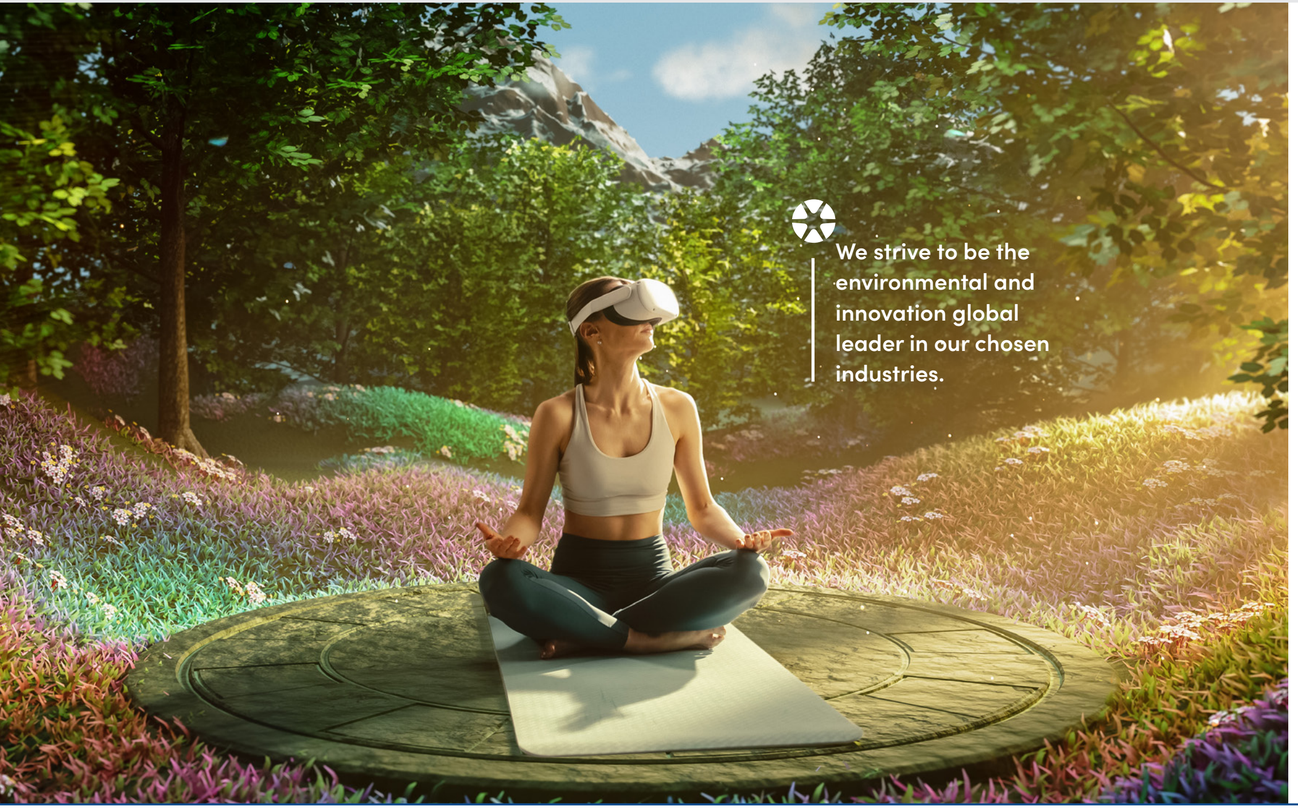
DyStar®

DyStar®

Committed to Sustainability

INTEGRATED SUSTAINABILITY REPORT

2022–2023



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Key Highlights of The Year

RESILIENT ECONOMIC PERFORMANCE

USD 898.88 million
in revenue

USD 115.79 million
economic value retained

USD 100.60 million
paid in global employee wages and benefits

SUSTAINABLE PRODUCTION AND SUPPLY CHAIN

100%
of new suppliers underwent ESG screening according to DyStar's supply chain policy

80%
suppliers assessed for environmental impacts

54
textile dyes awarded the Cradle to Cradle Product Innovation Institute® Platinum Level Material Health Certificate™

SUPPORTING AND DEVELOPING OUR PEOPLE

29%
management roles held by women

20,927.87
staff training hours

0
discrimination reported

0
workplace fatalities, high-consequence injuries and work-related ill health

100%
employees at manufacturing sites attended safety trainings

100%
operations assessed for risks relating to corruption

0
corruption

INNOVATIVE PORTFOLIO

Member of **27**
industry organizations and business associations

500
regulated or restricted substances monitored through econfidence®

1,793
bluesign® approved DyStar products

28
"Positive Lists" on eliot®

2,200
DyStar products are recommended for use on Oeko-Tex® Standard-compliant articles

450
substances registered according to EU REACH®

1,750
substances pre-registered according to KKDIK

2,464
products compliant with ZDHC MRSL 2.0

ENVIRONMENTAL RESOURCE MANAGEMENT

↓45%
emissions intensity 2022 vs. 2011

↓1.4%
energy intensity 2022 vs. 2011

↓14%
water intensity 2022 vs. 2011

↓52%
wastewater intensity 2022 vs. 2011

↑43%
waste production intensity 2022 vs. 2011

70.75 thousand m³
water reused

0
significant impacts on local biodiversity or habitats

/ ABOUT DYSTAR /

Our Business & Purpose

Our Business and Services

The DyStar Group (referred to as "DyStar" or the "Group") is a leading dyestuff and chemical manufacturer and solution provider, anchored by its core purpose to create sustainable value for stakeholders across the value chain – from communities, employees, retailers, and industry partners. DyStar offers a broad portfolio of colorants, specialty chemicals, and services globally. With a heritage of more than a century in product development and innovation in the textile industry, the Group has expanded its portfolio to the paint, coating, paper, and packaging industries.

The following are the key industries that DyStar is involved in:

TEXTILE & LEATHER

PERSONAL CARE, PHARMA & HOUSEHOLD

FOOD & BEVERAGE

PAINTS, COATINGS, INDUSTRIAL & CONSTRUCTION

PRINTING, PAPER & PACKAGING

WATER TREATMENT & AGRICULTURE

Our Purpose to Create Sustainable Value

DyStar is guided by its core values – "Responsibility", "Innovation" and "Excellence" in its effort to create economic, societal and environmental value for stakeholders in our value chain.

OUR PURPOSE

We strive to be the environmental and innovation global leader in our chosen industries

OUR VALUES

RESPONSIBILITY

We are committed to conducting our business activities with the highest levels of integrity and ethical standards. We also ensure a safe and healthy environment for our employees and provide them with equal opportunities.

INNOVATION

We are committed to continuous innovation in products and services, as well as in manufacturing techniques and business processes. This helps us to deliver environmentally compatible products, minimizing our environmental footprint and those in the value chain.

EXCELLENCE

The quality of our products and services is a key factor in our company's success and underpins the fulfillment of our corporate goals. We also aim to create an open and creative work environment to attract talented and services-oriented employees.

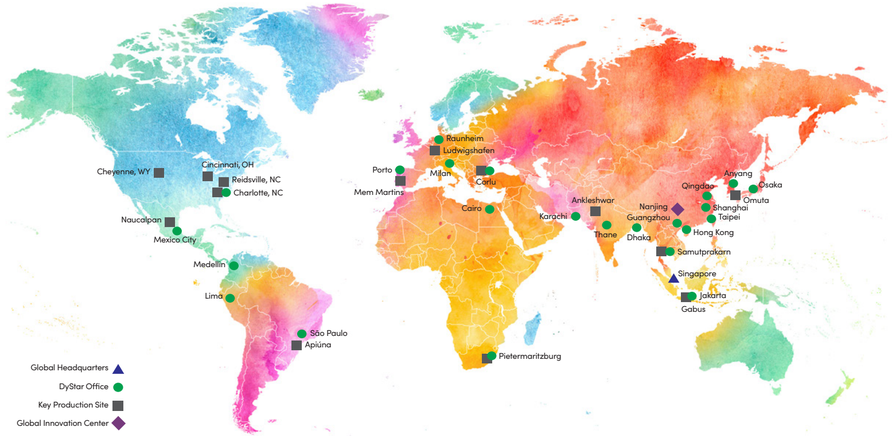
About This Report

DyStar reaffirms its commitment towards global sustainability efforts[1] with the publication of its 13th annual Sustainability Performance Report.

This report communicates how DyStar is creating value for stakeholders by integrating sustainability into its policies, operations, and value chain. The Group also discloses its economic, environmental, social, and governance ("EESG") performance that are material to its customers and stakeholders.

Reporting Scope

This report covers DyStar's global portfolio, including all production sites, warehouses, offices, and laboratories that are either owned or operated by DyStar in over 50 countries for the financial year 1 January 2022 to 31 December 2022.



Where relevant and available, this report provides comparative historical data. At DyStar, Sustainability Reporting (inclusive of financial performance) is performed on an annual basis, with its last report, 2021– 2022 Integrated Sustainability Report, published in September 2022. No other significant changes in reporting scope were observed between reporting years.

Reporting Framework

This report has been prepared in accordance with the Global Reporting Initiative ("GRI") Standards 2021, which provides a comparable and credible way to disclose the Group's ESG performance.

The reporting principles of comparability, accuracy, timeliness, clarity, and reliability, as set out by the GRI Standards, were also adhered to in the development of this report. The GRI Content Index, along with the applicable disclosures, is detailed on pages 90 - 95 of this Report.

This report also takes reference from the International Integrated Reporting Council's ("IIRC") Integrated Reporting Framework. The Group believes the IIRC framework provides stakeholders with a holistic view of how the interrelation between ESG and financial performance can unlock value for stakeholders.

Lastly, this report is in line with the United Nations' Sustainable Development Goals ("UN SDGs") and highlights DyStar's efforts to contribute to the UN SDGs that are most relevant to its business. The report demonstrates DyStar's commitment to addressing pressing sustainability issues and striving towards a more sustainable future.

Data and External Assurance

DyStar has enlisted the services of an external consultant to ensure that sustainability performance data is collected uniformly across all global operations. A third-party data management system is employed to gather and evaluate this information. Working with a global consulting partner, DyStar employs this external data management system to collect, analyse, and review sustainability performance data from all its business entities in a standardized manner. While the data presented in this report is not externally verified, DyStar is considering options to have highly material portions externally verified in upcoming sustainability reports.

Feedback

DyStar welcomes feedback from all stakeholders as it seeks to continuously improve upon all aspects of its Sustainability journey. Please address any feedback or questions at www.DyStar.com/contact-DyStar/.

[1] *The Group takes reference from the United Nation's Sustainable Development Goals (UN SDGs) and relies on the science-based assessments of the Intergovernmental Panel on Climate Change (IPCC) to inform its Sustainability.*

/ ABOUT DYSTAR /

Executive Board Director Statement

The world has become more complicated with a cascading series of global crises and conflicts starting with COVID-19 pandemic. And all these threats are creating significant challenges to the global economies and the supply chain we operate in today.

In 2022, we saw the global economy losing momentum in the growth story from 2021. In the wake of the Russia-Ukraine war, energy prices, transportation and labour costs have caused many businesses across the world to suffer on their reporting cards. Our dye business operations, like many other businesses, are similarly challenged by the pressure of higher costs of energy, transportation, and labour altogether. What has made it worse is that inflation has reached levels not seen since the 1980s.

Resilience allows us to navigate through tough times and seize the moment. In that respect, DyStar has cautiously remained optimistic in our global performance, despite our revenue for 2022 taking the bite from the impact of this unfortunate chain of events directly affecting our bottom lines, our markets and global textile and fashion industries.

Although the risk factors remain skewed to the downside and are linked to the war, and associated disruptions in energy and food markets, financial vulnerability, and trade tensions, we believe our innovation strategies and value-creation model will keep us in good check and balance.

For example, compared to our base year in 2011, DyStar successfully reduced environmental impacts such as:

1. emission intensity by 45%
2. water intensity by 15%
3. wastewater intensity by 52%.

In summary, the Board and Senior Management team remain committed towards meeting our 2025 targets despite the emergence of new challenges in a difficult operating environment today.

Xu Yalin
Executive Board Director

/ ABOUT DYSTAR /

Chief Executive Officer Statement

I am pleased to present DyStar's FY22 Sustainability Report, which highlights our performance, improvements, and future opportunities as we strive to become an environmental and innovation global leader. Despite the challenges faced during the year, DyStar remained committed to our sustainability goals and made significant progress in various areas.

Observations

The year 2022 started strongly for DyStar after a good recovery from the previous year. However, we experienced some impact due to external factors, primarily driven by the worsening growth-inflation of the global economy. This resulted in a slowdown in demand, including in the textile and related products industry.

Our dye business operations, like many others across economies, faced challenges such as higher energy, transportation, and labor costs. The inflation levels reached were unprecedented since the 1980s, further adding to the complexities we encountered.

Financial, Environmental, and Social Aspects

Financially, the risks remained skewed to the downside, associated with the war, disruptions in energy and food markets, financial vulnerability, and trade tensions. Despite these challenges, DyStar consistently demonstrated our commitment to strengthen our sustainability offerings, benefiting both the environment and the rest of the stakeholders.

In terms of environmental progress, DyStar has made significant strides in promoting a Green Supply Chain in China. Our close collaboration with suppliers has improved transparency in the supply chain, helping us to achieve positive environmental outcomes. Under an industry program led by Institute of Public & Environmental Affairs (IPE), an NGO based in China, DyStar emerged as second placing for The Green Supply Chain Corporate Information Transparency Index (CITI).

Furthermore, we have embarked on an Environment Health & Safety Standardization Project, focusing on enhancing the safety and well-being of our employees and optimizing our operational impacts.

We have also prioritized the mental and physical well-being of our employees. DyStar Singapore achieved the Overall 2nd place at the National level for the National Steps Challenge Season 6 Corporate Challenge. Additionally, we have grown our influence over the social community on LinkedIn®, gaining over 7,000 new followers.

Risks and Challenges Ahead

Looking ahead to 2023, we anticipate challenges in the global textile industry, including rising costs and weakening demand across most markets. Logistics and warehousing solutions are also expected to remain challenging. As inflation rises, demand weakens further, and inventories remain high.

In the APAC region, particularly China and India, we anticipate accounting for approximately 76% of the growth market. Challenges related to manpower, water and resources, SBTI standards, climate impact disclosure, and supplier engagement will require our attention and proactive mitigation efforts.

To address these risks, DyStar is committed to introducing new products in differentiated categories such as Food Chemicals and Dyes, and Performance Chemicals. We are expanding our Auxiliary footprint and restarting new product lines in cooperation with our shareholders. Additionally, we are actively developing new market segments in the field of Bio Technologies to diversify our offerings.

Changing Landscape and Opportunities Ahead

We acknowledge that challenges are increasing in making our global supply chain cleaner, better, and more efficient. Water consumption in many regions poses a real threat, and so is energy supply becoming more expensive. We are determined to help our customers by offering more innovative solutions such as through our Cadira® concept, without compromising quality and performance.

One of the key opportunities ahead lies in striking the right balance between improving our environmental footprint and managing costs effectively. DyStar, with its established setup, is well-equipped to meet these challenges. However, the speed of implementation may depend on various factors that we will closely monitor and adapt to accordingly.

To conclude, in pursuit of becoming an environmental and innovation global leader, we will continue to explore opportunities for growth and development. By leveraging our expertise, expanding into differentiated product categories, and embracing bio technologies, we aim to address emerging market demands and meet the evolving needs of our customers.

Thank you for your continued trust in DyStar.

Eric Hopmann
Chief Executive Officer

/ ABOUT DYSTAR /

Governance Structure

DyStar has been dedicated to maintaining the utmost standards of corporate governance, performance, and ethical practices throughout all its operations since its establishment in 1995. The Board and Senior Management are accountable for upholding DyStar's objective of generating sustainable value for stakeholders along the entire value chain, as well as safeguarding the long-term business viability of the company.

Board of Directors

DyStar is constantly reviewing its governance structure to ensure that it meets the business and relevant stakeholders' needs. At DyStar, there is a distinct separation of roles between the Chairman and the Chief Executive Officer (CEO) roles to ensure a balance of authority and to allow independent decision-making. The Board is accountable for providing oversight over the company and establishing the tone for DyStar's long-term business objectives, organizational strategy, risk management, and global operations. The Board collaboratively reviews and approves business plans to guarantee that DyStar can fulfil its goal of creating sustainable value. Additionally, it is the Board's duty to ensure that environmental and social factors are taken into account during the decision-making process.
DyStar's daily operations are overseen by Executive Board Director (EBD), Xu Yalin, who is based in Singapore. He also serves as the representative of the Board, acting as the primary liaison between the Board and the Senior Management. He coordinates with members of the Senior Management to ensure the Board's decisions and strategies are successfully realized.

BOARD OF DIRECTORS
Ruan Weixiang *Chairman*
Xu Yalin *Executive Director*
Yao Jianfang *Director*
Manish Kiri *Director*
Amit Mukherjee *Director*

Board Committees

The Board is supported by the Audit Committee and the Remuneration Committee, which meet periodically to discuss current and future developments, opportunities, and assessments of new projects and policies.

The Audit Committee plays a crucial role in overseeing DyStar's internal control procedures and internal audit function, assessing the objectivity and independence of external auditors, verifies the Group's financial statements and all financial performance announcements.

The Remuneration Committee oversees DyStar's policies and practices on human resources and advises the Board on remuneration practices, appointments, and compensation matters.

Senior Management Team

Led by the Group's Executive Board of Director ("EBD") and Chief Executive Officer ("CEO"), the Senior Management team is responsible for implementing the strategies and objectives set forth by the Board, and places a strong emphasis on efficacy, transparency, and sustainability while carrying out their duties.

