



**SUSTAINABILITY PERFORMANCE 2013**  
*Committed to Sustainability*

# CONTENTS

1	LETTER FROM CEO
2	THE SUSTAINABILITY COMMITTEE
3	ABOUT THE REPORT
4	ABOUT DYSTAR
4	<i>OUR WORLDWIDE PRESENCE</i>
5	<i>OUR PRODUCTS AND SOLUTIONS</i>
6	<i>OUR SERVICES</i>
7	<i>OUR MEMBERSHIP</i>
8	ECONOMIC PERFORMANCE
9	SUSTAINABILITY AT DYSTAR
11	STAKEHOLDER ENGAGEMENT
13	OUR SUSTAINABILITY PERFORMANCE
13	<i>ENSURE SUSTAINABLE OPERATIONS</i>
21	<i>PROVIDE RESPONSIBLE PRODUCTS AND SERVICES</i>
25	<i>PROMOTE ETHICAL PRACTICES</i>
31	DATA AT A GLANCE
32	GRI INDEX
37	UN GLOBAL COMPACT INDEX



# LETTER FROM CEO



Dear Stakeholders,

DyStar has built its business upon technical expertise accumulated over more than 100 years of dyestuff manufacture, strong customer relationships, the skills of its employees, and the foresightedness of its management. Anticipating the demand for sustainable production practices in the textile industry, we were amongst the first to recognize sustainable action as a business imperative. We have leveraged our sustainability vision to improve our own production processes, to develop innovative products and services and to promote environmental best practice along the whole of the textile supply chain.

We published our first Group sustainability report in 2010 and it was at that time that we established concrete goals for reduction of our operational impacts. As our production has increased so has our resource consumption but both our emission intensity and resource use per tonne of production have fallen significantly over the last 4 years. We remain committed to reducing our resource and emission intensity by continuous process improvement. This is a big challenge for us as our product mix is both very broad and extremely dynamic as we respond to constantly changing market and customer requirements.

This year a greater proportion of our total manufacturing output was in dyes – which have much higher resource intensity than

our chemical auxiliary products. However for both our dye and chemical manufactures we managed to reduce emission intensity in 2013 compared to 2012 and the reductions over the last 3 years are significant.

In spite of the challenges, all our teams across countries are committed to achieve our sustainability goals. We recognize and appreciate the efforts of our employees in making our business and sustainability efforts successful. We ensure that they benefit personally from our drive towards greater sustainability, and do not remain only as contributors. We provide a working environment that recognizes the needs of our multicultural and geographically-dispersed workforce. We understand the importance of personal growth for our employees throughout their careers, and offer opportunities for them to enhance their knowledge and skills through a wide variety of training and development programs. We also aim to ensure the highest possible standards of occupational health and safety for our entire workforce but particularly for those directly involved in dye and chemical manufacture. Strict adherence to the relevant health and safety regulations and national and international labour standards is a mandate for all our sites.

We continue to encourage our employees to play an active role in the various communities in which we operate. Initiatives such as donation of food and money in disaster struck regions, helping integrate differently-abled people within society, and helping those suffering from HIV/AIDS were just some examples of activities undertaken by DyStar employees during the 2013.

Today, I can say with confidence, that we have gained significant momentum in our sustainability efforts. We have invested heavily in new product research and development, we are providing high quality products

and services to our customers, and we are raising the standard of environmental and social sustainability in our operations. This, in turn, has enhanced our global recognition and credibility and helped us grow our business.

With this background, I have great pleasure in presenting to you DyStar Group's Annual Corporate Sustainability Report for 2013. We recognize that apart from our own understanding and analysis, our sustainability goals and objectives depend to a large degree on the feedback we receive from our stakeholders and readers. We listen to and learn from your views and responses. So may I also take this opportunity to thank you for your support and constant engagement with us as we continue on our journey to sustainability!

A handwritten signature in black ink, reading 'Harry Dobrowolski'.

**Harry Dobrowolski**  
**Group CEO / President**

# THE SUSTAINABILITY COMMITTEE



**Gerald Talhoff**

**VP – Global Manufacturing & Supply Chain**

In 2013 we decided to increase our backwards integration because we had come to the conclusion that manufacturing certain intermediates in-house would be more sustainable than buying them. This did slightly and temporarily increase our energy and water intensity. However, our goal remains unchanged: We want to be the most sustainable suppliers of dyes, chemicals and services to the world's textile industry and we improve our performance continuously. By 2020 we will have reduced our emissions by at least 20% compared to our 2010 levels. All employees in Manufacturing and Supply Chain are committed to this.



**Ron Pedemonte**

**Head of DTS & Sales Areas America**

Innovation and sustainable solutions are the two pillars of on which our product development rests. We design products & services which not only improve our own environmental and safety performance but also shorten production time, optimize resource consumption and provide best in class quality to our customers. Our customers are appreciative of our approach and their satisfaction and acceptance is evident from the increase in our market shares/sales. We continue to monitor the emerging needs of the dynamic textile industry and will strive to meet every requirement of our customers in a sustainable manner.



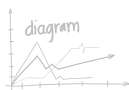
**Dr. Charu Jain**

**Global Sustainability Manager DyStar Group**

We see sustainability as a journey rather than a destination. We started this journey in 2010 and set ourselves specific milestones to reach. Our operations and products are increasingly becoming more environment and socially responsible. Even though we have come a long way, we have further to go. In coming year, we also hope to bring our suppliers and customers at par with DyStar own sustainability benchmarks. Our ultimate aim is to be a defining member and lead the way towards a cleaner textile industry.



# ABOUT THE REPORT



## 01 Scope and Boundary

The DyStar Group started its Sustainability journey in 2010, and since then has been successful in its endeavour and has progressed along its journey. This is DyStar Group's fourth annual Sustainability Report published for the year 2013. The report reviews the company triple bottom line (i.e. Economic, Environmental and Social) performances. The report also forms a part of our formal Communication of Progress (COP) to the United Nations Global Compact (UNGC) principles.

The intended readers of this report shall include all key stakeholders - employees, suppliers and contractors, shareholders and investors, customers, regulatory authorities, industry associations, non-governmental organizations, academics, industrial peers, media and local communities. The report has been prepared in accordance with the Global Reporting Initiative (GRI) G3.1 Guidelines as per the Application level B and covers 22 Core and 11 Additional Indicators. Our last report was published for the reporting period 2012.

### Scope and Boundary of the Report

The report captures the sustainability performance data for our business units, facilities and subsidiaries<sup>1</sup> that are operationally and financially controlled by DyStar Group.

Exclusions in the report boundary include third party warehouses, agents and Lenmar Chemical Corporation. In 2013, DyStar Group acquired the assets and business of Lenmar Chemical Corporation of Dalton, Georgia and we intend to include the data from Lenmar in our sustainability report from 2014 onwards. Operations at the production plant in Hangzhou, China, were discontinued during the course of the current reporting period.



