis;

- Stahl has a strict SHE (Safety, Health and Environment) policy that sets clear rules, guidelines and KPIs for all its manufacturing sites and work places. With regards to safety Stahl has drawn up a zero tolerance policy towards unsafe acts;

- the Stahl Code of Conduct for business partners includes a health and safety section;

- auditing of Stahl sites is continuous and reporting on safety and health, including accidents and incidents, is done monthly and annually;

- training courses are held continuously throughout the company on chemicals management and handling of flammable materials;

- the use of CE certified equipment is mandated as well as associated training;

- Stahl has identified safety and health risks at customers who use its chemicals, and this also requires action for mitigation, given the potential harm caused by its products to people working at those organizations. Indeed many of its customers work in environments which are not as highly regulated as the chemical industry. Stahl has taken action, either alone or in conjunction with other peer companies and NGOs, to train users in these cases on (1) the safe use of chemicals, (2) the correct use of personal protective equipment, and (3) communicating clear rules on exposure prevention for potentially harmful chemicals. In addition to this, Stahl itself regularly hosts seminars around the world, for example in India, Pakistan and Bangladesh, which are attended by large groups of customers, which are focused on safety, health, environmental stewardship and sustainability in general. In 2019 Stahl initiated a project as part of the TEGEWA group of chemical suppliers in Bangladesh, in conjunction with the Dutch NGO, Solidaridad, on improving the safe handling of chemicals in the leather manufacturing area in Dhaka. Using its knowledge, and that of governance bodies like UNIDO, Stahl hopes to improve the well-being of factory workers in the cluster *via* practical training on the use of protection equipment and knowledge training on the use and handling of typical chemicals used in the industry;

3. **Risks linked to protection of the environment, *e.g.* air & water pollution, water consumption, waste management, restricted chemical substances, climate change, biodiversity, local community impact.**

These risks are linked to unplanned releases to the environment of hazardous materials from Stahl sites, as well as the risks linked to the environmental stewardship practices of its partners in the supply chain, especially those who use its products in their manufacturing operations.

Mitigating the risk:

- Stahl recognizes the challenges for the planet and has aligned its policies to the 17 Sustainable Development Goals agreed by the United Nations in 2015, and to the targets outlined in the Paris Climate Accord;

- climate change: in 2015, Stahl established a 5 year target for CO_2 emissions reduction (less than 10%). The company achieved that target in 2019. CO_2 emissions are reported each quarter, and in the annual Stahl ESG report;

- Stahl's strict SHE policy covers the risks linked to spills or releases into the environment, including a dedicated spill team who are trained regularly;

- spills, releases, incidents and environmental KPIs (CO_2, energy, water, waste) are reported and analysed monthly;

- environmental stewardship in the supply chain: Stahl's corporate strategy is to initiate projects that promote transparency throughout the supply chain. This includes the promotion of responsible environmental practices in the industries that the company serves. As an example, Stahl is a Board member of the Leather Working Group, the largest leather industry association. The Leather Working Group (LWG) has developed an audit protocol for leather tanneries around the world in order to level the playing field and create a recognized standard for environmental stewardship. Approximately 20% of the world's leather is audited according to the LWG protocol. Stahl also hosts annual seminars in India, Pakistan and Bangladesh, attended by large groups of customers, NGOs and industry associations, during which safety, health, housekeeping and environmental stewardship issues are presented and discussed in detail;

- Stahl's global portfolio for the garment fashion & footwear segments has been certified as compliant to the ZDHC MRSL. Approximately 1200 products have been certified at Level 3 compliance to the ZDHC Gateway conformance, the highest compliance level.

4.3.4.8 Stahl Reporting methodology

4.3.4.8.1 Reporting scope

- Unless otherwise indicated, HR data are reported for all Stahl entities worldwide.

- Reporting scope – history for environmental data.

Site	2019	2018	2017	2016	2015
Brazil, Portao	Y	Y	Y	Y	Y
China, Suzhou	Y	Y	Y	Y	Y
France, Graulhet	Y	Y	Y	-	-
Germany, Leinfelden	Y	Y	Y	Y	Y
India, Kanchipuram	Y	Y	Y	Y	Y
India, Ranipet	Y, until & including June	Y	Y	Y	Y
Italy, Palazzolo	Y	Y	Y	Y	Y
Mexico, Toluca	Y	Y	Y	Y	Y
Netherlands, Waalwijk	Y	Y	Y	Y	Y
Singapore, Singapore	Y	Y	Y	Y	Y
Spain, Hospitalet	Y, until and including June	Y	Y, from October onwards	-	-
Spain, Parets	Y	Y	Y	Y	Y
USA, Calhoun	Y	Y	Y	-	-
USA, Peabody	-	-	Y, until and including September	Y	Y

Y=Yes, full year and – = not reported.

Methodological limitations and uncertainties

The reporting methods for certain CO_2 indicators for Scope 3 emissions may have certain limitations due to the pragmatic considerations of collecting and consolidating the relevant data.

4.3.4.8.2 Social indicators

Total workforce

The total workforce is the number of employees with a permanent or fixed-term contract with the Stahl group on the last calendar day of the month. The data are reported in terms of full-time equivalents.

4.3.4.8.3 Safety indicators

Population considered

In the KPI preparation, the following types of population are considered:

- contractor specific: A contractor present at Stahl only for specific projects or works;

- contractor usual: A contractor present at Stahl on a regular basis. i.e. maintenance personnel, security guards or personnel working in the canteen;

- Stahl worker: any person having a personal work contract with Stahl.

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