The Senior Management team is also responsible for fostering a culture of ethical business conduct that is consistent with DyStar's mission and purpose. To do so, it has formed a Sustainability Committee, which consists of eleven members – each from a key function in the Group.

Sustainability Committee

The Sustainability Committee, which is accountable to the CEO, is responsible for implementing the Board's Sustainability strategy in line with the Group's purpose. The Committee convenes each quarter to assess DyStar's Sustainability performance and progress as well as industry developments which may affect the Group's risks and opportunities.

The Committee conducts stakeholder engagement to raise awareness and promote sustainability practices in the industry, strengthen sustainable product development within DyStar, and monitor the Group's ESG performance. The Committee also periodically reviews and recommends key ESG risks and opportunities to the Board.

An internal Sustainability-themed newsletter is also circulated to major stakeholders within DyStar to keep them abreast of the latest industry developments, as well as relevant global news surrounding legislation, innovation, and climate change.

A sustainability-related enquiry page is also available on DyStar's website to anticipate any knowledge gaps and feedback from stakeholders.

DYSTAR SUSTAINABILITY COMMITTEE	
Eric Hopmann *Chief Executive Officer*	**Fanny Vermandel** *Vice President* *Global Marketing Coloration*
Hartmut Behnke *Director* *Global Marketing Auxiliaries*	**Thorsten Huels** *Director* *Global Marketing Denim*
Markus Dorer *Head* *Global Marketing Printing*	**Ng Siew Boon** *Vice President* *Global Finance*
Vera Huang *Vice President* *Global Procurement*	**Clement Yang** *Vice President* *Global Manufacturing*
David Tan *Senior Director* *Global Supply Chain Management*	**Clemens Grund** *Senior Director* *Global Product Safety & Ecology and Global Intellectual Property*
Adrian Ho *Senior Manager* *Global Communications*	

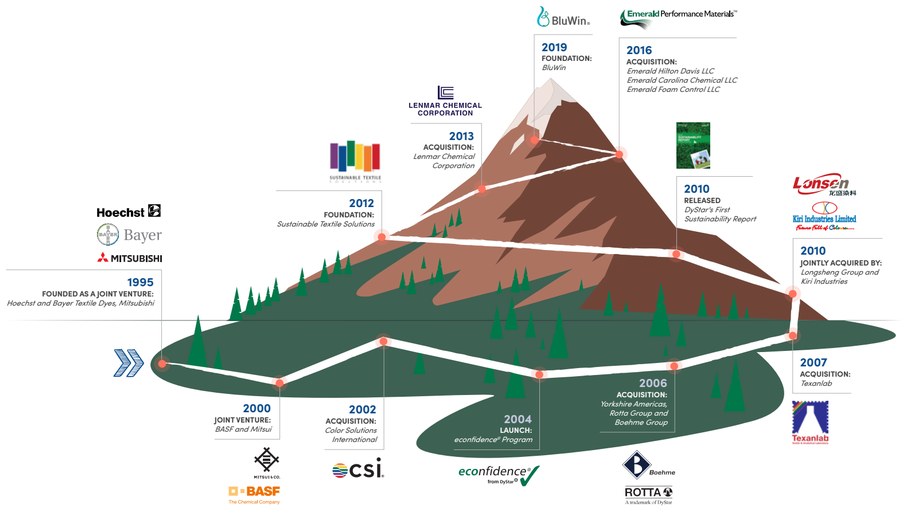
/ ABOUT DYSTAR /

Our Approach to Sustainability

Our Sustainability Journey

DyStar draws on the pioneering research of its parent companies in the synthetic dyes chemistry sector, such as Hoechst AG, Bayer AG Textile Dyes, Mitsubishi, BASF AG Textiles Dyes, and Mitsui, which spans over a century.

DyStar has since been creating innovative products and services that meet the most stringent quality, safety, and environmental standards. In this manner, the company can leverage its capabilities and role in the value chain to enhance social and environmental performance throughout the industry.



Building upon its rich history, DyStar's business continues to expand steadily, branching out into new markets and sectors such as plastic, paper, and many others.

Creating Sustainable Value

DyStar's Sustainability strategy is aligned with the Group's purpose to create value for stakeholders across the value chain.

The Group's vision is to become an environmental and innovation global leader in its chosen industries. This is guided by its core values – Responsibility, Innovation, and Excellence. To put these values into action, the Group has identified four focus areas to translate these values into practical measures that strengthen its ESG endeavours.

DYSTAR'S SUSTAINABILITY STRATEGY

Creating safer and better products

DyStar continuously innovates its products to ensure it is better, safer, and environmentally preferable to create value for its stakeholders and the community.

Conserving the environment

DyStar adopts a two-fold Sustainability approach – reducing its own environmental impact and helping customers reduce theirs. To that end, DyStar has set a 2025 target to reduce its environmental impact across the main focus areas of energy, greenhouse gas emissions, water, and waste. Additionally, DyStar also established its organizational sustainability structure to optimize its operational impacts.

Caring for our people

Recognizing that employees are its most valuable asset, DyStar takes tangible steps to create a diverse workplace and invests in continuous learning for all employees to build a resilient organization.

Communicating our value creation

DyStar communicates a summary of its Sustainability strategy and progress in managing ESG issues through its annual Integrated Sustainability Report. DyStar also advances sustainable development by aligning with the UN SDGs.

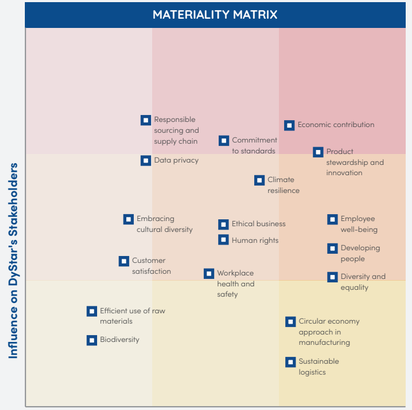
[2] For more information, please see the Sustainable Production and Supply Chain and Innovative Portfolio chapters.

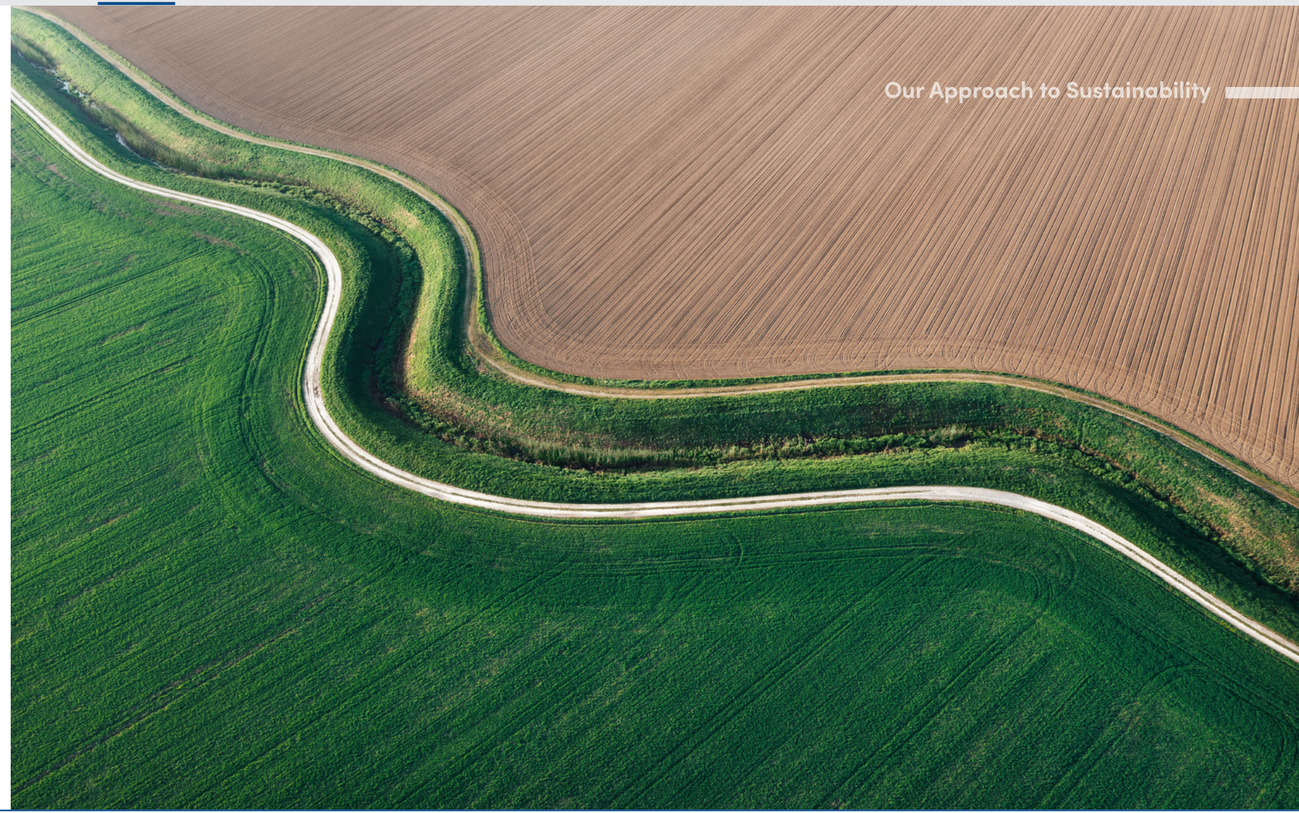
To have a meaningful effect, Sustainability must be implemented throughout all aspects of a company's operations and value chain. At DyStar, Sustainability is prioritized by incorporating sustainable practices into daily operations and the value chain. DyStar is dedicated to promoting Sustainability throughout the entire value chain. In addition to minimizing its own operational impact, DyStar works with upstream suppliers to improve its ESG performance and maintain ethical standards. The company also actively markets and supplies a diverse range of responsible products, tools, and services to meet the needs of customers, brands, and retailers[2].

Our Material Matters

The materiality review seeks to identify important environmental, social, governance, and economic factors that could significantly affect DyStar's enterprise value. It includes assessing how these factors influence stakeholders' perception of DyStar's relationships and interactions. This analysis helps DyStar to prioritize crucial topics in the Group's business and financial decisions, aligning with its core purpose and Sustainability strategy.

DyStar conducts an annual materiality review. In FY2022, the Group reviewed its materiality topics identified in FY2021. The Group centred its review around ensuring that material topics were those which significantly impacted the chemical manufacturing industry in line with emerging global climate and ESG trends. DyStar's Senior Management validated that these topics are still aligned with the Group's purpose and Sustainability strategy.





Our Approach to Sustainability

Decarbonisation Peer Benchmarking

The textile industry contributes to a significant percentage of global Greenhouse Gas (GHG) emissions and is consequently under great pressure to step up efforts required to reduce GHG emissions. DyStar acknowledges its responsibility in addressing this issue and understands that chemistry-based products and innovations hold immense potential in paving the way for a future that is climate-neutral. In line with this, DyStar is working intensively to significantly reduce the carbon footprint of our production and thus of our products. DyStar also has an overall environmental target, which is to reduce its environmental footprint by 30% for every ton of product by 2025 against the baseline year of 2011.

However, considering the industry's risk and growth drivers, it is critical for DyStar to refresh its environmental targets to realign with the current regulatory market landscape. DyStar also believes it is important to re-evaluate and align its Sustainability efforts standing in the market, with an increased focus on decarbonization.

Hence, in FY2022, DyStar conducted a peer benchmarking exercise focusing on decarbonisation-related policies, processes, and practices. DyStar views this peer benchmarking exercise as a strategic tool to improve its performance, identify areas for improvement, foster innovation, and meet the evolving expectations of investors and stakeholders in addressing climate change. By examining the targets, policies, processes, and practices implemented by other companies in the same industry, DyStar can gain valuable insights into best practices and identify areas where it may be falling behind or excelling. Ultimately, the findings from the benchmarking can guide the development of more robust strategies and initiatives to close those gaps and align with industry leaders in decarbonization efforts.

For this exercise, four key peers were chosen and their disclosures around several key environmental metrics were assessed. The key observations and corresponding recommendations arising from the peer benchmarking exercise are outlined in the table below. DyStar will consider implementing the action plan in a phased approach and aim to disclose our progress in future reports.

KEY OBSERVATIONS	DYSTAR'S ACTION PLAN
In reflection of peers' practices and market expectations (e.g., CSRD and ISSB standards), companies are expected to review their upstream and downstream value chain and disclose Scope 3 emissions comprehensively across all 15 categories (where applicable).	**Expand DyStar's Scope 3 GHG Inventory** • Conduct a review of DyStar's value chain to identify key Scope 3 categories for tracking, calculation and reporting
Aligned with peers' practices and global best practices, companies are encouraged to set long-term targets (with short- and medium-term interim targets). DyStar currently has a medium-term target. However, it is important to set targets in reference or aligned to globally recognised standards to ensure credibility and comparability.	**Refresh decarbonisation target and strategies to reduce emissions in phases** • Review DyStar's environmental targets guided by Science Based Targets initiative (SBTi) standards, which is widely adopted in the European and Asian markets. • Refresh strategies to reduce emissions, including renewable energy procurement (Scope 1 and 2). Scope 3 to be considered in the Year 2024/2025.
DyStar would need to focus on building resilience to climate risks. This involves not only reducing emissions and mitigating risks but also developing strategies to adapt to changing climate conditions and regulatory requirements in regions of operations.	**Conduct climate risks and opportunities assessment in line with Task Force on Climate-related Financial Disclosures (TCFD)'s recommendations** • Conduct a comprehensive climate risk assessment to identify specific hazards and vulnerabilities as well as opportunities most relevant to DyStar's operations. • Based on the assessment, develop a climate risk management framework including strategies. • Embed climate risk into DyStar's Enterprise Risk Management Framework, strategic planning, and financial planning. • Engage stakeholders to ensure that they understand the risks and support DyStar's climate risk management efforts. • Develop monitoring process of climate risks and opportunities.

[3] *The six capitals are aligned to IIRC's framework and DyStar demonstrates its value creation through these six capitals in subsequent chapters.*

Communicating Sustainability Performance

DyStar holds the view that Sustainability and business are interconnected and should be treated to create value for stakeholders. In alignment with the IIRC framework, the Group takes into account six key forms of capital – Financial, Manufactured, Intellectual, Natural, Human, and Social – in all of its business and financial processes. DyStar demonstrates the creation of value through the application and production of these various forms of capital. Furthermore, the company employs these six capitals to provide a more comprehensive understanding of its financial, business, and ESG performance when communicating with stakeholders[3].

CAPITAL	INPUTS	CAPITAL	BUSINESS STRATEGIES	OUTPUTS	STAKEHOLDERS OF INTEREST
Financial DyStar's financial capital is made up of its balance sheet, cash flow, and investments which can grow the business and create value for stakeholders.	• Global operating cost: **USD 647.83 million** • Global employee wages & benefits: **USD 100.60 million** • Payments to Governments: **USD 38.66 million**		• Prioritizing the hiring of local employees and relying on local suppliers • Proactively invest in infrastructure and technology	• Global revenue: **USD 898.88 million** • Economic value retained: **USD 115.79 million**	• Employees • Customers, Brands and Retailers • Suppliers
Manufactured DyStar's manufactured capital focuses on strengthening the Sustainability of its supply chain and ensuring a reliable supply of raw materials.	• Raw material: **62.06 thousand tons** • Packaging material: **7.60 thousand tons** • All new suppliers are required to sign DyStar's Letter of Commitment		• Strict supply chain policies to ensure responsible sourcing of materials and suppliers • Continuously seek new ways to reduce supply chain disruptions and optimize material efficiency • Enhance Sustainability logistics by partnering with third parties to collect, clean and re-distribute intermediate bulk containers	• Total production: **105.46 thousand tons** • Core product range: Textile Dyes, Inks and Pigments, Colorants and Process Additives Applied in Consumer Products, Textile & Apparel Auxiliaries, Industrial Colorants and Performance Chemicals	• Customers, Brands and Retailers • Suppliers
Intellectual DyStar's intellectual capital consists of its strengths to drive innovative solutions in its industry and partnerships with external associations.	• Number of industry organisations/business associations: **27** • Sustainability with technology: **eliot® & Cadira®** • Textile effects and labels: **Evo® finishing products**		• Innovate new products to meet the changing requirements of its customers and enhance product performance	• **500** regulated or restricted substances monitored through econfidence® • Conducted **Five** public webinars attended by **709** industry audiences • **11** Cadira modules • **450** substances registered according to EU REACH®	• Customers, Brands and Retailers • NGOs and Industry Associations
Natural DyStar's natural capital builds upon its commitment to conserve resources, avoid waste, and promote a circular economy.	• Direct energy consumed: **593.60TJ** • Indirect energy consumed: **458.46TJ** • Water withdrawal: **6.60 million m³** • Water reused: **70.75 thousand m³** • Direct GHG emissions – Scope 1: **33.70 thousand tCO_2e** • Indirect GHG emissions – Scope 2: **23.21 thousand tCO_2e** • Wastewater discharged: **0.90 million m³** • Hazardous Waste: **10.44 thousand tons** • Non-hazardous waste: **2.81 thousand tons** • Numbers of spills, total amount spilled: **20 spills, 12.02 tons**		• Enhance energy efficiency through energy conservation initiatives • Increase the proportion of renewable energy • Practice responsible waste management • Improve operational processes to enhance water efficiency	• Energy consumption intensity: **9.98 GJ per ton of production** • Water withdrawal intensity: **62.59 m³ per ton of production** • GHG emissions intensity: **0.54 tCO_2e per ton of production** • Wastewater intensity: **8.57 m³ per ton of production** • Overall waste intensity: **125.70 kg per ton of production**	• Employees • Customers, Brands and Retailers • Suppliers • NGOs and Industry Associations
Human DyStar's human capital comprises the skills and experience of its employees as well as ensuring the business is conducted with integrity and fairness.	• Total number of workforce: **1,719** • Total training hours: **20,927.87** • **100%** of operations assessed for risks relating to corruption		• Create an inclusive work environment and ensure fair hiring practices • Place emphasis on upskilling employees' core competencies • Provide training programs to attract capable managers • Cultivate a strong safety-first culture	• **29%** of Management roles held by women • **0** cases of workplace fatality • **0** cases of corruption and anti-competitive behavior	• Employees • Customers, Brands and Retailers • Suppliers • NGOs and Industry Associations
Social DyStar's social capital is made up of its interaction with local communities to ensure its business generates positive outcomes for them.	• Donated **USD 128,942**		• Provide opportunities for employees to be part of various community outreach initiatives • Prioritize locals in its hiring process		• Employees • NGOs and Industry Associations