## 02 Reporting Process

### Reporting Process

The entire reporting process is led by DyStar Group's Sustainability Committee. The committee is further supported by a cross-functional project team with representative members from all production sites and offices. An IT based sustainability data management software is deployed for the collection and analysis of sustainability information. There is no external assurance sought for the current sustainability report. However, a two tier verification process has been designed into the software system to strengthen the data collection process.

The key material issues reported for the current period were identified through a well-defined formal process of engagement with the representatives of various stakeholder groups. Details of this selection process and the prioritized topics are given in the "Stakeholder Engagement and Materiality" section of the report. The key aspects and indicators were chosen on the basis of the material issues to form the content of this report.

While reporting on performance indicators, an attempt is made to apply a uniform

approach for data collection, measurements and calculations for our entire operations. Any assumptions and methodology used for the analysis or reporting are included in the report as applicable.

The report is made available in a PDF version online at [www.dystar.com](http://www.dystar.com). In accordance with the company environmental policy to conserve resources, only a limited number of hard copies have been printed.

The intended readership of this report includes individuals and groups who are capable of influencing DyStar's operations, may have an interest in them or may be affected by them. This group comprises employees, suppliers and contractors, shareholders and investors, customers, regulatory authorities, industry associations, non-governmental organizations, academics, industrial peers, media and local communities.

We solicit your feedback to improve upon our reporting process in the coming years. Any query with respect to this report may be addressed to: [sustainability@DyStar.com](mailto:sustainability@DyStar.com)



## ABOUT DYSTAR



DyStar Group is one of the leading global organizations delivering quality dyes, performance chemicals, and color solution services to the textile industry. The company offers a complete range of colorants, auxiliaries and services. DyStar Group is owned by DyStar Global Holdings (Singapore) Pte Ltd, a special purpose vehicle jointly owned by India-based Kiri Dyes and Chemicals Limited and China-based Longsheng Group. In 2013, we acquired the assets and the business of Lenmar Chemical Corporation of Dalton, Georgia. Lenmar is a very successfully specialty chemical products manufacturer servicing the Textile and Carpet, Fiber processing, Laminate floor, Water treatment, Oil and Agriculture Industries.

Our operations are managed by 2200 employees and are spread across 12 countries with 14 production facilities and sales offices in all key regions. The company has its headquarters in Singapore<sup>2</sup>. In 2013 our revenue was \$822 million USD with share of 45% in Asia, 30% in Europe and 25% in America.

## VISION STATEMENT



RIGHT PLAN



CONNECTION



TEAMWORK

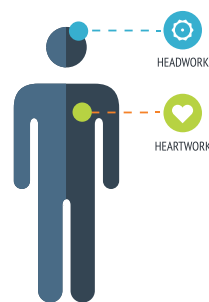
**"We aspire to become the world's most sustainable and responsible supplier of colors, chemicals and services to the global textile industry."**



## DYNAMIC PARTNERS

India-based Kiri Dyes Chemicals Limited + China-based Longsheng Group = Jointly owns DyStar Group.

**Recently acquired the assets and businesses of Lenmar Chemical Corporation.**



**2200**  
EMPLOYEES



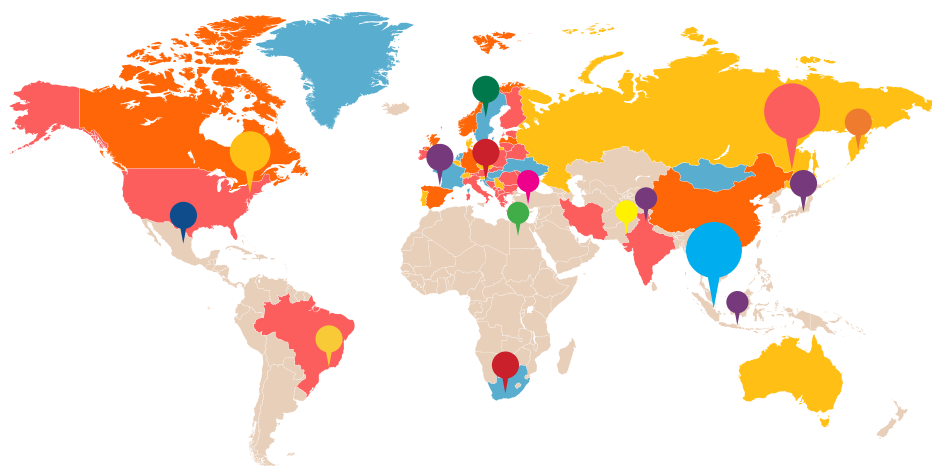
**14** PRODUCTION FACILITIES | **12** COUNTRIES

**\$822M**  
USD

REVENUE 2013



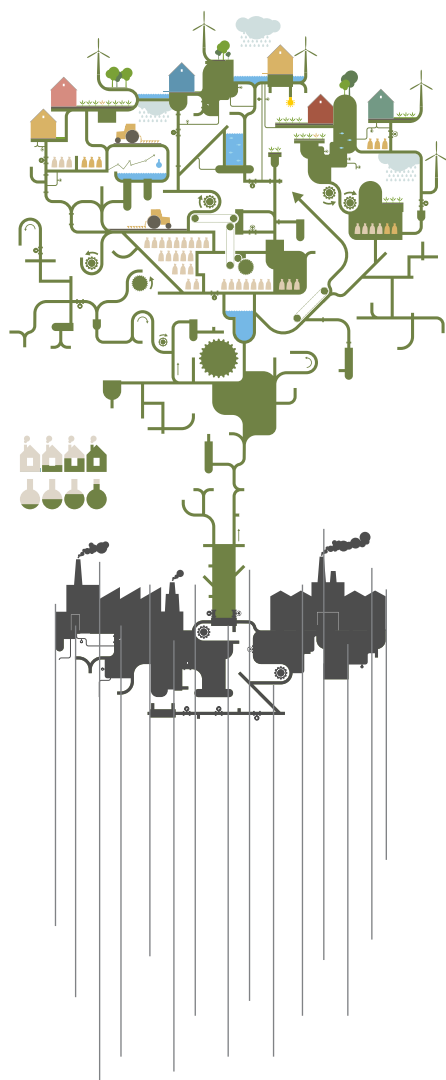
## OUR WORLDWIDE PRESENCE



- Bangladesh
- Brazil
- China/Hong Kong
- China/Shanghai
- Egypt
- Germany
- India
- Indonesia
- Italy
- Japan
- Korea
- Mexico
- Pakistan
- Portugal
- South Africa
- Spain
- Taiwan
- Thailand
- Turkey
- USA

## OUR PRODUCTS & SOLUTIONS

DyStar offers a wide range of products and services to support the entire textile value chain. Our product innovation has resulted in about 1,500 product-related trademarks across 100 countries worldwide. Our products are designed to provide safe, toxic free and environmentally friendly solutions to our customers. All of our products are manufactured and sold in accordance with applicable chemical legislations such as REACH®. DyStar offers many items which comply to industry eco-label standards such as Oeko-Tex® Standard 100 or individual brand and retailer Restricted Substances Lists (RSLs). Several "Positive Lists" are published on the DyStar website.