Risks and Opportunities

RISK LANDSCAPE	IMPACT ON DYSTAR	RISK AND OPPORTUNITY STRATEGIES
Macroeconomic and business risks	Energy and geopolitical risks can interrupt the supply chain and influence how the business will develop.	DyStar is placing emphasis on energy reduction by implementing technical measures to reduce its emissions and having a regular monitoring system in place to enhance energy efficiency.
Financial risks	Unprecedented events such as the COVID-19 pandemic or political affairs can affect global operations and weaken global supply chains. This may lead to extensive economic impacts such as increased liquidity and credit risks.	At the end of FY2022, DyStar did not hold any external loans and continues to have ample cash reserve and/or cash equivalent. Additionally, DyStar also maintains credit lines at banks in the event where additional funds are required.
Climate change risks	Climate-related physical and transition risks such as increased environmental regulations and more frequent extreme weather events can result in disruptions to local and regional operations including impact on supply chain demand etc.	DyStar consistently makes investments in cutting-edge technologies and operational enhancements to reduce its environmental impact. As consumers shift towards environmentally-friendly products, DyStar's environmental leadership uses this to its advantage by ensuring transparency and addressing the needs of end consumers. To ensure DyStar is adapted and thrives in a low-carbon future, DyStar's Management continuously seeks to better comprehend climate threats and demonstrates climate leadership.
Supply chain risks	Supply chain disruptions and supply shortages may lead to significant cost increases and lack of raw materials.	DyStar has a comprehensive strategy to ensure Sustainability is embedded across its workflow from purchasing, production, and logistics operations. DyStar launched various initiatives such as a supplier audit program and a tool to evaluate the environmental performance of its key suppliers periodically.
Regulatory risks	Stricter environmental regulations and the ensuing random factory inspections may reduce the supply of essential raw materials and limit industry output due to unscheduled supplier closure and small chemistry factory closure.	To ensure the supply of raw materials are not affected and assurance over the products' environmental standards, DyStar produces essential raw materials and intermediates for the dyestuff industry at its integrated chemical industry park. Additionally, environmental performance metrics are closely monitored by DyStar to ensure compliance with all applicable laws.

RISK LANDSCAPE	IMPACTS ON DYSTAR	RISK AND OPPORTUNITY STRATEGIES
Waste management risks	A decline in production capacity may occur due to issues with on-site waste gas or water treatment facilities and/or vendors' inability to properly handle hazardous waste at their production sites.	DyStar is committed to reducing its overall waste generated and enhancing its effluent purification process through innovative solutions. This provides DyStar the chance to adopt more cutting-edge waste management technology and reduce the environmental impact of its operations.
Operation risks	Production halts may occur due to critical equipment or unit faults.	The global project and engineering team at DyStar has measures implemented in place to minimise operational breakdown events. This includes selecting and procuring high-quality equipment, accompanied by preventive maintenance, vital spare parts and safety stock practices.
Safety risks	Safety mishaps and hazards such as severe fires, explosions, hazardous material leaks and explosions may harm people and violate safety and environmental laws and regulations. This can result in a halt in DyStar's business operations, property damage and loss of reputation.	Risk prevention, assessment, and mitigation procedures are part of DyStar's safety management system. This includes: 1) Selecting appropriate chemicals and working methods; 2) Knowledge of hazardous chemical materials existing at worksites; 3) Knowledge of occupational exposure limits for each chemical material; 4) Knowledge of risk identification procedures; 5) Establishing measures for risk mitigation; 6) Development of procedure instructions and occupational safety practices; 7) Setting instruments and procedures for emergency response; 8) Covering all hazardous processes and materials used with Process Hazard Analysis; 9) Regular internal and external safety audits and reviews of safety measures; 10) Periodic safety training for employees, contractors, and other relevant stakeholders; 11) Establishing safety performance KPIs for all employees
Information security risks	Security lapses and data breaches could disrupt DyStar's operations and negatively affect its reputation.	DyStar has implemented data privacy measures and its Global Personal Data Protection Policy since 2018. DyStar also invests in IT security and continuously promotes awareness regarding IT security to all employees.
Community risks	With DyStar's operations having significant impacts on the community and area it operates in, DyStar may face business and reputation risk if there is a lack of communication and understanding with the local community.	DyStar invests significantly in local communities to develop scalable solutions which addresses challenges that the community faces. DyStar employees also actively participate in Corporate Social Responsibility (CSR) programs by volunteering at various community outreach initiatives to reach out to the local community.

FINANCIAL CAPITAL

At DyStar, we create financial value and sustainable business growth through our dynamic and resilient business model. Recognizing the synergy between financial capital and non-financial sustainability issues allows us to capitalise on a broader range of opportunities and mitigate non-financial risks that may have financial implications.

/ FINANCIAL CAPITAL /

Resilient Economic Performance

As a leading producer of dyes and chemicals for the textile industry, DyStar recognizes the critical role that financial capital plays in sustaining its business and supporting its stakeholders. The Group creates financial prosperity and sustainable business growth through its dynamic and strong business model. Optimizing its financial capital management is not only a strategic imperative for its sustained growth and success, but also a fundamental pillar of DyStar's commitment to align its financial decisions with its broader sustainability vision.

Financial Results

DyStar generates financial value by leveraging on global environmental and social resources, and the Group is constantly seeking new ways to improve resource efficiency in order to achieve cost reductions, product preference, and brand enhancement. This helps DyStar to strengthen its financial flexibility and resilience, ultimately generating economic value for stakeholders.

ECONOMIC (MILLION USD)	2020	2021	2022
Global Revenue	214.13 / 344.38 / 199.91	239.05 / 477.61 / 265.48	233.60 / 409.27 / 256.01
Global Operating Costs	122.00 / 323.50 / 108.45	113.88 / 433.00 / 141.31	126.37 / 377.87 / 143.59
Global Employee Wages and Benefits	31.94 / 34.67 / 37.06	31.50 / 40.00 / 38.31	31.13 / 34.69 / 34.78
Net Payments/(Receipt) to/from Providers of Capital	(2.28)	(4.62)	(4.00)
Payments to Government	25.98	33.40	38.66
Economic Value Retained	77.10	155.34	115.79

Resilient Economic Performance

In FY2022, DyStar reported a revenue of USD 898.88 million, down 8.48% from the year before. However, operating costs were reduced by 5.86% from the previous financial year, highlighting DyStar's progress in increasing production efficiency and streamlining manufacturing operations. DyStar aims to place an emphasis on reducing energy usage by implementing technical measures to reduce its emissions and introducing regular monitoring systems to enhance energy efficiency. Global employee wages and benefits amounted to USD 100.60 million, down 8.39% from the year before as the group updated its compensation packages and career development initiatives. Unprecedented geopolitical events could affect global operations and weaken global supply chains. This may lead to extensive economic impacts such as increased liquidity and credit risks. As of the end of FY2022, DyStar does not have any external loans and holds a sufficiently large reserve of cash and cash equivalents. Additionally, DyStar also maintains sizeable credit lines at banks in the event where additional funds are required.

Taxes

DyStar complies with all tax requirements in the jurisdictions it operates in. To that end, DyStar has internal mechanisms in place to ensure that it complies with all tax obligations and regulations in the countries it operates in. In FY2022, DyStar contributed a total of USD 38.66 million in tax payments to the government. DyStar collectively received USD 0.35 million in tax relief and tax credits as well as USD 0.17 million in subsidies from the various governments in which DyStar operates in.

Investments

Climate-related physical and transition risks such as increased environmental regulations and more frequent extreme weather events can result in supply chain disruptions, increased energy costs, and water scarcity. In FY2022, DyStar continued to make investments in cutting-edge technologies and operational enhancements to reduce its environmental impact.

MANUFACTURED CAPITAL

Our manufacturing processes focus on the creation of products with high standards of quality, cost savings, safety and eco-efficiency for customers. Various mechanisms are put in place to ensure an ethical and robust supply chain that prioritises resource efficiency from design to logistics.

/ MANUFACTURED CAPITAL /

Sustainable Production and Supply Chain

DyStar's manufacturing procedures are focused on manufacturing products for customers that meet high standards for quality, cost-effectiveness, safety, and eco-efficiency. Numerous safeguards are in place, from design to logistics, to guarantee a reliable and ethical supply chain that prioritizes resource efficiency.

When implementing Sustainability across its Manufacturing and Logistics activities, DyStar adopts a holistic approach. To ensure ethical sourcing of materials and suppliers, the Group has stringent supply chain guidelines in place. Resources are used during the manufacturing process as effectively as possible to minimize waste and maximize output. In order to reduce the logistics process' environmental impact, efforts are made to ensure that there is minimal waste and unnecessary packing.

Sustainable Production and Supply Chain

Creating Value Across Our Entire Value Chain

DIRECT IMPACTS

DESIGN → **MANUFACTURING** → **STORAGE** → **TRANSPORT**

Research and Development for New or Improved Products and Process

Product stewardship at DyStar starts with thorough consideration of green chemistry principles during the design phase. The development of products that are safer and more resource-efficient benefits DyStar's stakeholders across the value chain.

Production of Dyes and Auxiliaries

DyStar conducts eco-tests on raw materials to prevent the introduction of contaminated substances into the manufacturing process. To ensure that DyStar's processes and products are safe for the health of people and ecosystems while also being aimed at optimizing resource efficiency, production processes also undergo rigorous risk assessment and mitigation measures.

Warehousing of Dyes and Auxiliaries

For warehousing and shipping, DyStar implements safety and environmental best practices, which are also thoroughly evaluated for environmental and health hazards.

Delivery of Dyes and Auxiliaries to Customers

To handle chemical products safely, DyStar adheres to the Globally Harmonized System (GHS) for labelling.

DyStar's logistics optimization reduces space wastage, fuel consumption, and annual transportation expenses.

INDIRECT IMPACTS

PROCUREMENT → **CUSTOMERS** → **BRAND AND RETAILERS** → **CONSUMERS**

Sourcing of Material and Services

To protect human health and the environment, DyStar utilizes its econfidence® program to prevent more than 500 restricted substances from entering the value chain. More details can be found in the econfidence® section.

Application of Dyes and Auxiliaries in Textile & Apparel Manufacturing

DyStar passes its cost savings, resource-efficiency and quality onto their customers through the innovative characteristics of DyStar products.

Product eco-testing and design phase precautions assure Brands & Retailers that it is safe to incorporate DyStar products.

Sales of Clothing and Apparels

Use of Textiles and Apparels

DyStar's precautions and risk mitigation measures protect consumers from exposure to carcinogenic, mutagenic, and reprotoxic substances.

DyStar products extend the lifespan of clothing and apparel, which benefits the environment and the consumers simultaneously.

Sustainable Production and Supply Chain

Responsible Sourcing and Supply Chain

The most significant contributor to DyStar's environmental footprint is concentrated in the supply chain. The Group is aware of its responsibility to reduce its environmental impacts across its whole supply chain. Additionally, it will strive to promote and uphold ethical standards of conduct in its dealings with suppliers. In order to source more responsibly, DyStar has established a stringent supply chain policy and numerous internal processes.

In FY2022, DyStar mitigated the impacts of global shipping disruptions by securing more freight forwarders for all its shipping lanes. DyStar also implemented a redundancy system by re-visiting its safety stock parameters.

SUPPLIER EVALUATION AND SCREENING

DyStar recognizes the importance of developing and maintaining long-term relationships with its suppliers to ensure a reliable supply chain and competitive cost base while fulfilling its commitments to customers and society. The Group carefully selects and develops suppliers who share their values and commitment to sustainability.

In its supply chain policy, DyStar outlines the environmental, social, governance, and product safety requirements that suppliers must meet. During the initial ecological testing, potential material suppliers undergo testing to ensure their products are eco-friendly and do not contain restricted substances or fail to comply with industrial standards. Shortlisted suppliers undergo further examination based on DyStar's supplier evaluation guidelines.

After completing the quality control process, suppliers are included in DyStar's qualified supplier pool and subject to regular performance checks and continuous eco-monitoring processes based on product specification and quality history. In FY 2022, 100% of existing suppliers were assessed for environmental and social impacts, and all new suppliers were required to pass the environmental screening to be registered in DyStar's supplier pool.

Suppliers were evaluated based on their ability to implement environmental systems and processes such as ISO14001, having internal processes to manage their emissions, and policies such as a Code of Conduct. During the screening procedure, no supplier was identified as violating the Group's supply chain policy or having substantial negative environmental and social impacts on nearby communities.

SUPPLIER LETTER (ECO QUESTIONNAIRE)

Supply chain represents the largest concentration of DyStar's Environmental footprint. The Group recognizes its responsibility to play a role in reducing environmental impacts across the supply chain. To that end, DyStar has developed a supplier letter (Eco Questionnaire) based on relevant laws, leading industry standards, and best practices. The letter lists elements that are forbidden, discouraged, or whose concentrations are not to be exceeded. The top 80% of DyStar's suppliers by contract value are notified and provided with a copy of the letter. The project is essential to reduce the risk of supply chain contamination.

LETTER OF COMMITMENT TO PROFESSIONAL INTEGRITY

DyStar is committed to a corporate culture that follows the guiding principles of professionalism, credibility, transparency, integrity, and fairness in its dealings. Likewise, DyStar holds its suppliers to the same standards.

In order to maintain fair, effective, mutually beneficial, and legal business practices with its suppliers, DyStar has a Letter of Commitment to Professional Integrity in place. Previously, suppliers were required to sign and regulate the commercial activities and performance of the contracts between DyStar and its suppliers, including any legal or regulatory infractions. This requirement applied to suppliers with yearly purchases of more than $1 million (at contract value). Since FY2022, all high-spend direct and indirect suppliers are required to sign the Letter of Commitment.

SUPPLIER AUDIT-DOLPHIN

In FY2018, DyStar introduced a more comprehensive supplier audit program called "DOLPHIN". This software, developed by DyStar's technology experts, provides a detailed assessment of potential strengths and risks associated with core suppliers, including sustainability, occupational safety, and environmental performance. DyStar plans to expand the program to include Tier-2 dye suppliers, auxiliaries category suppliers, and potential suppliers in the future. In FY2022, DyStar finalized the DOLPHIN Tier-2 project list, and the project is set to resume in FY2023.

DRIVING SUSTAINABILITY & GREENING THE SUPPLY CHAIN WITH IPE TOOL

In order to assess the environmental performance of its key suppliers and to be aware of any environmental violations by those suppliers, DyStar has been using a tool created by the Institute of Public and Environmental Affairs (IPE) since FY2019. The tool allows DyStar to monitor its core suppliers' environmental performance and cases of non-compliance by creating a "Blue Map" of the shortlisted providers. DyStar will prompt suppliers to resolve any identified issues and take the necessary corrective action if they have been detected for any kind of non-compliance.

In FY2022, DyStar was ranked second in the industrial chemicals industry category on IPE's CITI Index. The CITI Index was developed to dynamically assess brands' performance in five areas: Responsiveness and transparency, Compliance and corrective action, Extended green supply chain practices, Energy conservation and emissions reduction, as well as Performance disclosure. DyStar seeks to continue working with IPE to improve the environmental and climate impacts of its upstream supply chain.

MITIGATING SHIPPING DISRUPTIONS

DyStar minimizes disruptions to its supply chain by having robust strategies for mitigating shipping disruptions. These strategies have made DyStar's supply chain more resilient to shipping disruptions and ensures that its supply chain continues to operate smoothly. These strategies include:

1. Planning in advance and conduct forecasting to procure timely space and equipment availability
2. Including buffer inventory and lead times
3. Using a combination of transport modes such as air and sea to ensure supply chain is not impacted if one mode of transport is disrupted
4. Spreading risks by working with different forwarders and inland hauliers
5. Identifying alternate sea ports e.g. Port of Savannah in US and Port of Ningbo in China
6. Spreading shipments across different vessels over a period of time
7. Communicating frequently with carriers and hauliers for the latest news and updates on transport movement
8. Keeping abreast of the latest news on port congestion and carriers news/ announcement

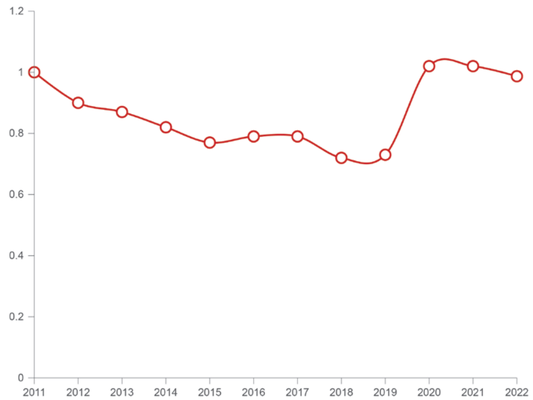
Efficient Use of Raw Materials

Every year, DyStar purchases more than 700 types of raw materials and crude/semi-finished goods for the production of finished goods. DyStar is aware that raw and associated materials are non-renewable and therefore, explores innovative ways to maximize material efficiency through real-time communications between the production and procurement teams to minimize inventory waste.