## OUR DYES

1 2 3 4 5

DyStar is the world's leading supplier of textile dyes. We have by far the broadest product range on the market, covering almost all fibres and quality specifications.



### 1. REACTIVE

LEVAFIX®  
PROCION®  
PROCION® PX  
REMAZOL®

### 2. DIRECT

SIRIUS®

### 3. VAT

INDANTHREN®

### 4. ACID

TELON®  
SUPRALAN®  
ISOLAN®

### 5. DISPERSE

DIANIX®  
PALANIL®

### 6. CATIONIC

ASTRAZON®

### 7. PIGMENTS

IMPERON®

### 8. DIGITAL PRINT

JETTEX®

### 9. MORDANT

DIAMOND®

### 10. REACTIVES FOR WOOL

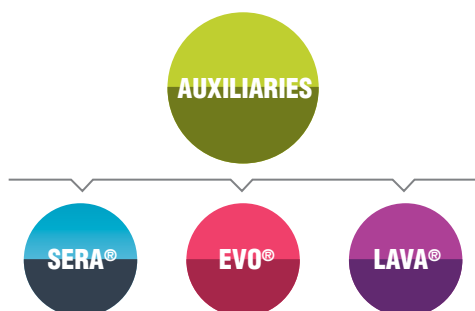
REALAN®

### 11. SULPHUR

CASSULFON®

### 12. INDIGO

## OUR AUXILIARIES



DyStar has a wide range of textile auxiliaries which is designed to offer solutions for the entire textile wet processing chain – **Spinning/Weaving, Pretreatment, Dyeing, Printing, Laundry, finishing and coating.**

## LEATHER & FUR



DyStar offers superior quality leather dyes based on our expertise in leather chemistry. Our products are available in several vibrant colours and also help optimize the ecological profile of leather production for our clients. We are the original producer of Boehme® Fatliquors and Auxiliaries. Our products suit every application from economical shoe upper dyeing to high fastness upholstery leathers and high-fashion products. By taking advantage of our specialised services our customers are able to meet a wide range of test specifications and ecological requirements. Some examples are Oeko-Tex® Standard 100, RSLs from various brands and the SG label for leather manufactured without toxic chemicals.

Our detailed product profile can be accessed on <http://www.dystar.com/Products.cfm>

# OUR SERVICES



## Ecology Solutions - econfidence®

An ecological solution that offers an extensive range of sustainable products and services  
Enable our customers to undertake responsible and sustainable production  
Advise clients on relevant legislations and ecological issues  
Give guidance on DyStar products suited to meet various ecological specifications and requirements



## Color Solutions International (CSI)

Leading provider of color standards and color communication tools for sustainable color communication services  
  
Supports brands and retailers by providing color tools, building color palettes, engineering colors and standards, and managing distribution to industry partners.



## Testing Solution - Texanlab

ISO 17025 certified, boutique testing laboratory with experience of testing over 125,000 samples of dyes, chemicals, fabrics and apparel for ecological parameters  
  
Has expertise in ecology testing and analysis according to the requirements of CPSIA, REACH®, EU Eco-label and brands & retailers' RSLs (Restricted Substances Lists).



## Sustainable Textile Solutions (STS)

Focus on three main components: consultancy, auditing and capacity building  
  
Dedicated to assisting brands, retailers and industry partners implement sustainable textile production that meets their quality and eco-requirements and makes more efficient use of resources

Our detailed services profile can be accessed on <http://www.dystar.com/Services.cfm>



# OUR MEMBERSHIP



## CSR, sustainability and ecology organizations

United Nations Global Compact (UNGC)  
Sustainable Apparel Coalition (SAC)  
Textile Exchange  
The Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers (ETAD®)  
Bluesign®  
Global Apparel, Footwear and Textile Initiative (GAFTI)  
Singapore Compact for Corporate Social Responsibility  
National Committee of Responsible Care®, Indonesia

## Industry associations

Textile and Fashion Federation (Taff), Singapore  
Brazilian Association of Chemistry, Brazil  
Association of International Chemical Manufacturers (AICM), China  
China Dyestuff Industry Association, China  
Ankleshwar Industries Association, India  
Anyer Merak Cilegon Chemical Manufacturer Association, Indonesia  
South African Dyers and Finishers Association, South Africa  
German Chemical Industry Association (VCI), Germany  
Society of Dyers and Colourists, UK  
American Association of Textiles Chemists and Colorists (AATCC), USA  
American Apparel and Footwear Association (AAFA), USA.  
ABIT (Associação Brasileira das Indústrias Têxteis) – Brazilian Association of Textile Industries.  
ABIQUIM (Associação Brasileira das Indústrias Químicas) – Brazilian Association of Chemical Industries.  
SINPROQUIM (Sindicato das Indústrias de Produtos Químicos) – Union of Chemical Products Industries.  
ABQCT (Associação Brasileira de Químicos e Coloristas Têxteis)- Brazilian Association of Textile Colorists and Chemists.



## OUR ECONOMIC PERFORMANCE

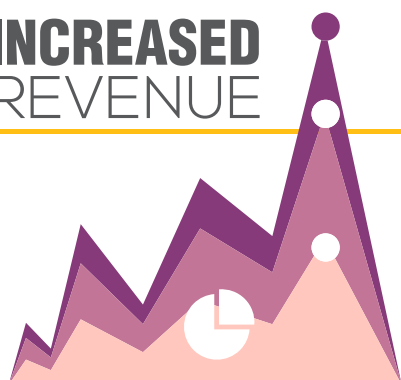


DyStar financial performance has seen a considerable improvement this year. Our gross revenue has increased from the previous year consistently for all three operations - Asia, Europe and America. This has been possible due to our persistent effort to remain efficient in our operations thereby reducing costs, delivering quality products to our expanding client base and focused approach on R&D and innovation.

Our production increased by 10% this year while we maintained our operational cost at approximately the same level. This exhibits a high level of efficiencies in managing our operations. We are happy to report that this year the economic value retained for the company is in positive. We feel this is foreshowing of a much stronger financial performance for the company in coming years.

Our total expenditure on purchases has gone up this year as our production has increased. However, keeping in line with our past practice, we continue to purchase primarily from our local suppliers. This helps us control quality, costs, meet delivery targets and make our operations efficient. Approximately 61% of our total material is purchased locally and almost all of services - IT, transport, maintenance, calibration, cleaning, security, freight transport, utilities, insurance, and consultancy services are sourced locally.

## INCREASED REVENUE



**Our gross revenue has increased from the previous year consistently for all three operations - Asia, Europe and America.**



**PRODUCTION  
UP 10%**

**TABLE 1: DYSTAR'S ECONOMIC PERFORMANCE**  
(MILLION USD), 2013

ECONOMIC PERFORMANCE	2012	2013
<b>DIRECT ECONOMIC VALUE GENERATED</b>		
<b>REVENUES</b>	764.14	822.86
ASIA	337.28	372.90
EUROPE	228.27	239.98
AMERICAS	198.59	209.98
<b>ECONOMIC VALUE DISTRIBUTED</b>		
<b>OPERATING COSTS</b>	634.77	638.76
ASIA	335.20	356.18
EUROPE	188.55	164.24
AMERICAS	110.31	118.34
<b>EMPLOYEE WAGES AND BENEFITS</b>	109.28	107.20
ASIA	47.46	43.34
EUROPE	42.86	41.56
AMERICAS	18.96	22.31
<b>PAYMENTS TO PROVIDERS OF CAPITAL</b>	23.33	12.55
<b>PAYMENTS TO GOVERNMENT</b>	7.15	14.49
<b>ECONOMIC VALUE RETAINED</b>	(10.39)	49.87

**TABLE 2 : EXPENDITURE ON LOCAL SUPPLIERS**  
(MILLION USD), 2013

	2012 <sup>3</sup>	2013
<b>AMOUNT SPENT ON LOCAL SUPPLIERS</b>	336.61	434.86
<b>TOTAL PURCHASE VALUE</b>	566.31	706.68
<b>PERCENT SOURCES FROM LOCAL SUPPLIERS</b>	59.4%	61.5%

<sup>3</sup> The values have been updated for year 2012.

For the last few decades, various governments, international agencies, scientific institutions, industries, NGOs, media and large masses of people across the world are actively advocating sustainable existence. Industries are a focal point of the movement, primarily owing to their large scale consumption of natural resources, a significant impact on human resource, surrounding communities and overall society.

Dyes and Chemicals manufacturing industry have also seen strong movement towards responsible consumption from both external and internal stakeholders.

DyStar Group as a major player in dyes and chemical industry is mindful of this growing awareness. We have aligned our sustainability approach with the overall issues faced by the industry and aims to address these issues through coherent and consistent efforts each year. As a responsible member of this industry, we are committed to continuously monitoring our impact in all three arenas of sustainability and implementing strategies to attain our short and long term goals.

We account for the environmental impact of our operations in the form of GHG emissions, consumption of energy, water and other resources, effluents and waste generation. We are aware of our impact on the health and safety of the customers, employees, and the local communities. With the objective of fulfilling our responsibility towards them, we design and implement innovative systems, programs and strategies to reduce such impact and to address the relevant issues. We assist our customers in reducing their environmental impact by providing a wide range of sustainable products and ecological solutions for their operations.

- Energy and water conservation
- Waste and pollutant reduction
- Occupational health and safety
- Product safety and innovation
- Compliance with laws and regulation
- Financial risks and economic sustainability



# OUR MANAGEMENT APPROACH & TWO FOLD STRATEGY

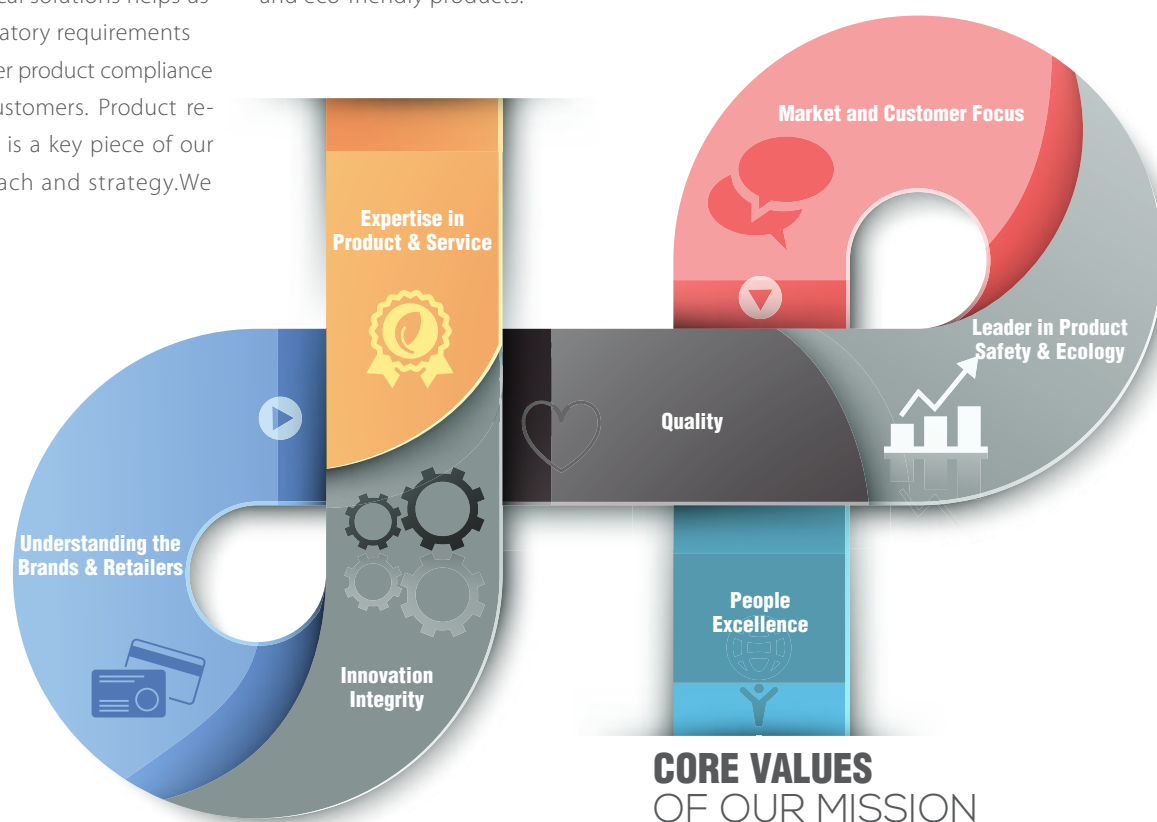
As the main consumer of dyes and colors, the textile, apparel and leather industry, also uses significant amount of water and energy while using these products to process fibers and fabrics. As the leading manufacturer of dyes and chemicals, DyStar recognizes twin opportunities and motivations to reduce energy and water consumption in our own operations and also in customer's operations. Introducing innovative products and services that help our customers to reduce their water and energy consumption helps us to grow our market share of ecological dyes and colors. It also positions DyStar as a reliable partner in a market where apparel and textile brands are continuously looking for ways to make their supply chain more sustainable.

Our strategic approach to sustainability and focus on ecological solutions helps us meet emerging regulatory requirements and increasingly stricter product compliance criteria set by our customers. Product responsibility therefore is a key piece of our sustainability approach and strategy. We

have established goals and targets for reducing energy consumption, greenhouse gas emissions, waste and wastewater. At the same time, we continue to invest in developing eco-friendly products and services.