In FY2022, DyStar's top purchased raw materials included Indigo granules and its intermediates – Disperse and VAT dye press cakes. These raw materials accounted for approximately 50% of DyStar's total purchases during the year.

DyStar's production plants consumed a total of 104,049 tons of raw materials and intermediates in FY2022. Utilization intensity was 1.00 tons of raw material per ton of production.

Raw Material Usage Intensity (tons of raw material per ton of production)



Sustainable Production and Supply Chain

Circular Economy Approach in Manufacturing

DyStar's in-house logistics team takes the necessary steps to minimize its indirect environmental impacts. The logistics team coordinates with numerous customers, transport companies and warehouse operators and works with them to optimize efficiency.

DyStar cooperates with Cradle-to-Cradle Product Innovation Institute®. To date, the Group has 54 textile dyes that have been assessed in the Material Health category and were awarded the Cradle-to-Cradle Product Innovation Institute® Platinum Level C2C Certified Material Health Certificate™.

VAT Dyes	Reactive Dyes	Reactive Dyes	Reactive Dye for Wool	Acid Dyes	Disperse Dyes	Disperse Dyes
Indanthren® Brilliant Orange GR Coll	Levafix® Amber CA-N	Remazol® Golden Yellow RGB 01	Realan® Black MFPV	Telon® Blue AFN	Dianix® Blue XF	Dianix® Red AM-SLR
Indanthren® Red FBB Coll	Levafix® Brilliant Yellow CA	Remazol® MAP Black NN		Telon® Navy AMF	Dianix® Yellow AM-SLR 200%	Dianix® Red XF2
Indanthren® Brilliant Green FBB Coll	Levafix® ECO Forest	Remazol® Navy RGB 01 150%	**Acid Dyes**	Telon® Orange AGT 01	Dianix® Yellow S-3G	Dianix® Rubine XF2
Indanthren® Olive Green B Coll	Levafix® ECO Black	Remazol® Red RGB 02	Telon® Blue BRL micro	Telon® Rubine A5B 01	Dianix® Yellow Brown XF2	Dianix® Turquoise S-BG
Indanthren® Scarlet GG Coll	Levafix® Fast Red CA	Remazol® Ultra Carmine RGB	Telon® Blue T-4R	Telon® Yellow ARB	Dianix® Yellow XF2	
	Remazol® Brilliant Blue RN	Remazol® Ultra Orange RGB	Telon® Brown 3G 200%	Telon® Blue M-GLW	Dianix® Orange AM-SLR	
Indigo Dyes	Remazol® Brilliant Red F3B	Remazol® Ultra Orange RGBN	Telon® Red T-2B	Telon® Green M-6GW	Dianix® Blue S-BG	
DyStar® Indigo Vat 40% Solution	Remazol® Brilliant Yellow GL 150%	Remazol® Ultra Rubine RGB	Telon® Yellow T-3R	Telon® Red M-BL	Dianix® Brilliant Violet R	
	Remazol® Luminous Yellow FL	Remazol® Ultra Navy Blue RGB	Telon® Blue A2R	Telon® Yellow M-4GL	Dianix® ECO Black HF	

Meeting Global Standards

DyStar provides customers with the highest quality products by implementing management frameworks and systems which comply with international standards such as the International Organization for Standardization (ISO). Across our operations, DyStar adopts the following international standards[4]:

ISO 9001:2015 Certification	
DyStar Carolina Chemical	DyStar Foam Control
DyStar Shanghai	DyStar Singapore
Color Solutions International Shanghai Co. Ltd	Color Solutions International, Inc.
DyStar Africa	DyStar Pakistan
DyStar Mexico	DyStar Colours Distribution GmbH
DyStar Japan	PT DyStar Colours Indonesia
DyStar Thailand	DyStar Portugal
DyStar Brazil	DyStar India
DyStar L.P.	DyStar Kimya, Turkey

Energy Management System ISO 50001:2018 Certification
DyStar Colours Distribution GmbH

Environmental Management System ISO 14001:2015 Certification
DyStar Kimya, Turkey

[4] *Refer to DyStar website for more information on certified entities* *www.DyStar.com/about-DyStar-group/*

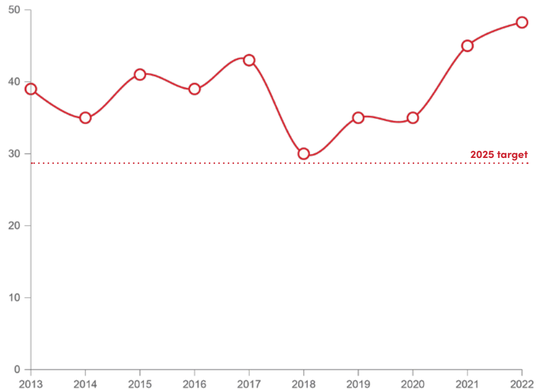
Sustainable Logistics

PACKAGING

At DyStar, the packaging is utilized to safeguard products while being transported to clients and to endure weather conditions. DyStar recognizes that recycling bulk packages like Intermediate Bulk Containers (IBC) can significantly reduce the amount of waste generated from packaging. To that end, DyStar engages specialized service providers to collect, clean, and re-distribute the company's IBCs for reuse.

In FY2022, DyStar used 5,089 tons of packaging material including cardboard boxes, plastic drums, bulk containers, and plastic wrapping. DyStar recycled 35% of its packaging materials and the overall packaging intensity increased by 10% in FY2022 as compared to FY2021. This is due to high consumption of packaging materials for waste disposal and additional packaging required to repackage sourced materials in the event of damage to initial packaging materials.

Packaging Usage Intensity (kg of packaging material per ton of production)



TRANSPORTATION

Safe transportation of dyes, auxiliaries, and other chemicals is crucial due to the risk of spillage caused by mishandling. The health, science, and environmental implications of unsafe chemical transportation can be significant.

To mitigate these risks, DyStar has multiple precautionary measures in place to ensure that DyStar products arrive safely and intact. This begins with the careful selection of experienced and licensed transportation contractors. DyStar's in-house logistics team takes the necessary steps to minimize DyStar's indirect environmental impacts. The logistics team coordinates with numerous customers, transport companies, and warehouse operators and works with them to optimize efficiency. For example, DyStar strives to reduce unnecessary transportation to reduce fuel consumption by optimizing delivery routes and consolidating shipments. Additionally, DyStar ensures that its containers and trailers are at Full Container Load (FCL) or Full Truck Load (FTL) before embarking on a delivery trip, reducing the total amount of greenhouse gases generated per unit of cargo. DyStar also aims to reduce its overall airfreight shipments which generate the most amount of carbon dioxide emissions.

DyStar carefully optimizes its distribution networks and ships directly from production plants to sales regions. Regionally, the company maintains a distribution centre as well as a network of smaller local warehouses that are strategically located near clusters of textile producers. The strategic placement of warehouses helps minimize the number of partial truckload trips required to reach customers. In areas where purchase volumes are consistently high, DyStar also provides on-site consignment stocks. These initiatives not only minimize the Group's environmental footprint but reduce overall operating costs.

INTELLECTUAL CAPITAL

We promote a culture of innovation to continuously build on our intellectual capacity and optimise processes and products to be more sustainable, efficient, and profitable. It is crucial to constantly improve and be responsive to the changing market needs, for DyStar to stay as a leader in its industry.

/ INTELLECTUAL CAPITAL /

Innovative Portfolio

To continuously expand DyStar's intellectual capacity and optimize processes and products to be more sustainable, effective, and profitable, the Group cultivates a culture of innovation. For DyStar to remain a leader in its industry, it is essential to continuously improve and be sensitive to the shifting needs of the market.

Production Stewardship and Innovation

As part of its commitment to ensure that its products are safe for both humans and the environment, DyStar includes product stewardship in its Environmental Guidelines. DyStar continuously examines its products to identify potential risks to the environment, human health, and safety. By extending its Sustainability initiatives and ideals throughout its value chain, DyStar seeks to reduce each product's lifecycle impact from cradle to grave as part of product stewardship. At DyStar product stewardship begins in the design phase, where careful attention is given to green chemistry principles so as to minimize its impacts on its stakeholders. The development of safer and more resource efficient products benefits the environment and DyStar's stakeholders across the value chain.

Collaboration and Memberships

In order to ensure that its products continue to meet the evolving needs of its customers, DyStar recognizes the criticality of using industry insights and the latest resources while innovating its products. To achieve this, DyStar joined various organizations, opening up access to industry information and to seek professional development. As of FY2022, DyStar is a member of the following 27 organizations:

INDUSTRY ORGANIZATIONS

- Asia Dyestuff Industry Federation (ADIF)
- China Dyestuff Industry Association (CDIA)
- Denim Manufacture Association of India
- German Chemicals Industry Association (VCI)
- Japan Dyestuff & Industrial Chemical Association (JDICA)
- Society of Dyers and Colourists, United Kingdom (SDC)
- South African Dyers & Finishers Association (SADFA)
- Taiwan Dyestuffs & Pigments Industrial Association
- TEGEWA (Association of Manufacturers of Process and Performance Chemicals)

BUSINESS ASSOCIATIONS

- APP KIEC (Asosiasi Perusahaan2 KIEC Cilegon)
- APKB (Asosiasi Perusahaan Kawasan Berikat)
- Corlu Chamber of Commerce and Industry
- Employers' Association of Indonesia (APINDO)
- Fukui Prefecture Dyeing Association
- HIPWIS (Himpunan Perusahaan Wilayah Serang)
- Importers and Exporters Association of Taipei (IEAT)
- Seiren
- Singapore Business Federation (SBF)
- Taiwan Textile Printing Dyeing & Finishing Ind. Association
- The Society of Fiber Science and Technology, Japan
- Urase

TEXTILE STANDARDS AND ORGANIZATIONS

- bluesign®
- Cradle to Cradle Product Innovation Institute®
- German Committee for Industrial Standards (DIN Normenausschuss)
- Global Organic Textile Standard (GOTS®)
- Oeko-Tex®
- Zero Discharge of Hazardous Chemicals (ZDHC)

New Processes and Products

Certain new products were introduced in FY2022 to comply with the newest quality standards and some alternative products were launched to overcome supply issues. In FY2022, Global Marketing Coloration launched the following new products:

- Dianix® Brilliant Violet R new
- Dianix Turquoise S-BG 01
- Dianix Yellow Brown S-2R 150% new
- Dianix Brilliant Orange 4R new
- Dianix Red E-FB 01
- Remazol® Yellow SAM 01
- Levafix® Blue CA 05
- Levafix Red CA new
- Levafix Royal Blue E-FR 01
- Realan® Navy EHF new
- Realan Black EHF new

DyStar is also partnering with customers to implement 11 Cadira® modules in the textile industry, which will help in saving valuable resources.

Eco-performance Program

econfidence®

DyStar's econfidence® program assures customers that its dyes and chemicals are safe for people and the environment. The econfidence program considers all applicable legislations and is one of the most extensive eco-testing programs for textile dyes and chemicals.

Led by a diverse team of experts, the program meticulously monitors the sourcing and production of DyStar's products to ensure that our products achieve the highest level of product quality and environmental responsibility. econfidence allows DyStar to build partnerships along the textile supply chain to foster a more sustainable textile production.

Modules Making an Impact

/ Saving Valuable Resources /

DyStar Cadira® Modules

DyStar's Cadira® Modules help to lower carbon footprints and optimize productivity through the optimal utilization of machinery.

We now offer 11 Cadira Modules which serve to: improve energy and water efficiency, significantly reduce wastewater, and reduce the quantities of chemicals used.

Essentially, the Cadira Modules are developed to reduce greenhouse gas emissions within the textile industry.

Innovative Portfolio

CADIRA® REACTIVE

Conserve valuable resources while lowering reactive dyeing costs

Cadira® Reactive Dyeing > Compared to Conventional Reactive Dyeing

- ▼28% Water
- ▼22% Electricity
- ▼24% Process time
- ▼31% Steam
- ▼30% Emissions
- ▼28% Wastewater

CADIRA® POLYESTER

Optimize resource-efficient exhaust processing

*Fully Optimized Cadira Polyester Dyeing > Compared to Conventional Polyester Dyeing**

- ▼50% Water
- ▼43% Electricity
- ▼46% Process time
- ▼46% Steam
- ▼45% Emissions
- ▼50% Wastewater

CADIRA® REACTIVE/DISPERSE CONTINUOUS

Optimize resource efficiency in continuous dyeing of Polyester/ Cellulosic blends

Cadira® Reactive /Disperse Continuous Dyeing > Compared to Conventional Continuous PDTPS process

- ▼45% Electricity
- ▼54% Water
- ▼41% Chemical

CADIRA® VAT

Improve the resource-efficiency of exhaust processing of cellulosic fibers

*Cadira® Vat Dyeing > Compared to Conventional Vat Dyeing**

- ▼30% Water
- ▼20% Electricity
- ▼30% Process time
- ▼25% Steam
- ▼24% Emissions
- ▼30% Wastewater

CADIRA® DENIM

Adopt the ultimate sustainable solution for clean denim production

Cadira® Denim vs Standard Indigo dyeing process using Hydrosulphite

- ▼95% Sulphate
- ▼50% Total suspended solids reduction
- ▼82% COD
- ▼10% Wastewater

CADIRA® PRINTING PX

Conserve resources during the wash-off process

Cadira® Printing PX vs Conventional Wash-off

- ▼50% Electricity
- ▼50% Process time
- ▼50% Steam
- ▼33% Wastewater

CADIRA® RECYCLED POLYESTER

Minimize the impact of the rPET dyeing process with Gold Level Material Health certified Dianix Dyes by the Cradle to Cradle Products Innovation Institute

Cadira® Recycled Polyester vs Dyeing Virgin Polyester with Standard Dyes

- ▼50% Water
- ▼43% Electricity
- ▼46% Process time
- ▼46% Steam
- ▼45% Emissions
- ▼50% Wastewater

CADIRA® WOOL

Protect the environment with clean and more efficient dyes for the wool dyeing process

Cadira® Wool vs Mordant Black 9 Dyeing Process

- ▼50% Electricity
- ▼50% Process time
- ▼50% Steam
- ▼40% Wastewater

CADIRA® LAUNDRY

Innovative product range for ultra-low liquor ration machines

Cadira® Printing PX vs conventional wash-off

- ▼90% Water
- ▼40% Electricity
- ▼60% Chemical impact
- ▼45% Worker impact

** Actual reductions may vary. Figures presented in the diagram represent the best-known performance results.*

CADIRA® POLYAMIDE:
Environmentally friendly scour-dyeing process for Nylon, Nylon blends and recycled Nylon

Savings with Cadira® Polyamide

- ▼30% Water
- ▼20% Electricity
- ▼25% Steam
- ▼30% Process time

CADIRA® POLYESTER/ CELLULOSIC EXHAUST
Combining Cadira Polyester and Cadira Reactive for increased productivity with even greater resource efficiency and cost savings

Combining Cadira® Polyester and Cadira® Reactive for medium shades for rapid two-bath process

- ▼49% Water
- ▼47% Electricity
- ▼52% Process time
- ▼54% Steam
- ▲72% Productivity

[5] More information can be found in DyStar's Integrated Sustainability Report 2021-2022

Technology and Processes

Enhancing Sustainability with eliot®

DyStar has developed and deployed eliot®, an information platform that provides straightforward guidance on sustainable product selection and process optimization. The tool helps clarify DyStar's sustainable products and processes through its user-friendly online platform. Customers have direct access to the system to get the information they need quickly and conveniently.

The eliot® tool consists of seven modules: Positive Lists, Product Finder, Information, eliot manuals, Optidye®, Cadira® modules, and the newly added Paper folder[5].

Moving forward, DyStar seeks to use product innovation as a key tool to mitigate the impacts of its products on the environment. DyStar aims to be the global leader in innovation, within its chosen industries. DyStar believes that leading other industry players in innovation is the key to achieving sustainable business growth and creating value for its stakeholders.

Commitment to Standards

As a leading dyestuff and chemical manufacturer, DyStar is dedicated to ensuring that its products adhere to voluntary and regulated safety standards in order to maximize reliability while safeguarding consumer safety. This demonstrates DyStar's dedication and accountability to safety and quality, as well as credibility amongst its stakeholders.

STANDARDS	DESCRIPTION
bluesign®	The bluesign standard was established to provide a comprehensive production control system to limit the human health and environmental impacts of textile manufacturing. It is based on five principles of sustainability – resource productivity, consumer safety, air emission, water emission, and occupational health and safety. The standard defines specific criteria applied to each phase within the production chain to ensure compliance with the given principles. DyStar has been a system partner since 2008, and in FY2022, a total of 1793 products were bluesign approved.
econfidence®	DyStar's econfidence program considers all applicable legislations and has an extensive eco-testing program for all textile dyes and chemicals. Through this program, DyStar assures its customers that its dyes and chemicals are safe for both people and the environment. At DyStar, a total of 500 regulated or restricted substances are monitored through econfidence.
eliot®	eliot® was introduced by DyStar in 2015 and is an internet-based tool for product selection and process optimization in the dyeing process. It is an information database for DyStar's customers and offers various modules for customers to select products based on various criteria. The tool has 28 "Positive Lists", which is a selection of recommended DyStar products that are compliant with the Brands and Retailers' Restricted Substances Lists or the selected eco standard.