We believe that creating societal and environmental value is integral to sustaining long-term shareholder value. For example, reducing consumption of energy and waste lowers costs for the company and minimizes impact on the environment. We therefore place sustainability at the core of our business strategy.

Our approach is to achieve sustained business growth and reasonable return on investments by continuously making our operations efficient, ensuring quality and service excellence, and offering innovative and eco-friendly products.



# STAKEHOLDER ENGAGEMENT

Our stakeholders are integral to DyStar's sustainability journey. Constant expansion of our business in the dynamic global environment implies an ever widening group of stakeholders for the company. To keep ourselves abreast of the diverse expectations of our key stakeholders and integrate them with our business goals, we constantly engage with our stakeholders to collect their inputs on our performance as well as address their concerns. This helps us define our path towards sustainability.

While we engage with a diverse group of stakeholders throughout the year, there are few groups of stakeholders who are the most critical for our operations. These have been identified by taking feedback from different groups of stakeholders and management of the company. A formal structure is used to identify the key stakeholders for the company. Using this approach, over the last four years, we have systematically aligned our goals with the expectations our stakeholders have of us.

An extensive stakeholder engagement exercise was conducted in the reporting period, 2013. The aim of this exercise was to assess the key sustainability issues that the stakeholders believe are material to DyStar. The stakeholders were surveyed through detailed questionnaires that brought forth a number of material issues. Out of the sample set of material issues chosen by the stakeholders, we prepared a final list of five most material issues for the organisation.

## LIST OF PRIORITIZED STAKEHOLDERS FOR 2013

- Shareholders / Investors
- Full time employees
- Customers



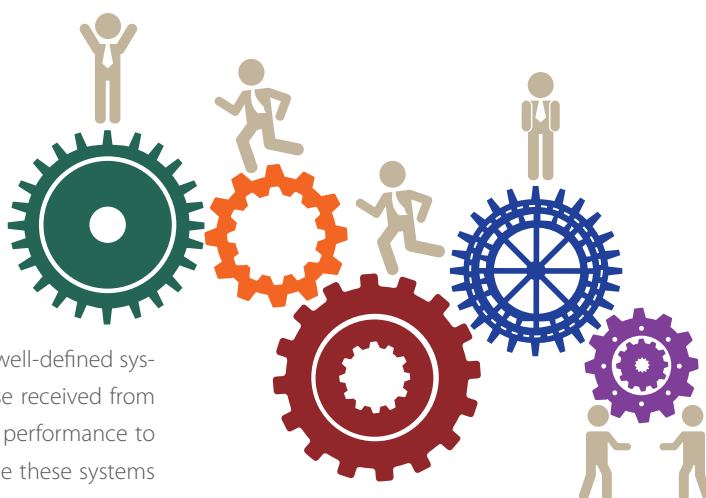
**FIGURE 3: ISSUES IDENTIFIED BY DIFFERENT STAKEHOLDERS**

01	02	03
<b>Material Issues - Internal Stakeholders</b> <ul style="list-style-type: none"> <li>• Use of recycled material</li> <li>• Economic performance</li> <li>• Environmental impact of materials used</li> <li>• Compliance with regulations</li> <li>• Disposal of effluents</li> </ul>	<b>Material Issues - External Stakeholders</b> <ul style="list-style-type: none"> <li>• Health and safety impacts of products on customers</li> <li>• Product quality</li> <li>• Compliance with regulations</li> <li>• Appropriate labelling of products and services</li> <li>• Environmental impact of materials used</li> </ul>	<b>Material Issues - Top management</b> <ul style="list-style-type: none"> <li>• Economic performance</li> <li>• Ensuring no human rights violation in operations</li> <li>• Product quality</li> <li>• Disposal of effluents</li> <li>• Disposal of solid waste</li> <li>• Occupational health and safety</li> </ul>

Based on the feedback received from our internal & external stakeholders, industry analysis and management input, following issues emerge as material issues for the company:

- Economic performance of DyStar
- Environmental impact of materials used by DyStar
- Disposal of effluents from DyStar operations
- Compliance with regulations
- Health and safety impacts of DyStar products on our customers, employees

DyStar has designed and implemented comprehensive and well-defined systems to engage with its stakeholders. Based on the response received from our stakeholders, we continue to improve our sustainability performance to match their expectations. Whenever necessary, we also revise these systems to prepare a more inclusive stakeholder engagement system for the company.



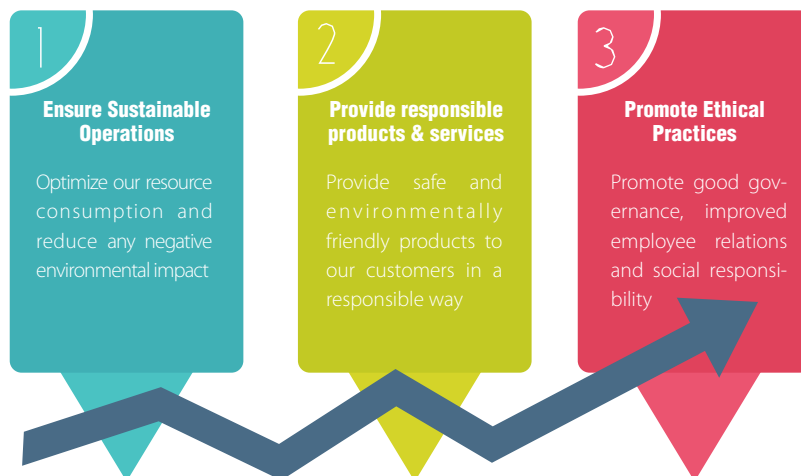
**TABLE 3: STAKEHOLDER EXPECTATIONS  
AND DYSTAR'S RESPONSIBILITY**



Stakeholders	Stakeholder Expectations	DyStar's Responsibility	Modes of Engagement
Customers	<ul style="list-style-type: none"> <li>• Quality of products</li> <li>• Customer privacy</li> <li>• Minimal environmental impact of DyStar products and materials</li> <li>• Health &amp; safety impacts of products on customers</li> <li>• Appropriate labeling of DyStar products</li> </ul>	<ul style="list-style-type: none"> <li>• Invest in research and development with a two pronged approach, namely ensuring high quality products, and development of more environmentally sustainable products and services.</li> <li>• Compliance with health and safety regulations, and labeling requirements based on various standards and regulations.</li> <li>• Maintain customer information in highly secure systems.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide information through various public and private channels such as our website, product brochures, social media and updates.</li> <li>• Organize meetings and seminars for customers on environment, sustainability and our products' ecological advantages.</li> <li>• Attend industry forums and conferences.</li> <li>• Conduct regular meetings with customers to exchange information.</li> <li>• Provide services such as sustainability audits based on current industry and legislative requirements</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>• Sustained and long-term growth of business.</li> <li>• Reasonable return on investment</li> </ul>	<ul style="list-style-type: none"> <li>• Formulate critical business strategies for profitability and sustainability</li> <li>• Timely and effective implementation of such strategies</li> <li>• Create stronger and long lasting brand equity.</li> </ul>	<ul style="list-style-type: none"> <li>• Update shareholders on company performance and sustainability initiatives through periodic meetings</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>• Collaborate on supply of quality products and services.</li> <li>• Fair selection, and respect for contractual obligations.</li> <li>• Establish long-term relationships.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a network of reliable suppliers and work closely with them to source high quality products and services.</li> <li>• Influence them to continuously improve their social and environmental performance.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuous dialogue with our key suppliers</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Occupational health and safety</li> <li>• Opportunities for growth</li> <li>• Reward for performance</li> <li>• Fair treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Strict adherence to health and safety regulations.</li> <li>• Provision of protective gear and regular health checkups for the workforce.</li> <li>• Continuous review of the HR policies for fairness and equality.</li> <li>• An open-door policy to provide employees at all levels access to management for sharing views and offering feedback.</li> <li>• Reward and recognize outstanding performance.</li> </ul>	<ul style="list-style-type: none"> <li>• Management interaction with employees in a number of ways on regular basis</li> </ul>

# OUR SUSTAINABILITY PERFORMANCE

Continuous engagement and interaction with the industry and our stakeholders has presented a plethora of avenues that are being explored to integrate sustainability in our business. We have classified these under three key areas:



## 1. ENSURE SUSTAINABLE OPERATIONS

DyStar is dedicated to maintain environmental sustainability of our operations and meet our environmental goals. We identify, evaluate, prioritize and manage environmental aspects in various areas of operations such as design, development, manufacturing, storage, packaging, and transportation. We also monitor use and distribution of raw materials and natural resources, waste management, and impact on biodiversity. DyStar has implemented environmental management system (EMS) at three of its sites and intend to expand it further to cover all other sites.

Various production sites and offices - with expert support from DyStar's Process Development teams- undertake steps such as alternate product mix, improve operational efficiency, and use modern and efficient technology to reduce the overall usage of resources and generation of water and effluents. The R&D and Product Development teams at DyStar continue to develop new products or new ways to manufacture prod-

ucts that require less energy and water and result in lower quantities of harmful waste. We continuously monitor our performance in these key areas against the internal benchmarks established by the company. On the basis of the assessment, we develop appropriate strategies to address and prioritize relevant issues.

### 1.1. ENERGY CONSUMPTION

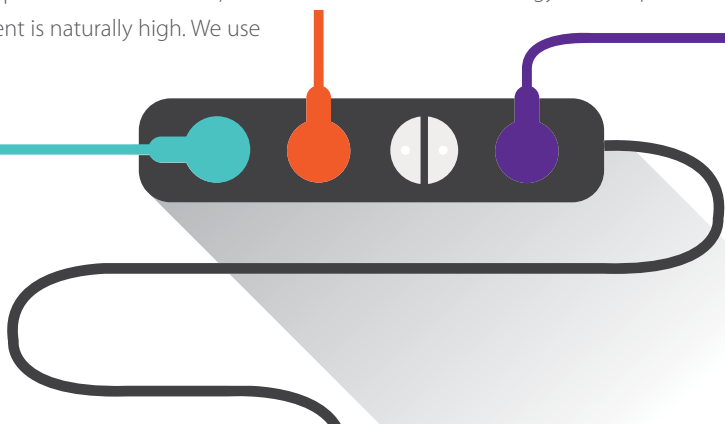
Energy is one of the most closely monitored resources in our company and effective energy management has been a key focal point of our sustainability program since its inception. With increasing costs and limited availability, energy has become a valuable commodity. We also realize that generation of energy has direct impact on climate change through emission of greenhouse gases.

With 14 production plants and over 20 offices & laboratories spread across the world, our energy requirement is naturally high. We use

electricity to run our machineries and steam as process requirement, mainly for heating purpose. Most of the energy including steam is purchased from external suppliers or government agencies; however at few places we do use natural gas and diesel to generate steam within the facility. In addition to these, a small quantity of diesel is used for transportation and LPG in our processes.

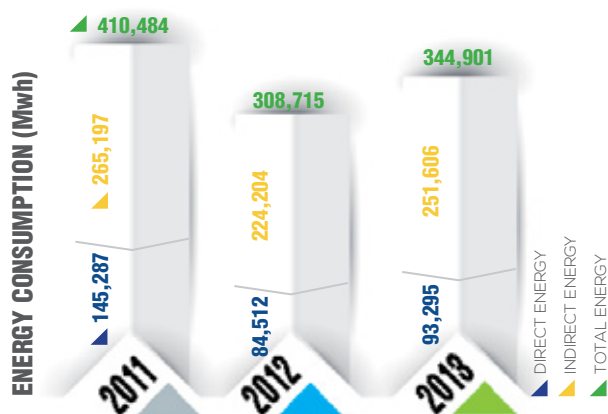
In 2013 our overall energy consumption increased by 11.72 % from 2012 levels. There are two reasons for this:

- a.) Our total production volume increased by 12% from 2012, thereby increasing our demand for energy
- b.) The product mix contained a larger quantity of dyes and related intermediate stages. Dyestuff production required a relatively more energy intensive production process than the manufacturing of auxiliary chemicals. This product mix effect has contributed to the increase of our energy consumption.



**TABLE 4 : DYSTAR ENERGY CONSUMPTION**

	UNIT	2011	2012	2013
TOTAL DIRECT ENERGY	kWh	145,286,560	84,511,631	93,295,159
	GJ	523,032	304,242	335,862
TOTAL INDIRECT ENERGY	kWh	265,197,203	224,203,606	251,606,027
GRID ELECTRICITY PURCHASED	kWh	88,421,119	69,383,175	74,979,492
PURCHASED STEAM	kWh	176,776,084	154,820,431	176,626,535

**FIGURE 4 : ENERGY CONSUMPTION AT DYSTAR**


## ENERGY MANAGEMENT SYSTEM

At DyStar Colours Distribution GmbH, Germany we have decided to implement an Energy Management System as per ISO 50001 guidelines. The preliminary work was started in 2013 and the final certification is expected to be received in 2014. The Energy Management System will help to manage energy consumption according to an international standard and find additional savings potentials. The company will also receive tax benefits from the state for implementing an EMS according to ISO 50001.

Despite producing more energy intensive product mix, we have succeeded in keeping our energy intensity at a similar level to our production in 2012.