STANDARDS	DESCRIPTION
Oeko-Tex®	Oeko-tex is one of the world's best-known labels for textiles tested for harmful substances and ensures that every component of the product is certified harmless for human health through testing of regulated and non-regulated substances. Currently, about 2200 DyStar products are recommended for use on Oeko-Tex Standard-compliant articles.
EU REACH®	REACH applies to all chemical substances and is a regulation of the European Union aimed at improving the protection of human health and the environment from risks posed by chemicals. In FY2022, about 450 substances were registered under REACH.
Turkish REACH (KKDIK®)	The Turkish regulation on chemicals registration, evaluation authorization and restriction (KKDIK) is closely aligned with the EU REACH provisions and requires companies to pre-register or register substances manufactured or imported into Turkey. DyStar has 1,750 substances pre-registered according to KKDIK.
ZDHC® Gateway	The ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) is a list of chemical substances banned from intentional use in facilities. DyStar has about 2464 products compliant with ZDHC MRSL 2.0 and supports the implementation of best practices to protect the environment.

NATURAL CAPITAL

DyStar recognizes that the financial capital we create through our operations is derived from the finite natural resources. We are committed to keeping our environmental footprint to a minimum throughout our production processes and supporting the transition to a more sustainable and circular textile industry.

/ NATURAL CAPITAL /

Environmental Resource Management

Climate Resilience

Climate resilience to reduce DyStar's vulnerability to climate change is an important goal for the Group. This target applies not only along the activities and production chain of DyStar, but also along the total chain of textiles and food additives. Evolving global industry standards highlight the importance to consider all efforts required to continuously improve water, materials, and energy consumption, ultimately lowering climate-affecting emissions.

Environmental Resource Management

DyStar 2025 Targets

DyStar strives to reduce its environmental footprint by 30% for every ton of production by 2025 against the baseline year of 2011. The 2025 target includes reduction in energy, water, raw materials, GHG emissions, waste, and wastewater in the Group's owned or operated sites. DyStar believes improving these focus areas will benefit the environment and help the Group remain within planetary boundaries.

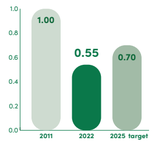
The Group is on track to meet our 2025 targets. In FY2022, DyStar met its GHG emission intensity and wastewater production intensity targets. The Group will continue to review and assess these targets annually, including to refine its approach to maintain them.

PACKAGING USAGE INTENSITY

(kg of packaging material per ton of production)

GREENHOUSE GAS EMISSIONS INTENSITY

(tons CO_2e emitted per ton of production)



NON-RENEWABLE ENERGY INTENSITY

(GJ used per ton of production)

WATER CONSUMPTION INTENSITY

(m³ of water consumed per ton of production)

WASTEWATER PRODUCTION INTENSITY

(m³ of wastewater discharged per ton of production)

WASTE PRODUCTION INTENSITY

(kg of waste per ton of production)

2011 **2022** **2025 target**

Reporting Scope, Methodology and Period

DyStar tracks environmental impact data in all of the Group's owned and operating facilities, ensuring that all production sites, warehouses, laboratories, and office locations globally that contribute to the Group's business are recorded. The methodology used to assess, measure, and disclose emissions is based on the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard developed by the World Resources Institute® (WRI) and World Business Council for Sustainable Development (WBCSD). All environmental data presented in the Environmental Performance Table (Figure 1) has been measured for the reporting period annually from 1 January to 31 December. DyStar implements a centralized reporting platform to measure and monitor environmental impacts across all its operations. This platform enables the Group to coordinate, consolidate and align data across all business units and track its progress towards meeting its 2025 targets.

Environmental Performance

DATA OVERVIEW	2022	2021	2020
Raw Material (thousand tons)	**104.05**	127.53	99.16
Raw Material Usage Intensity (tons per ton production)	**1.00**	1.02	1.02
Packaging Material (thousand tons)	**5.09**	5.60	3.37
Direct Energy Consumed (TJ)	**593.17**	645.00	585.84
Indirect Energy Consumed (TJ)	**457.73**	746.22	510.48
Energy Consumption Intensity (GJ per ton production)	**10.13**	11.11	11.19
Water Consumption (million m³)	**6.60**	7.85	6.57
Water Consumption Intensity (m³ per ton production)	**63.56**	62.68	68.10
Water Reused (million m³)	**0.07**	2.08	1.74
Direct GHG Emissions – Scope 1 (thousand tCO_2e)	**33.70**	36.79	40.48
Indirect GHG Emissions – Scope 2 (thousand tCO_2e)	**23.21**	38.43	45.44
GHG Emissions Intensity (tCO_2e per ton production)	**0.55**	0.60	0.87
Wastewater Discharged (million m³)	**0.90**	1.43	1.17
Wastewater Intensity (m³ per ton production)	**8.71**	11.44	12.94
Hazardous Waste (thousand tons)	**10.44**	8.13	7.25
Non-hazardous Waste (thousand tons)	**2.81**	4.90	6.87
Overall Waste Intensity (kg per ton production)	**127.64**	104.09	142.36
Number of Spills, Total Amount Spilled (tons)	**20 spills, 12.02 tons**	12 spills, 2.27 tons	10 spills, 23.25 tons

Figure 1: Environmental Performance Table

Greenhouse Gas ("GHG") Emissions

In FY2022, DyStar's Scope 1 and Scope 2 emissions totalled 56,907 tCO_2e, representing a 66% decrease from 2011's baseline year and a 24% decrease compared to FY2021. GHG emissions were significantly lowered as a result of energy-efficient efforts implemented across the Group, despite an increase in production output due to the rapidly growing business environment and the global economy recovery from the COVID-19 pandemic.

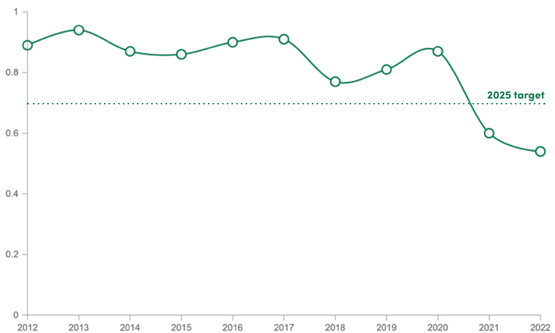
Although most of the production plants resumed full operations and employees returned to the workplace progressively during the year, DyStar's GG intensity has reported a 45% decrease when compared to baseline year 2011, and a 9% decrease was observed when compared with year 2021. This is likely because of the implementation of energy conservation initiatives and the increased use of renewables by DyStar.

Some energy conservation initiatives implemented by DyStar in FY2022 include:

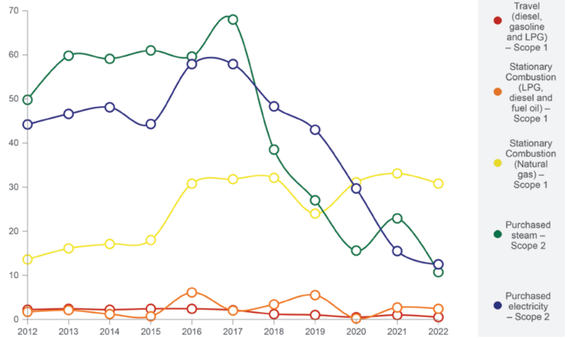
- Installation of a solar power plant for the Karachi warehouse in 2022, leading to a reduction of CO_2 emissions of about 26 t/a
- Substitution of standard horizontal bead mills against vacuum mill at Cincinnati site in 2021, further replacement with 2 new mills completed in August 2022
- Insulation of sodium storage tanks at the Ludwigshafen site in 2022 to reduce power consumption for electrical heaters
- Identification of leakages in the compressed air and condensate systems at Ludwigshafen and Cincinnati sites to reduce power, natural gas, or steam consumption by ultrasonic measurements *– Ongoing*
- Insulation of reactors and formulation vessels for hot formulations at several Auxiliaries sites (Corlu, Reidsville, Samutprakarn) to reduce steam consumption and therefore natural gas consumption *– Near completion*
- Improvement of the insulation of steam lines, condensate lines and heat transfer oils systems at Cincinnati, Ludwigshafen, and Omuta sites to reduce steam, LPG, or power consumption
- Insulation of steam pipeline from the boiler to consumers at Corlu site
- Installation of motion detectors at Corlu warehouses to reduce power consumption
- Increase of the operation of motors with high capacity by frequency inverters to adjust the power consumption according to the demand

Natural gas made up 91% of Scope 1 emissions, while 54% of Scope 2 emissions came from electricity. Of DyStar's total emissions profile, Scope 3 emissions accounted for 7.8%. 91% of Scope 3 emissions came from the transportation of goods and services.

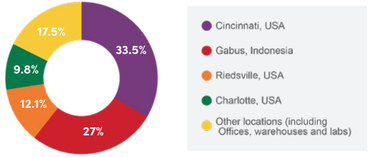
Greenhouse Gas Emissions Intensity (tons CO_2e emitted per ton of production)



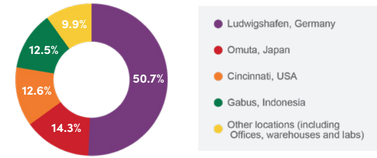
Greenhouse Gas Emissions by Source (thousand tons CO_2e)



GHG Emissions by Production sites



Scope 1 (Total emissions: 33.7 thousand tCO_2e)



Scope 2 (Total emissions: 23.2 thousand tCO_2e)

Ozone-depleting Chemicals (ODCs)

In FY2022, DyStar did not produce any ODCs as it only made use of the R717 refrigerant, which is a non-ODS and has a global warming potential (GWP) of 0. DyStar measures the consumption of ODCs on-site, although ODCs are not a direct result of DyStar's products or processes. The Group includes any ODC that is used as refrigerants on-site and the GWP for refrigerants are derived from the fifth assessment report of the Intergovernmental Panel on Climate Change (IPCC). No refrigerant leakage has been recorded in FY2022.

Energy Management

Energy utilized at DyStar is mostly derived from purchased electricity, steam, natural gas, and liquefied petroleum gas (LPG). Utilization of industrial machinery, IT systems, and air conditioning are the main source of electricity consumption, while steam is either produced on-site or purchased from external providers, which is used for process and room air heating.

DyStar's total energy consumption has decreased by 24% from 1,391.22 TJ in FY2021. Overall energy intensity also declined to 10.13 GJ per ton of production from 11.11 GJ per ton of production in FY2021. This improvement in energy consumption is likely due to the 117% increase in the Group's use of renewable energy from 29.6 TJ in FY2021 and energy conservation initiatives adopted by DyStar.

Direct energy sources accounted for 56% of DyStar's total energy consumption in FY2022, an increase of 21.75% as compared to FY2021. As for indirect energy sourced from purchased electricity and steam, it made up the remaining 44% of total energy, an 18.8% decrease from the year before.

DyStar is aware of the significant advantages and financial savings that could result from a reduction in its energy consumption. In a continuous effort to reduce its energy consumption, DyStar takes advantage of cutting-edge technology and opportunities, such as fuel-efficient combustion units. Additionally, Production Heads at its production facilities are given specific reduction targets that are evaluated annually. To ensure each production site implements appropriate measures to reduce its energy consumption, the following checks are conducted regularly:

- Check for opportunities at all sites to establish independent power supply by use of renewable sources (solar power, wind power, hydroelectric power)
- Check that all lamps have been substituted with LED lamps
- Review large power consumers by checking the feasibility to operate them with variable frequency drives
- Ensure energy-efficient motors are used when new machines are installed
- Check leakages in compressed air and condensate systems and eliminate them to reduce power and steam consumption
- Improvement in equipment and pipeline insulation to reduce energy losses.
- Continue the program for Ludwigshafen and Raunheim based on the certified Energy Management System ISO 50001:2018

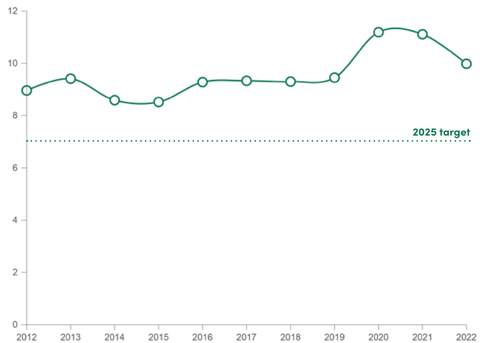
Members of the senior management regularly review data on resource consumption during the reporting period and engage in discussions on finding ways to optimize energy-efficiency.

Other than improving resource efficiency, DyStar also taps on the use of renewable energy, which includes solar energy, hydroelectric power, wind energy, geothermal energy, and nuclear power. This helps in reducing DyStar's reliance on energy generated from fossil fuels, which is aligned with the Group's commitment in transitioning towards a cleaner energy future. In FY2022, DyStar made notable achievements in making the transition towards renewable energy:

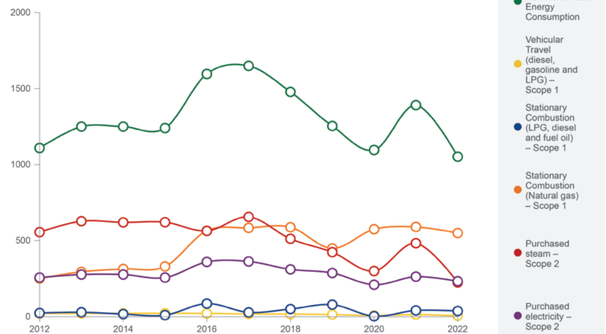
- A solar power plant installation above the roof of FG Warehouse in Ankleshwar Plant is under discussion
- 10 Solar Street lights have been approved for installation in Ankleshwar Plant
- A wind power plant installation is under discussion for Corlu Plant

/ DyStar Turkey has committed to using electricity generated from renewable resources through the redemption of Renewable Energy Certificates, throughout the period of FY2021 to FY2022. /

Non-Renewable Energy Intensity (GJ used per ton of production)



Non-Renewable Energy Consumption by Source (TJ)



Water

Water plays a crucial role in DyStar's operations, from being used in the process of manufacturing dyes and its related products, to cleaning its equipment. As water is a scarce resource, DyStar is dedicated to the conservation of the planet's water resources and keeps track of water consumption throughout its operations.

In FY2022, DyStar consumed a total of 6.60 million m^3 of water, a 16% decline compared to FY2021. This resulted in a slight decrease in water consumption intensity of 1.4% from the previous year.

Used water (like municipal water, recovered process water, Reverse Osmosis water or deionized water) is used as raw material, cooling water, process water or boiler feed water. The outlet of the consumed water is as follows:

1. Part of the finished goods such as liquid dyes or auxiliaries
2. Evaporation during generation of cooling water or drying processes with discharge to the environment as water vapor
3. Discharged to the environment after wastewater pre-treatment
4. Used for gardening
5. Make-up water or feed water for steam boilers to generate steam for heating purposes

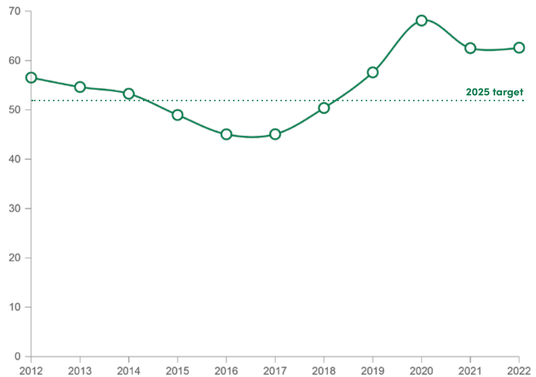
DyStar remains dedicated to mitigating the impacts of its operations on the environment and is committed to its goal of reducing its carbon footprint. Throughout FY2022, DyStar looked for ways to improve its water efficiency and made improvements to its operational procedures in order to boost water efficiency and reap cost-savings, including:

- 3 sewage water treatment units have been installed at Gabus site, with 2 more units planned in 2023
- High-pressure cleaners for equipment cleaning are installed at Reidsville site
- Liquid ring vacuum systems with cooling circulation have been installed
- Substitution of liquid ring vacuum pumps against dry running vacuum pumps have been installed
- Regular reviews of filtration processes to identify options for reuse of washing water for the first displacement washing on filter presses

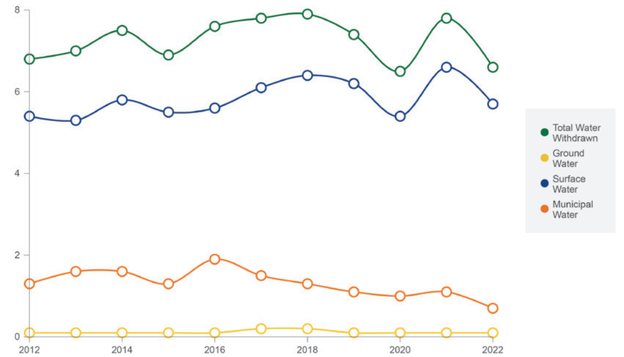
Water consumption is closely monitored and reported monthly at all DyStar sites. At DyStar's Ankleshwar site, the daily water consumption is limited by authority regulations due to general water shortage. DyStar seeks to harvest rainwater directly at the Ankleshwar site as means to recover as much water as possible for reuse in gardening or make-up water for cooling towers or steam boilers. To reduce water consumption, DyStar uses high-pressure cleaners for equipment cleaning instead of boiling out of vessels. Targets are also defined at other sites to reduce water consumption and wastewater generation, where there is high treatment cost.

In FY2022, DyStar managed to reuse 70,749 m^3 of water, which is approximately 1.1% of the Group's total water consumption. This is 37.3% less than the amount of water reused in the year before due to the reduced volume of wastewater, resulting in a lower quantity of recycled process water. In addition, the cooling water buffer tank in the Ludwigshafen Plant was damaged, further reducing the amount of reused cooling water generated.

Water Consumption Intensity (m^3 of water consumed per ton of production)



Water Withdrawal by Source (million m^3)



Environmental Resource Management

Wastewater

To safeguard local communities and water resources, DyStar manages wastewater according to the best practices in the industry. To treat wastewater, DyStar utilizes both onsite and offsite wastewater treatment methods. Typical wastewater treatment processes at DyStar's sites are:

1. Chemical treatment, including neutralization
2. Flocculation / Coagulation followed by filtration
3. Adsorption on activated carbon
4. Multi-effect Evaporation (MEE) with either drying of MEE concentrate onsite or disposing via certified 3rd party incineration plants, followed by reuse of the evaporated water as process water or make-up water for cooling tower
5. Ultrafiltration and nanofiltration
6. Biological treatment (aerobe)
7. Dissolved air flotation (DAF)

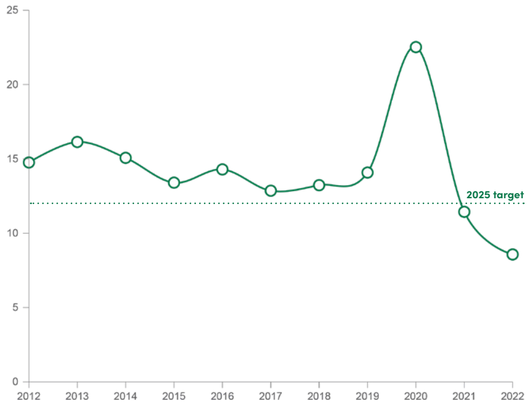
The Group also keeps track of wastewater on its sites to ensure that threshold limits stated in contracts or regulations are adhered to. Wastewater is being monitored regularly before discharge using samples from the buffer tank to ensure compliance. Sites have in place spectrophotometers to analyse several discharge parameters. The same measures are taken for wastewater bound for final treatment at municipal plants and wastewater handled by external contractors. DyStar recognizes the need to ensure the prohibition of the reuse of wastewater by other organizations and hence puts in place strict precautions.

In FY2022, DyStar discharged 904,170 m^3 of wastewater, representing a decrease of approximately 58.2% from that in FY2021. Wastewater intensity has further improved to 8.71 m^3 per ton of production as compared to 11.44 m^3 per ton of production in the year before. This is likely due to the Wastewater Treatment (WWT) Plant modifications in Ankleshwar site which led to the improved performance, including:

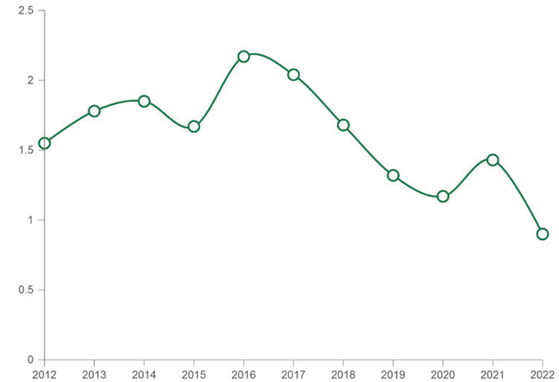
- Acid-proof tiling of WWT plant to avoid soil contamination
- Modification of solid waste roof to avoid leakage of water during rainy season and further eliminate the chance of soil contamination
- Wastewater treatment reverse osmosis filters are replaced for improved performance
- For maximum use of treated or recycled water from WWT water pipe networks are installed in production facilities. Treated water is used for cleaning purposes and toilets.
- Lighting of WWT site is replaced with LED installations
- New auxiliary production facility MEE is under installation

The Ankleshwar and Gabus sites are currently operating as part of a "Zero Liquid Discharge Scheme" under the local authorities' initiative due to environmental impact assessments conducted or the nature of production licenses. These sites are prohibited from discharging of any wastewater. Instead, the wastewater goes through a treatment process to be converted to a concentrate or solid residue, for disposal via landfill or incineration. Water recovered in the process is then reused as make-up water for cooling towers or process water.

Wastewater Production Intensity (m^3 of wastewater discharged per ton of production)



Wastewater Discharged (million m^3)



Environmental Resource Management

Air Emissions

DyStar is dedicated to ensuring that the air pollutants released from its production facilities and operational activities are below permitted levels. The main air pollutants that DyStar produces include particulate matters (dust), total organic carbon (TOC), volatile organic compounds (VOC), sulfuric oxides, ammonia, hydrochlorides, and nitrous dioxide.

The various nitrous oxides and methane are measured only at DyStar's Ludwigshafen and Gabus manufacturing facilities since these exhaust gas compounds are a part of municipal discharge limits. To reduce the amount of air pollutants emitted, DyStar is exploring new exhaust gas treatment systems with higher efficiency, while enhancing current systems to lower TOC and dust emissions.

At Gabus site, an exhaust gas pre-treatment unit to reduce ammonia emissions was installed in 2022.

In 2022, a complete new 2-stage scrubber system was installed at Corlu site to maintain emissions below permitted threshold limits and avoid exposure of employees during charging of hazardous materials into the reactors or formulation vessels.

Waste Management

Both hazardous and non-hazardous waste are produced at DyStar. DyStar recognizes that the increased volume of waste generated could pose major risks to the ecosystem as well as public health. As a result, the Group is dedicated to reducing the overall amount of waste produced and guaranteeing effective waste management.

At DyStar, hazardous waste such as contaminated waste packaging, product residues, residues resulting from the distillation recovery of solvents, solutions and other liquids that cannot be disposed of as wastewater and residues that may remain after wastewater evaporation at certain plants are produced as a result of its manufacturing activities. In FY2022, DyStar generated 10,444 tons of hazardous waste. The increase in hazardous waste is related to clean-up of inventories above shelf-life and inventories from closed production sites. As for non-hazardous waste, it is made up of mostly office waste, uncontaminated packaging material and pallets. In FY2022, DyStar produced 2,813 tons of non-hazardous waste.

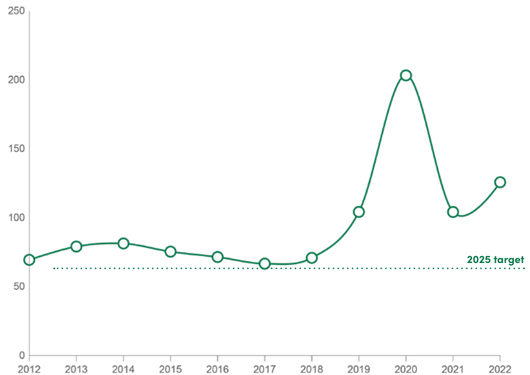
Overall, DyStar's waste intensity for FY2022 was 127.64 kg per ton of production. The increase in hazardous waste production is related to clean-up of inventories above shelf-life and excess inventories from closed production sites. There were also no major hazardous waste spillages across all DyStar locations. In FY2022, DyStar was able to recycle 23% of its packaging materials. This improvement is likely due to DyStar's efficient waste management and steadfast commitment to recycle as much of its non-hazardous waste as possible.

For all waste to be disposed, specifications are made available to all DyStar's operating facilities and samples are tested by certified disposal companies. The Group's manufacturing sites continuously monitor and ensure that the specification per waste class including the monthly waste amount allowed to be disposed are maintained.

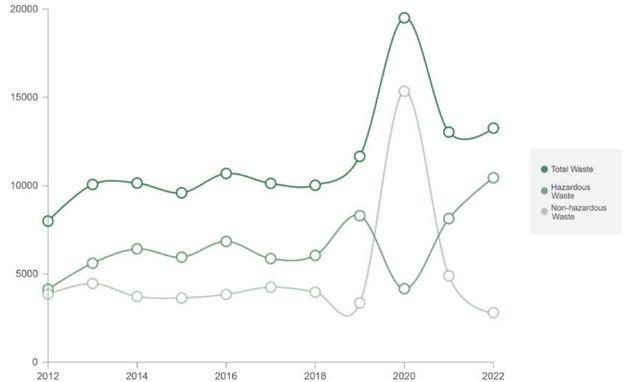
In general, all waste (solid or liquid) generated by DyStar's business activities is transported by certified transportation companies and disposed of by certified disposal companies. Certificates and licenses of the involved transporters and disposal companies are reviewed annually, including inspections of the disposal sites such as landfills or incineration plants.

DyStar's total hazardous and non-hazardous waste disposed totalled 13,256 tons, with 79% categorized as hazardous.

Waste Production Intensity (kg of waste per ton of production)



Waste Production by Category (tons)



Biodiversity

DyStar's operations at all manufacturing sites do not take place near protected, highly biodiverse, or critically important ecosystems or habitats. The company is taking the necessary steps to ensure that there are no significant impacts of its operations on surrounding ecosystems. As part of these precautions, new manufacturing sites are subjected to robust environmental and social impact assessments. These assessments are also extended to hazardous waste, wastewater, and certified disposal companies that DyStar partners with. DyStar is continuously improving the efficiency of installed systems for wastewater and exhaust gas treatment at all existing manufacturing sites.

In FY2022, no significant impacts on local biodiversity or habitats have been recorded as a result of DyStar's production activities at any of its operational locations.

HUMAN CAPITAL

Employee development and well-being are important priorities at DyStar. Mechanisms are in place to ensure our team's ethical behavior and to promote a fair, inclusive, and diverse workforce for all.

/ HUMAN CAPITAL /

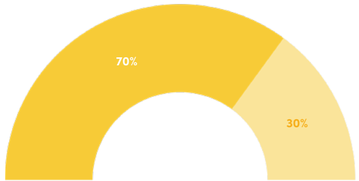
Supporting and Developing Our People

As a leading dyestuff & chemical manufacturer and solution provider, DyStar has established a strong global presence and prides itself on fulfilling its commitments to its people while acknowledging diversity as the key to its worldwide success. As defined in its Code of Conduct, DyStar not only holds its employees to high standards but also applies the same expectations on an organizational basis. There is a strong belief in fair and ethical employment, as well as the creation of a safe work environment for all - thereby optimizing the interests of our people.

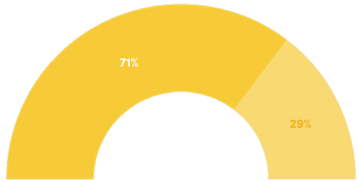
Headquartered in Singapore, DyStar employs 1,719 people across its business units, with offices and production facilities located in the six geographical regions. DyStar also engages a small number of non-employees to conduct work, but this report will focus on members who are in an employment relationship with DyStar.

Supporting and Developing Our People

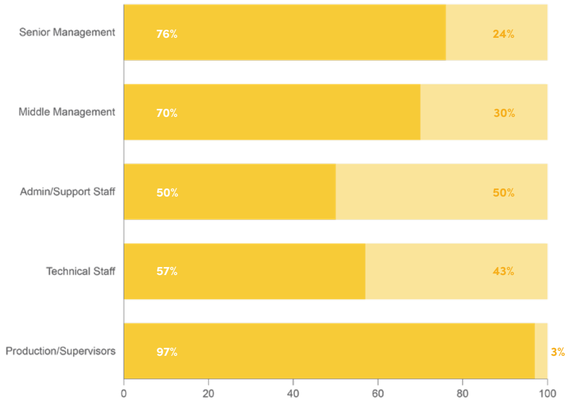
Total Workforce by Gender



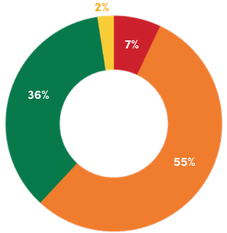
Employee Turnover by Gender



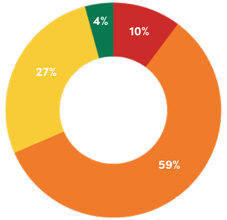
Employees by Position and Gender



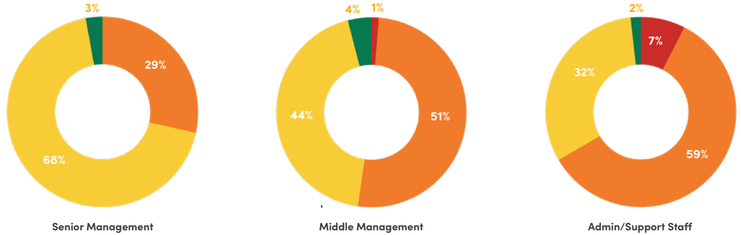
Total Workforce by Age Group

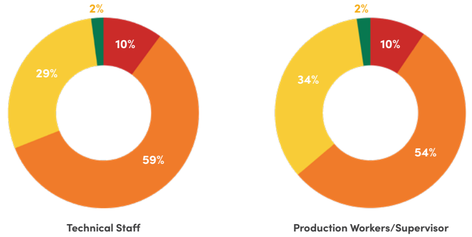


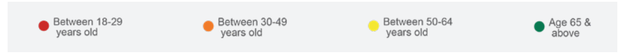
Employee Turnover by Age Group



Employees by Position and Age Group

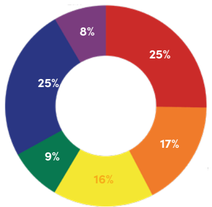




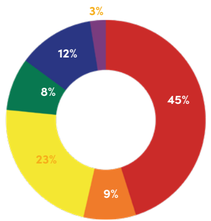


Supporting and Developing Our People

Total Employees by Region



Employee Turnover by Region



Americas | North Asia | Southeast Asia
Europe | South Asia | Turkey, Africa & Middle East

Diversity

DyStar views diversity as a strength and is dedicated to providing equal employment opportunities for all. The company firmly believes that no forms of discrimination or coercion should be tolerated, and it emphasizes the importance of being sensitive to a wide range of cultural circumstances in the daily workplace.

DyStar acknowledges the influential role that role models play in empowering women at work. This is evident in the composition of its management committee, where approximately 60% of the highly esteemed positions are held by women. By employing role modeling, DyStar aims to inspire more women to pursue leadership roles and achieve their full potential in the workplace.

The Group has put in place several events and programmes to ensure that a culture of championing diversity is fostered at the workplace. These efforts constitute DyStar's reputation as a company that prioritises employee wellbeing and good behaviour.

DyStar Mumbai

On 8th March, DyStar celebrated International Women's Day to recognize the achievements of female members of the organization and women around the world. A luncheon was organized for female colleagues, where they enjoyed delicious food and received personalized Women's Day greeting cards based on their personality and accomplishments. The event was significant as it marked the first time in nearly two years that colleagues were able to gather in the office after the easing of COVID restrictions and marked the continuation of DyStar's commitment to recognition of supporting women in the workplace.

Occupational Health and Safety

DyStar is committed to providing its employees with a safe and healthy work environment. The company recognizes the specific hazards associated with chemical industry operations and seeks to ensure occupational safety by identifying potential health risks, providing information, and training, and implementing appropriate protective measures. Employees are also entrusted with mutual responsibility to ensure safety and are required to abide by the company's instructions and regulations. DyStar developed its occupational safety system in consultation with employees to address work organization, occupational safety management, health protection, safety technology, hazardous substances, and production processes. The company believes in taking a holistic approach to safety and expects all employees to take personal responsibility for further improving safety procedures.

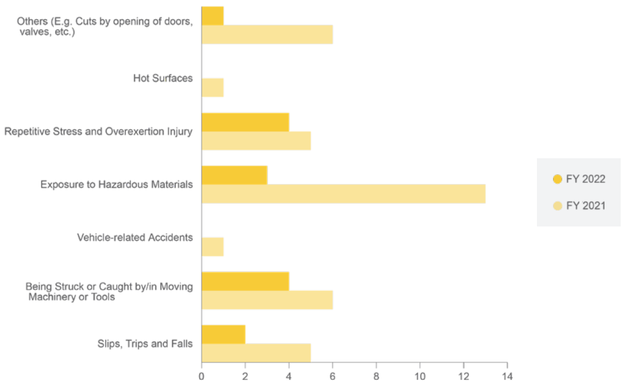
Plants are designed to prioritise safety and minimize potential hazards and process risks. When selecting contractual partners to operate on plant sites, safety, health, and environmentally relevant criteria must be considered. Contractors are expected to follow DyStar's rules, and safety systems for technical installations must be systematically developed and updated to reflect technological progress.

It is a standard practice at DyStar to draw up accident prevention plans for all plants in consultation with relevant DyStar departments and local authorities. Employees are also required to receive suitable instructions and training for operating plants and equipment and must practice emergency procedures.

These safety principles are applied worldwide across DyStar's business units. The company transfers technologies and knowledge within the Group to ensure all DyStar companies implement consistent protection and safety principles and standards.

In FY2022, DyStar has maintained its track record of zero case of work fatalities. There was a total of 12 work-related injuries among employees – a significant decrease from the 35 cases in FY2021. There was no high-consequence injuries, fatalities or work-related ill health recorded in FY2022 for both employees and non-employees.

The breakdown of the type of injuries is as follows:



Tables 1 and 2 below illustrate the number of work-related injuries for employees and non-employees, broken down by the type of injury.