This has been possible due to the strong emphasis we put on monitoring and managing our energy consumption at all locations. We have an energy conservation campaign ongoing throughout the year and operational teams at all locations that keep working on initiatives to reduce energy consumption. Some of the notable initiatives taken by our units this year are:

### 1.) At Nanjing plant in China many programs were launched to enhance energy efficiency in 2013 such as:

- Optimize agitation time in buffer vessels
- Optimizing agitation in the production process of cationic dyes
- Better control of electrical heat tracing
- Modification of the air compressor system to adjust power consumption to current needs
- Improvement in the efficiency of the chiller

system

### 2.) At Wuxi Production plant in China:

- Capacitors were updated and the power factor was increased
- The production process was optimized and agitation time of buffer vessels was reduced
- Replacement of compressors to optimize usage

### 3.) At Naucalpan production plant in Mexico:

- A campaign was run to save energy in electric lighting and use of electronic and computer equipment.

### 4.) At MemMartins production unit in Portugal, the use of pre- heated dispersing agent was reduced

### 5.) At Samutprakarm production unit in Thailand, production planning was re-arranged to reduce cleaning and fuel consumption

In our offices, laboratories and R&D center electricity is closely monitored and all possible steps are taken to reduce the wastage of electricity. Some of these measures are switching off lights during lunch hours or

when not in use, replacing existing equipment's with more energy efficient ones, maintaining optimal temperature of air conditioners, use of timer-plug for daytime operating, such as ice maker, water dispenser etc.; putting stickers on light switches to increase employees' awareness, promoting car pool usage at our locations to optimize fuel consumption in vehicles. At several places, we have optimized the size of our offices to fit with our manpower requirement. This has also helped us avoid unnecessary energy consumption.

Our measured savings in year 2013 in are 927, 960 kWh.

We have set the target of reducing our energy consumption by 20% by 2020 compared to 2010 targets and we are working towards achieving this target. On a positive note, the absolute emissions of DyStar have come down by 15% from 2011 levels. We continue to monitor our energy consumption very closely at all locations.



## 1.2. MANAGING OUR GHG EMISSIONS

DyStar was one of the pioneer companies in the dyes and chemical with established systems to monitor its carbon emissions at group level. Our first report was published for the year 2010 and since then every year we release our annual carbon footprint report to our stakeholders. The assessment is conducted as per WRI/WBCSD GHG Protocol Corporate Standard and in accordance with the requirements of ISO 14064 – 1: 2006 standards.<sup>4</sup>

Considering the wide geographical spread of our operations, we have deployed an

IT enabled cloud based sustainability data management tool for better access, control and increased accuracy of the data collected. Constant efforts are always put-in to make our data collection system more robust and error free. Further, the assumptions used every year are revised as per the latest international guidelines.

In 2013, the total GHG emissions of DyStar increased by 12.83% to 159,799 tCO<sub>2</sub>e compared to 2012. The increase in emissions is primarily attributed to increased overall production volume and a more energy intensive

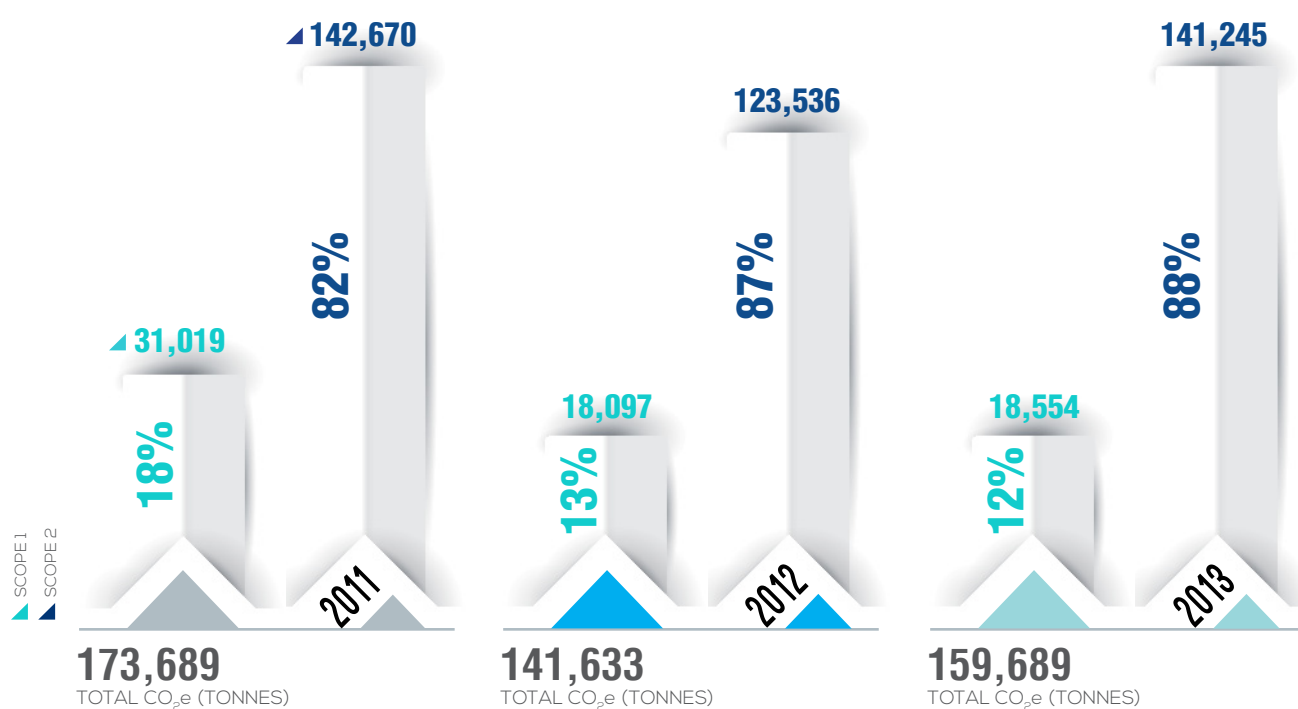
product mix including their intermediate stages. We decided to do so because we are convinced that manufacturing certain intermediates in-house is the better option in terms of product safety and a sustainable manufacturing process than to outsource them, even if our own carbon footprint appears somewhat higher by doing so.

Together, our five largest dyestuff manufacturing plants - Ludwigshafen, Germany; Nanjing, China; Gabus, Indonesia; Omuta, Japan and Wuxi, China are responsible for 96 per cent of total emissions.