WORK-RELATED INJURIES (EMPLOYEES)

TYPE OF INJURY	NUMBER OF EMPLOYEES
Slips, Trips and Falls	1
Being Struck or Caught by/in Moving Machinery or Tools	3
Vehicle-related Accidents	0
Exposure to Hazardous Materials	3
Repetitive Stress and Overexertion Injury	4
Hot Surfaces	0
Others (E.g., Cuts by Opening of Doors, Valves etc.)	1
TOTAL	**12**

Table 1: Work-related Injuries (employees)

WORK-RELATED INJURIES (NON-EMPLOYEES)

TYPE OF INJURY	NUMBER OF EMPLOYEES
Slips, Trips and Falls	1
Being Struck or Caught by/in Moving Machinery or Tools	1
TOTAL	**2**

Table 2: Work-related Injuries (Non-Employees)

DyStar has established an Occupational Health, Safety, and Environmental Protection framework that guides its approach. The framework includes:

1. Providing employees with adequate personal protective equipment (PPE) to safeguard against direct and long-term health risks associated with handling hazardous materials or processes. A PPE matrix related to such hazards is being implemented at all sites.
2. Conducts regular and thorough site inspections by interdisciplinary teams to identify potential health and safety risks, and any gaps are remedied within a set timeframe with appropriate follow-up actions.
3. Investigates all incidents and accidents in conjunction with HSE experts to address root causes, define corrective actions, and prevent recurrences.

Standard Procedures

Globally, DyStar has established a network of local and regional Health, Safety and Environmental (HSE) Managers whom are tasked to enforce safety procedures and to ensure all employees and contractors comply with applicable laws, regulations, and DyStar policies at all times. The HSE Team creates guidelines and training programs for vigilance and regularly assesses their effectiveness together with the Regional and Global HSE Managers.

DyStar has put in place stringent policies to ensure the safe handling of hazardous materials, chemicals under pressure, working at elevated temperatures, and the release of hazardous by-products, among other protocols. An example of this is DyStar's Emergency Response Plan (ERP) that provides step-by-step guidance on handling hazardous chemical incidents on manufacturing sites. In such situations, special actions are taken according to the Standard Operating Procedures (SOP) or operation manuals.

To address work-related hazards and minimize associated risks, DyStar has put in place a comprehensive Job Hazard Analysis at all of its sites. This analysis identifies potential hazards that could affect employees, and additional measures are implemented to ensure a safe working environment. Site managers are responsible for ensuring that employees follow established safety protocols and review the effectiveness of implemented measures.

In Germany, for instance, the hazard analysis is conducted in line with the German Workplace Ordinance, which aims to protect the health and safety of employees at work. Any changes to the work environment are met with immediate technical or organizational actions to mitigate potential risks to health and safety.

As part of the Process Hazard Analysis (HAZOP), risk assessments are conducted separately for the handling of hazardous chemicals. This principle considers all potential maloperations and technical deviations that could have an impact on people, property, or the environment, following a "one failure principle" to limit the impact of all deviations identified. A dedicated procedure is also followed to identify potential deviations and related organizational and/or technical measures to minimize the impact.

All near misses or work-related accidents are logged in the Incident Tracker report system, including a description of the incident, root cause investigation, and corrective and preventive actions taken to prevent a recurrence. Any work-related hazards or hazardous situations reported as "near miss" are immediately addressed to prevent an unsafe situation that could potentially cause an accident or negatively affect the health and safety of DyStar's employees.

DyStar conducts regular assessments of its operations to identify any potential negative health impacts and implements ergonomic reviews to make technical improvements where necessary. This may include installing vacuum lifters at workstations that require regular lifting or reducing the weight of individual containers. DyStar also provides medical services at all of its manufacturing sites, allowing employees to have access to regular consultations with on-site physicians. Employees are also covered by work insurance programs. For the case of the Ankleshwar site, DyStar has an Occupational Health Centre that is available to all employees.

DyStar Turkey, Africa & Middle East

As climate change escalates, the frequency and severity of natural disasters heightens, exposing company operations to climate risks, and potentially compromising the safety of our employees. DyStar places great focus on mitigating related risks and to enabling employees to protect themselves to their best abilities. As part of DyStar's effort towards mitigating potential safety hazards attributed to climate risks, DyStar has implemented earthquake simulation and disaster training for all employees. A simulation is conducted in a simulation truck to enact the possible situation of an earthquake and employees are trained on the behaviours that would lead to the highest chance of survival and safety after the disaster strikes.

HSE-related training in Gabus, Indonesia Plant

In accordance with Indonesia's law and mandates, the following appointments and programmes have been implemented within FY 2022:

Occupational Safety & Health Expert

Health and safety management training and certification to increase competency of HSE Manager.

Hazardous & Toxic Waste Management Person in Charge

Hazardous and toxic waste management training and certification to increase competency of HSE manager.

Occupational Safety & Health Expert for Fire Prevention

To fulfill local regulation requirements, representatives are appointed and trained by the HSE Manager to increase their competency in fire protection and prevention management.

Emergency Response Team Competition

This event was conducted to increase the skill and competency for good practice of emergency response, including proper use of fire extinguisher and fire hydrant, first aid treatment to the victim, and how to handle the chemical spillage that happened on site. All groups of Emergency Response Team (76 employees from 4 groups) were participants in this event. This is an example of DyStar going the extra mile to promote awareness and is beyond the requirement for a particular customer audit.

Employee Rights and Benefits

In addition to DyStar's Code of Conduct, which outlines DyStar's legal and ethical principles, DyStar also reinforces employees' rights in keeping with the international standard on Social Accountability (SA8000). This approach aligns with ISO 9001, which sets out the criteria for a quality management system. At DyStar, employees are considered important stakeholders, and upholding mutual trust is a priority.

DyStar acknowledges and upholds the rights of its employees to establish and support labour unions, as well as the right to engage in collective bargaining. The company ensures that labour union representatives are not subjected to discrimination and that their members are granted access to the workplace. DyStar follows prevailing laws and standards when determining working hours and ensures that wages are never below the minimum wage specified by law. The company guarantees that it does not enter into employment contracts with illegal workers and that it does not engage in false apprenticeship/vocational training arrangements to avoid compliance with working and social laws.

DyStar adopts a zero-tolerance policy towards any forms of discrimination based on race, ethnic origin, gender, religion, philosophy, political or union membership, disability, age, marital status, or sexual orientation. To comprehend POSH (Policy on Prevention, Prohibition and Redressal Against Sexual Harassment at Workplace), examples of verbal and nonverbal Sexual Harassment were discussed. Colleagues were educated on steps to taken if they want to lodge a complaint, name and education background of Internal Complaint Committee members and their function in the policy, turnaround time for filling complaint and its redressal etc.

DyStar understands the circumstances of employees with children and childbearing, thus actively providing maternity protection. All eligible employees are entitled to parental leave and maternity leave. In total, 26 employees took maternity/paternity leave in FY2022, with 22 employees returning to work upon the end of leave period.

Apart from complying with wage laws and industry standards, DyStar also believes in rewarding employees for good performance and behaviour. In FY2022, DyStar conducted performance review for all employees which built the basis for incentive schemes.

Global Employee Recognition Award 2022

DyStar rewards outstanding employees who have gone above and beyond in their work by awarding them with the company's annual Global Employee Recognition Awards. The following employees were recognized for their efforts and hard work in 2022:
(From left to right)

VIVI TIO
Supply Chain Management, Manager
Indonesia

PRASAD B. MEHENDALE
Business Development Assistant Manager
India

LIZZA HU
Assistant Category Manager
China

LUIS ARCHANGELO
Senior Systems, Applications & Products Consultant
Portugal

GIL SHEN
Health, Safety and Environment, Manager
China

SUELY TAKAHASHI
Quality Management & Health, Safety and Environment, Manager
Brazil

EBRU DEMIR
Supply Chain Management, Manager
Turkey

G. SATHIYASEELAN
Infrastructure & Operations, Assistant Manager
Singapore

Supporting and Developing Our People

Opportunities for Development

DyStar encourages the upskilling of its employees by focusing on improving their core competencies. In order to cultivate a diverse and empowered workforce, DyStar commits to investing in various training and development programs aimed at providing effective skill-building opportunities for its employees. DyStar identifies the continual improvement and expansion of employee skills, knowledge, and interests as a key factor of the company's sustainable growth as opportunities arise and evolve in the long-term. n FY2022, a total of 20,927.87 training hours were clocked across the organisation, made up of employees from all levels.

The below table illustrates the overview of training hours committed across the organisation.

TRAINING	
Number of Training Hours	**20,927.87**
TRAINING HOURS BY GENDER	
Male	**18,229.22**
Female	**2,698.65**
TRAINING HOURS BY EMPLOYEE CATEGORY	
Senior Management	**1,389.75**
Middle Management	**4,496.15**
Admin/Support Staff	**2,158.36**
Technical Staff	**2,715.48**
Production/Supervisors	**10,168.13**

Table 3: Training Hours Statistics

Global Training Program

Global Training Program is managed through the Global HR and its regional and local network. The People leadership will oversee the implementation and execution of the different training program tailored to the region. The program includes mandatory regulatory, safety, quality, and certification training, technical training to enhance job competencies, and soft skills training to develop supervisory, interpersonal, and leadership skills. By focusing on increasing the capacity and performance of each employee, the Global Training Program at DyStar aims to boost the company's overall efficacy and efficiency.

Management Trainee Program/ Internships

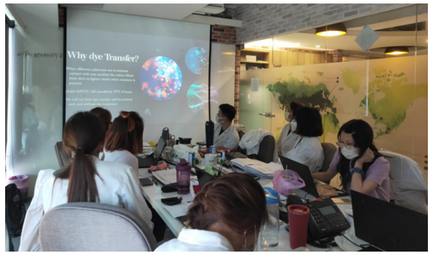
Apart from improving the capacity of existing employees, DyStar developed the Management Trainee program to attract young talents with promising prospects for future leadership positions.

DyStar India Training Programmes

DyStar implemented several training initiatives, including biweekly technical training sessions for Key Account Manager/ Business Development colleagues, succession planning using a 9-grid model to evaluate team members' potential, and a training session on Microsoft® 2FA and MS Outlook tool conducted by the IT manager for the South Asia region. These initiatives aimed to refresh technical knowledge, update application of new products, develop talent pipeline, and improve work efficiency through the effective use of technology.

Industrial Training by TPFIA

Environmental sustainability is a pressing global issue. In response to the upcoming Carbon Border Adjustment Mechanism (CBAM), DyStar implemented a personnel training course in collaboration with Textile Printing Dyeing & Finishing Industry Association (TPDFIA) on May 10th, 2022. The course featured an associate professor from Asia Eastern University of Science and Technology who introduced fibre types and applications, while promoting the use of DyStar Cadira® modules to reduce energy and water consumption and increase production capacity for energy and carbon reduction. Taiwan Textile Research Institute (TTRI) and Industrial Technology Research Institute (ITRI) provided Global Recycled Standard (GRS) certification coaching and tools to calculate carbon footprint.



Opportunities from Challenges

COVID-19 has fundamentally changed the way people live, with indoor activities emerging as a key trend. Resultingly, sales of brands that engage with technical athletic clothes have benefited from this trend. DyStar is able to capitalise on this since the material used by brands is mainly nylon fibre, which is within DyStar's capacity of production. In response to this, in FY2022, a 2-days training program was arranged in Taiwan for the brand. Due to positive feedback from employees of the brand, DyStar has decided to plan for more courses to involve employees going forward.

DyStar University (DSU)

DyStar launched the Learning Management System - DyStar University (DSU) to all employees globally in December 2022. DSU offers a plethora of training courses and proprietary materials that will support employees' learning journey at DyStar. Currently, the company introduced a suite of product marketing modules specially curated to help employees learn about the organisation's various offerings by products. The courses are designed to help support learnings more effectively and result-oriented as we included short quizzes and achievement certificate for every completed course. In FY2022, we had 58 employees who completed a total of 297 training modules.

Accolades and Awards

DyStar Shanghai was awarded 188th place of the Top 200 Economic Contribution Enterprises in Jing An District of Shanghai in 2022.

Günther Widler, Head of Technology for the Denim and Sodamide, has been recognized for his influential leadership in the global denim marketplace. He was featured in the prestigious Rivet 50 index, which acknowledges the most impactful leaders spearheading transformative change in the industry.

Supporting and Developing Our People

Ethical Business

DyStar is dedicated to establishing a strong foundation for its corporate governance as it is fully cognizant of its social responsibilities. DyStar has implemented strong compliance and ethics processes to deter unethical behaviour and bolster existing safeguards. Code of Conduct sets out the framework for employees on ethical values and there are eight guiding principles. In addition, DyStar has clearly outline its expectations on Fraud Policy to encourage and protect whistle blowers as well as for Supplier and Third-Party Service Provider Code of Business Conduct, and a Sales Related Service Partners Code of Business Conduct. The main objective is to ensure the global organisation continues to uphold ethical behaviors at all levels, delivering business excellence in the highest ethical and compliance standards.

Anti-corruption and Anti-competition

DyStar's business is vulnerable to the risks of corruption and bribery given its operations span across numerous geographical areas and interactions with numerous stakeholders. To that end, 100% of DyStar operations were assessed by the Global Internal Audit Team for risks relating to corruption. In FY2022, no significant risks relating to corruption were identified through the risk assessment conducted. The company has a zero-tolerance stance towards any form of bribery and corruption. At DyStar, anti-corruption policies are communicated to 100% of all employees across the organization, including governance body members, Vice Presidents, Directors and Managers. Additionally, to ensure employees adhere to these policies and are prepared in addressing matters relating to ethical business conduct, all employees receive training on anti-corruption annually. In FY2022, DyStar reported zero confirmed anti-corruption cases and zero public legal cases regarding corruption brought against the organization or its employees.

With regard to anti-competitive behaviour, DyStar diligently abides by all laws and regulations and does not tolerate it within its staff. All employees have to comply with the law as stated by DyStar's policies. Employees who may have queries regarding behaviour that could potentially be considered anti-competitive can seek legal counselling. In FY2022, zero cases regarding anti-competitive behaviour and violations of anti-trust and monopoly legislation were reported.

Human Rights

DyStar is committed to conducting business responsibly and has a zero-tolerance policy for child, forced, and coercive labour. The Group's Code of Conduct includes a section on human rights, and every contract signed by external parties stipulates that they must abide by the laws and regulations governing those rights in their respective jurisdictions.

No sites are allowed to employ children and only those above the age of 18 are hired due to safety reasons. To ensure suppliers uphold human rights principles and maintain the basic standards of business conduct, DyStar engages in supplier engagement processes and regular on-site visits to monitor for signs of human rights abuses in its supply chain. For example, all significant suppliers are audited onsite either annually or biannually to ensure they comply with DyStar's stance against the employment of children and both internal and external audits are conducted to ensure no forced labour takes place.

To date, there has been no reported case relating to child or forced labour, and DyStar has not been charged any fines or penalties in this area.

DyStar respects work's rights to exercise freedom of association or collective bargaining agreements. In FY2022, 20% of DyStar employees are covered under collective bargaining agreements. In the event of significant operational changes that could substantially affect employees, employees are provided a notice period. However, this varies based on the collective bargaining agreement signed and location regulations.

Data Privacy

DyStar understands the risk posed by cyber threats in the digital era and the necessity to enhance data security to safeguard its customers' data. The Group is dedicated to upholding the highest levels of data security and privacy to safeguard both its own corporate data and that of its customers.

In order to comply with regulations such as the Personal Data Protection Act of 2012 (PDPA) and the General Data Protection Regulation (GDPR) of the European Union, DyStar has implemented data privacy measures and works closely with international regulators and investor-related bodies. Additionally, DyStar also introduced its Global Personal Data Protection Policy in 2018, which clearly denotes practices relating to the collection, processing, use and disclosure of personal data, to comply with various data privacy requirements.

DyStar Singapore conducts a yearly internal audit of personal data protection and adheres to a data breach procedure to prevent the loss of customer data.

In FY2022, DyStar reported zero case of identified losses of customer data as well as zero substantiated complaints received concerning breaches of customer privacy.

DyStar's Data Breach Procedure

DATA BREACH RESPONSE PROCESS	ACTIONS TAKEN TO CONTAIN THE DATA BREACH
Step 1: Contain Staff should report all suspected/ confirmed data breaches immediately. Data breach management team to conduct an initial assessment of the data breach to assess the severity. **Step 2: Assess** An in-depth assessment of the data breach will be conducted to understand the risks posed by the data breach and how these risks can be addressed. **Step 3: Report** Notification of Personal Data Protection Commission (PDPC) and affected individuals. **Step 4: Evaluate** Review and take action to prevent future breaches.	1. Isolate the compromised system from the Internet or network or shut down the compromised system if necessary. 2. Prevent further unauthorised access to the system – e.g. reset passwords if accounts and passwords have been compromised. 3. Isolate the causes of the data breach in the system, and where applicable, change the access rights to the compromised system. 4. Stop the identified practices that led to the data breach. 5. Establish whether the lost data can be recovered and steps that can be taken to minimise any harm or impact caused by the data breach (e.g. remotely disabling a lost notebook containing personal data of individuals).

SOCIAL CAPITAL

DyStar acknowledges the importance of ensuring healthy interaction with local stakeholders and generating positive outcomes for the local communities around where we operate.

/ SOCIAL CAPITAL /

Contributing to the Community

DyStar is committed to being a responsible citizen and recognizes that its operations have significant impacts on the towns and villages that surround them. The company seeks to incorporate sustainable practices in its operations to create value for the stakeholders, while still generating positive outcomes for the local communities.

To help strengthen local communities, DyStar pledged to invest in the education and training of the local workforce. As part of its efforts, the company prioritizes locals in its hiring process.

Contributing to the Community

Embracing Cultural Diversity

DyStar is committed to creating an inclusive work environment, where employees of different cultural backgrounds feel welcomed to contribute their unique perspectives, and drive innovation within the company. Traditional practices are frequently featured in DyStar-organized events, while local traditions and cultures are encouraged and celebrated.

Corporate Social Responsibility

Throughout the year, DyStar participated in various corporate social responsibility ("CSR") programs to support the local community and environment as well as provide opportunities for its employees to be part of various community outreach initiatives.

Donation to Sardar Patel Hospital

DyStar India pledged another USD 25,632 (2,100,000 INR) worth of donations to the Shree Sardar Vallabhbhai Patel Rotary General Hospital, located in Ankleshwar. The donations are meant to help fund the procurement of a navigation system for hip and knee replacement surgeries, and Minimal Invasive Cardiac surgery instrument sets.

Donation to India's Prime Minister Relief Fund

In FY2022, DyStar India pledged USD 94,045 (7,705,000 INR) to India's Prime Minister Relief Fund. The donations are used for the welfare of society.

Ramadhan/Idul Fitri's Package to Local Communities

As part of its CSR program in Indonesia, DyStar Indonesia pledged to contribute 1,486 packages worth USD 7,481 (109,221,000 IDR) which include basic essentials such as rice, cooking oil and sugar for 1,486 families in the Gabus Village.

Donation of sacrificial animal for Hajj's Day

DyStar Indonesia also participated in its local community's Eid Al Hajj whereby it sponsored 7 sacrificial goats worth USD 1,404 (20,500,000 IDR) and presented these goats to the village heads of seven enclaves within Gabus Village.

Indonesian Anniversary (Independence Day)

For the Indonesian Anniversary or Indonesia's Independence Day, DyStar Indonesia helped organize the event which included traditional games for the local people in the surrounding Gabus plant community.

Maulid Nabi 2022

Maulid is the Islamic observation of the birthday of the Prophet Muhammad. DyStar Indonesia actively contributed to commemorating Maulid with the surrounding local Gabus plant community.

World Environment Day

DyStar Indonesia participated actively in the annual World Environment Day (Global warming) agenda conducted by the local Indonesian government. For example, DyStar Indonesia donated mangrove tree seeds in support of the event.

Table 4 below provides an overview of DyStar's total CSR contributions.

CSR PROGRAM (DYSTAR INDIA)	AMOUNT (INR)	USD
Prime Minister Relief Fund	**7,705,000**	**94,045**
Shree Sardar Vallabhbhai Patel Rotary General Hospital, Ankleshwar, Bharuch District, Gujarat	**2,100,000**	**25,632**

CSR PROGRAM (DYSTAR INDONESIA)	AMOUNT (IDR)	USD
CSR Ramadhan/Idul Fitri's Package to local communities	**109,221,000**	**7,481**
Sacrifice goats in line with Hajj's day	**20,500,000**	**1,404**
Indonesian Anniversary (Independence Day)	**1,550,000**	**106**
Maulid Nabi	**1,050,000**	**72**
World's Environment Day	**3,000,000**	**205**
		128,945

Table 4: CSR Contributions

Customer Satisfaction

DyStar places great emphasis on customer satisfaction and experience to ensure customer retention and sustainable business growth. To deliver better products to our customers, it is imperative to understand the satisfaction levels of our customers and the concerns they might have.

In FY2022, DyStar received 298 justified and non-justified complaints from customers, 75 less than in FY2021. The complaints received were of various natures, ranging from logistics issues such as wrong labelling to product quality issues. Each complaint was resolved promptly by the DyStar subsidiary site Quality Control team according to its nature. Despite the number of complaints remaining relatively constant across the years, DyStar strives to be committed to providing a satisfactory experience for all its customers and seeks to minimize the complaints received annually.

As part of the efforts to improve customer satisfaction, DyStar conducts yearly target setting reviews on the number of justified customer complaints to compare performance across different DyStar sites/regions.

Appendix A: Supplementary Sustainability Data

[7] DyStar follows the standard definition of permanent employees by GRI Standards, which includes employees with an indefinite contract that can be full-time or part-time work.

[8] DyStar follows the standard definition of temporary employees by GRI Standards, which includes employees under a contract that is limited by time or tasks.

A1: Workforce Statistics

Total Number of Employees by Employment Contract, by Age

	PERMANENT EMPLOYEES[7]	TEMPORARY (CONTRACT) EMPLOYEES[8]
Age 17 & below	0	0
Between 18 - 29 years old	115	9
Between 30 - 49 years old	905	35
Between 50 - 64 years old	581	32
Age 65 & above	37	5
Total	**1,638**	**81**

Total Number of Employees by Employment Contract, by Region

	PERMANENT EMPLOYEES	TEMPORARY (CONTRACT) EMPLOYEES
North Asia	216	62
South Asia	138	7
Southeast Asia	422	1
Europe	286	8
Americas	431	3
Turkey, Africa & Middle East	145	0
Total	**1,638**	**81**

Total Number of Employees by Employment Type, by Age Group

	FULL-TIME EMPLOYEES	PART-TIME EMPLOYEES	NON-EMPLOYEES[9]
Age 17 & below	0	0	0
Between 18 - 29 years old	115	0	12
Between 30 - 49 years old	898	7	36
Between 50 - 64 years old	570	11	23
Age 65 & above	36	1	3
Total	**1,619**	**19**	**74**

Total Number of Employees by Employment Type, by Region

	FULL-TIME EMPLOYEES	PART-TIME EMPLOYEES	NON-EMPLOYEES[9]
North Asia	216	0	42
South Asia	138	0	32
Southeast Asia	422	0	0
Europe	269	17	0
Americas	429	2	0
Turkey, Africa & Middle East	145	0	0
Total	**1,619**	**19**	**74**

[9] Non-employees refer to workers who are not directly employed by DyStar.

Appendix A: Supplementary Sustainability Data

A1: Talent Attraction & Retention

Total Number of New Employee Hires by Gender

GENDER	NUMBER
Male	161
Female	58
Total	**219**

Total Number of New Employee Hires by Age Group

AGE GROUP	NUMBER
Age 17 & below	0
Between 18-29 years old	60
Between 30 - 49 years old	115
Between 50 - 64 years old	42
Age 65 & above	2
Total	**219**

Total Number of New Employee Hires by Region

REGION	NUMBER
North Asia	26
South Asia	27
Southeast Asia	19
Europe	18
Americas	125
Turkey, Africa & Middle East	4
Total	**219**

Total Number of Turnovers by Gender

GENDER	NUMBER
Male	166
Female	69
Total	**235**

Total Number of Turnovers by Age Group

AGE GROUP	NUMBER
Age 17 & below	0
Between 18-29 years old	24
Between 30 - 49 years old	137
Between 50 - 64 years old	64
Age 65 & above	10
Total	**235**

Total Number of Turnovers by Region

REGION	NUMBER
North Asia	54
South Asia	20
Southeast Asia	29
Europe	20
Americas	106
Turkey, Africa & Middle East	6
Total	**235**

Appendix A: Supplementary Sustainability Data

A3: Diversity & Equal Opportunities

Total employees by Position

POSITION	NUMBER
Senior management	**70**
Middle management	**325**
Admin/support staff	**518**
Technical staff	**287**
Production/Supervisors	**519**
Total	**1,719**

Total employees by Position and Age Group

POSITION	AGE GROUP	NUMBER
Senior management	Age 17 & below	**0**
	Between 18-29 years old	**0**
	Between 30-49 years old	**20**
	Between 50-64 years old	**48**
	Age 65 & above	**2**
Middle management	Age 17 & below	**0**
	Between 18-29 years old	**4**
	Between 30-49 years old	**166**
	Between 50-64 years old	**142**
	Age 65 & above	**13**
Admin/support staff	Age 17 & below	**0**
	Between 18-29 years old	**39**
	Between 30-49 years old	**306**
	Between 50-64 years old	**164**
	Age 65 & above	**9**
Technical staff	Age 17 & below	**0**
	Between 18-29 years old	**29**
	Between 30-49 years old	**169**
	Between 50-64 years old	**83**
	Age 65 & above	**6**
Production workers/Supervisor	Age 17 & below	**0**
	Between 18-29 years old	**49**
	Between 30-49 years old	**282**
	Between 50-64 years old	**176**
	Age 65 & above	**12**
Total		**1,719**

Total employees by Position and Gender

POSITION	GENDER	NUMBER
Senior management	Male	**53**
	Female	**17**
Middle management	Male	**228**
	Female	**97**
Admin/support staff	Male	**257**
	Female	**261**
Technical staff	Male	**164**
	Female	**123**
Production workers/Supervisor	Male	**503**
	Female	**16**
Total		**1,719**

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GRI Content Index

GRI STANDARDS	DISCLOSURE NUMBER	DISCLOSURE TITLE	PAGE REFERENCE / REMARKS
General Disclosures			
GRI 2 (2021): General Disclosures	2-1	Organizational details	4
	2-2	Entities included in the organization's sustainability reporting	6
	2-3	Reporting period, frequency, and contact point	6-7
	2-5	External assurance	7
	2-6	Activities, value chain and other business relationships	4, 30-31
	2-7	Employees	67-68
	2-9	Governance structure and composition	12-13
	2-11	Chair of the highest governance body	12-13
	2-12	Role of the highest governance body in overseeing the management of impacts	12-13
	2-13	Delegation of responsibility for managing impacts	12-13
	2-14	Role of the highest governance body in sustainability reporting	12-13
	2-15	Conflicts of interest	12-13
	2-16	Communication of critical concerns	12-13
	2-17	Collective knowledge of the highest governance body	12-13
	2-19	Remuneration policies	13
	2-22	Statement on sustainable development strategy	14-15
	2-23	Policy commitments	14-15
	2-24	Embedding policy commitments	14-15
	2-25	Processes to remediate negative impacts	79
	2-26	Mechanisms for seeking advice and raising concerns	78
	2-27	Compliance with laws and regulations	78
	2-28	Membership associations	43
	2-29	Approach to stakeholder engagement	16
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Material Topics			
GRI 3 (2021): Material Topics	3-1	Process to determine material topics	16
	3-2	List of material topics	16
RESILIENT ECONOMIC PERFORMANCE			
Material Topic: Economic contribution			
GRI 3 (2021): Material Topics	3-3	Management of material topics	25-27
GRI 201 (2016): Economic Performance	201-1	Direct economic value generated and distributed	25-27
	201-2	Financial implications and other risks and opportunities due to climate change	20-21
SUSTAINABLE PRODUCTION AND SUPPLY CHAIN			
Material Topic: Responsible sourcing and supply chain			
GRI 3 (2021): Material Topics	3-3	Management of material topics	29, 32, 36, 38
GRI 308 (2016): Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	32-33
	308-2	Negative environmental impacts in the supply chain and actions	32-33
GRI 414 (2016): Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	32-33
	414-2	Negative social impacts in the supply chain and actions taken	32-33
Material Topic: Efficient use of raw materials			
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GRI 301 (2016): Materials	301-1	Materials used by weight or volume	35
	301-2	Recycled input materials used	30-31, 60
	301-3	Reclaimed products and their packaging materials	38

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GRI 3 (2021): Material Topics	3-3	Management of material topics	36
Material Topic: Sustainable logistics			
GRI 3 (2021): Material Topics	3-3	Management of material topics	38-39
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Material Topic: Product stewardship and innovation			
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Material Topic: Sustainable logistics			
GRI 3 (2021): Material Topics	3-3	Management of material topics	37, 47
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GRI 303 (2018): Water and Effluents	303-1	Interactions with water as a shared resource	56-59
	303-2	Management of water discharge-related impacts	58
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	303-4	Water discharge	58
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GRI 305 (2016): Emissions	305-1	Direct (Scope 1) GHG emissions	52
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	305-4	GHG emissions intensity	53
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GRI 306 (2020): Waste	306-1	Waste generation and significant waste-related impacts	60
	306-2	Management of significant waste-related impacts	60
	306-3	Waste generated	60
	306-4	Waste diverted from disposal	60
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Material Topic: Biodiversity			
GRI 3 (2021): Material Topics	3-3	Management of material topics	61
GRI 304 (2016): Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	61
	304-2	Significant impacts of activities, products and services on biodiversity	61
SUPPORTING AND DEVELOPING OUR PEOPLE			
Material Topic: Employee well-being			
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	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	72
	401-3	Parental leave	72
Material Topic: Developing people			
GRI 3 (2021): Material Topics	3-3	Management of material topics	74-75

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GRI STANDARDS	DISCLOSURE NUMBER	DISCLOSURE TITLE	PAGE REFERENCE / REMARKS
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	404-2	Programs for upgrading employee skills and transition assistance programs	74-75
	404-3	Percentage of employees receiving regular performance and career development reviews	72
Material Topic: Diversity and equality			
GRI 3 (2021): Material Topics	3-3	Management of material topics	66
GRI 405 (2016): Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	66
GRI 406 (2016): Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	66
Material Topic: Workplace health and safety			
GRI 3 (2021): Material Topics	3-3	Management of material topics	67
GRI 403 (2018): Occupational Health and Safety	403-1	Work-related injuries	68
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	403-3	Occupational health services	69
	403-4	Worker participation, consultation, and communication on occupational health and safety	69
	403-5	Worker training on occupational health and safety	68-71
	403-6	Promotion of worker health	68-71
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	68-71
	403-8	Workers covered by an occupational health and safety management system	67-68
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	403-10	Work-related ill health	67-68
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GRI 3 (2021): Material Topics	3-3	Management of material topics	77
GRI 205 (2016): Anti-corruption	205-1	Operations assessed for risks related to corruption	77
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	205-3	Confirmed incidents of corruption and actions taken	77
GRI 206 (20160: Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	77
Material Topic: Human rights			
GRI 3 (2021): Material Topics	3-3	Management of material topics	78
GRI 407 (2016): Freedom of Association and Collective Bargaining	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	78
GRI 408 (2016): Child labor	408-1	Operations and suppliers at significant risk for incidents of child labor	78
GRI 409 (2016): Forced or Compulsory	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	78
Material Topic: Data privacy			
GRI 3 (2021): Material Topics	3-3	Management of material topics	79
GRI 418 (2016): Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	79
CONTRIBUTING TO THE COMMUNITY			
Material Topic: Embracing cultural diversity			
GRI 3 (2021): Material Topics	3-3	Management of material topics	81
GRI 413 (2016): Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	82-83
Material Topic: Data privacy			
GRI 3 (2021): Material Topics	3-3	Management of material topics	83

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SDG Index

UN SDGS	MATERIAL TOPIC	HOW DYSTAR SUPPORTS THE UN SDGS
 *Target 3.8 & 3.9*	• Workplace health and safety	• Provide permanent full-time and part-time employees with medical plans, life insurance and accident insurance • Ensure a safe workplace by adhering with its Occupational Health, Safety and Environmental Protection Framework • All employees working at manufacturing sites to undergo safety trainings • Ensure proper treatment of hazardous and non-hazardous waste to reduce air, water and soil contamination
 *Target 4.4*	• Developing people	• Invest in training and development opportunities to improve employees' knowledge and skills • Engage with customers, brands and retailers via webinars to reduce resource use in the textile dying processes
 *Target 5.5*	• Employee well-being	• Adopts a zero-tolerance stance towards any form of discrimination at the workplace • Continouly seek opportunities to increase the rle of women in its workforce and reduce the gender gap
 *Target 6.3 & 6.4*	• Climate resilience	• Ensure proper measures are in place to treat and manage wastewater • Responsible consumption of water across its operations • Reuse water and tap on alternative sources of water such as rainwater to reduce improve water efficiency
 *Target 7.2 & 7.3*	• Climate resilience	• Increasing the proportion of renewable energy • Leveraging on innovative technologies and opportunities to reduce energy usage
 *Target 8.1*	• Resilient economic performance	• Explore new ways to enhance resource efficiency to improve its financial flexibility and resilience • Prioritize hiring from the local community

UN SDGS	MATERIAL TOPIC	HOW DYSTAR SUPPORTS THE UN SDGS
 *Target 10.3*	• Employee well-being • Human rights	• Adopts a zero-tolerance stance towards any form of discrimination at the workplace • Creating an inclusive work environment
 *Target 11.6*	• Production stewardship and innovation • Climate resilience	• Leverage on innovation to ensure products are safe for human and the environment, and free from environmental, health and safety risks • Proper management of waste and wastewater
 *Target 12.2, 12.4, 12.5 & 12.7*	• Climate resilience • Responsible sourcing and supply chain • Efficient use of raw materials • Circular economy approach in manufacturing	• Reduce energy, waste and waste intensity across its operations • Responsible sourcing of materials and suppliers • Ensure resources are utilized at optimal efficiency to minimize wastage and maximize output • Increase proportion of recycled packaging materials
 *Target 13.2*	• Climate resilience	• Optimize transport and logistics to minimise environmental footprint • Adopt new technology to reduce energy and GHG intensity • Engage with customers, brands and retailers via webinars to reduce resource use in the textile dying processes
 *Target 16.5 & 16.6*	• Ethical business • Human rights	• Conduct business with the highest standard of corporate governance and transparency • Zero-tolerance stance towards child, forced and compulsory labor • Implementation of a strong ethics and compliance mechanisms, including a Code of Conduct

Committed to Sustainability

DyStar's products and services help customers worldwide reduce costs, shorten lead times and meet stringent quality and ecological specifications.

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