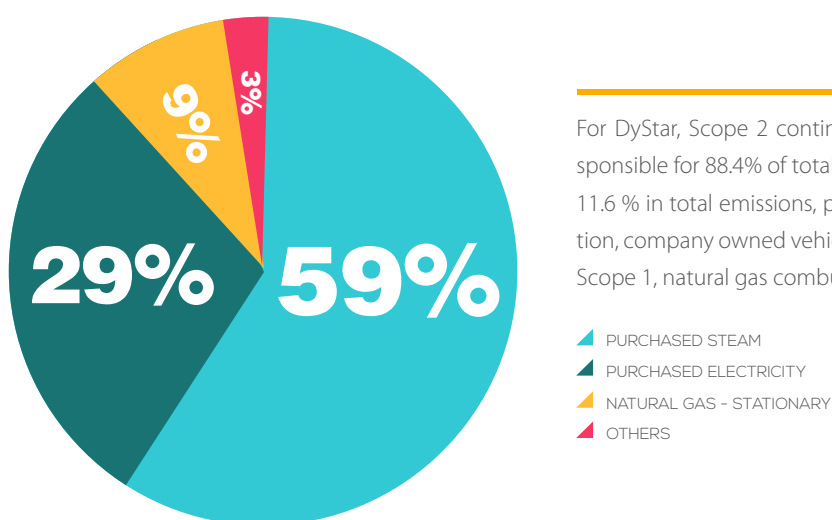
**TABLE 5 : DYSTAR'S GHG EMISSIONS**

TOTAL GHG EMISSIONS	EMISSIONS SOURCE	EMISSIONS (TONNES CO <sub>2</sub> e)					
		2011	%	2012	%	2013	%
	SCOPE 1	31,019	18%	18,097 <sup>5</sup>	13%	18,554	12%
	SCOPE 2	142,670	82%	123,536	87%	141,245	88%
	Total CO <sub>2</sub> e emissions	173,689	100%	141,633	100%	159,799	100%

**FIGURE 5 : DYSTAR'S GHG EMISSIONS**



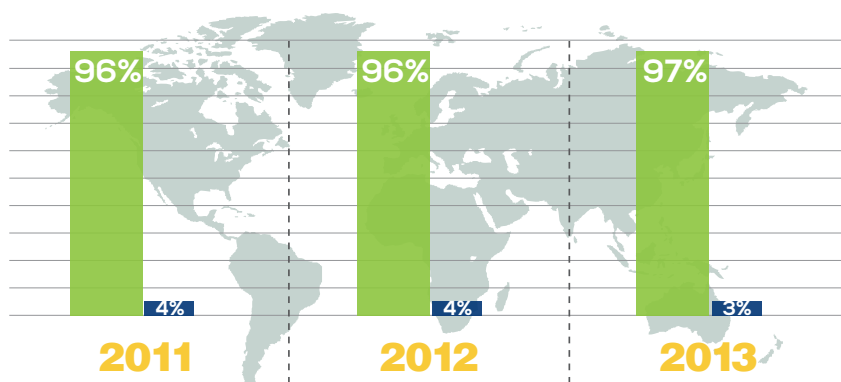
**FIGURE 6 : EMISSION SOURCES 2013**



For DyStar, Scope 2 continues to be the major source of emissions and is responsible for 88.4% of total emissions in 2013. Scope 1 emission, with a share of 11.6 % in total emissions, primarily comprise emission from stationary combustion, company owned vehicles, refrigerant losses and chemical processes. Under Scope 1, natural gas combustion contributes the largest share.

**FIGURE 7 : % OF TOTAL EMISSION PRODUCTION & NON PRODUCTION SITES**

The production plants of DyStar located in various parts of the world account for the major share of emissions. In 2013, approximately 97 % of the emissions were released by the production plants and only about 3 % were contributed by offices and laboratories.



Our overall emissions intensity has increased from 1.20 tonnes CO<sub>2</sub>e per tonne of production in 2012 to 1.26 tonnes CO<sub>2</sub>e in 2013. This is an increase of 5.3 % from last year. However, our intensity in 2013 is still 13.64 % lower than the intensity in the year 2011, which was 1.46

**TABLE 6 : GHG EMISSION INTENSITY**

GHG EMISSION INTENSITY PER TONNE OF PRODUCTION	2011 <sup>6</sup>	2012 <sup>7</sup>	2013
TOTAL CO <sub>2</sub> e EMISSIONS (TONNES)	173,689	141,622	159,799
PRODUCTION VOLUME - FG W 40% INDIGO SOLN.(TONNES)	119,116	118,411	126,897
EMISSION INTENSITY (TONNES CO <sub>2</sub> e / TONNE PRODUCTION)	1.46	1.20	1.26
% CHANGE WITH RESPECT TO PREVIOUS YEAR		-17.98%	5.29%
% CHANGE WITH RESPECT TO BASE YEAR			-13.64%

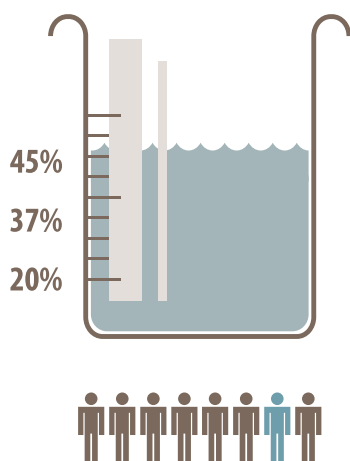
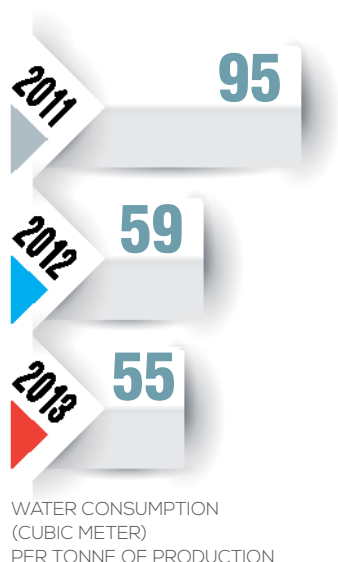
The increase in our emission intensity for the year 2013 has been due to change in our product mix. In 2013, the share of dyes in our product mix was close to 50 compared to 44% in 2012. As dye manufacturing is comparatively more emission intensive, our overall emissions intensity has increased. However, intensity ratios at our production plant have gone down which shows that our operations are improving and we are releasing lower emissions per tonne of production.

**FIGURE 8 : EMISSION INTENSITY FOR PLANTS (TCO<sub>2</sub>e/T PRODUCT)**





**FIGURE 9 : WATER INTENSITY**  
2013



## HIGHLIGHTS

### FROM 2013 GHG ASSESSMENT

Some highlights from 2013 GHG assessment are:

- The largest dye production plant, Ludwigshafen's emission intensity in 2013 reduced by 13.5% as compared to 2012.
- Emission intensity at Gabus reduced by 14.5% as compared to 2012
- Nanjing and Wuxi have kept their emissions steady and at par with 2011 levels
- The second largest production plant for auxiliaries, Corlu reported a reduction of 7.5%

in its emission intensity with respect to 2012.

At all locations we continue to work on reducing our absolute emissions in spite of our product mix. All the initiatives by DyStar to reduce energy consumption directly reduce our carbon emissions as well. By 2013, we have reduced our emissions by over 13% from base year. We remain committed to our emission reduction target of 20% on a GHG intensity basis by 2020.

### 1.3. WATER CONSUMPTION

Textile and chemical industries are major consumers of water, with dyestuff production and dyeing being two of the most water intensive stages in the entire value chain. On the other hand, water is increasingly becoming an important and limited resource. Industries are competing with communities for fresh water and cost of available water is rising. With all these factors in place, it becomes imperative for us to optimize water utilization in our operations.

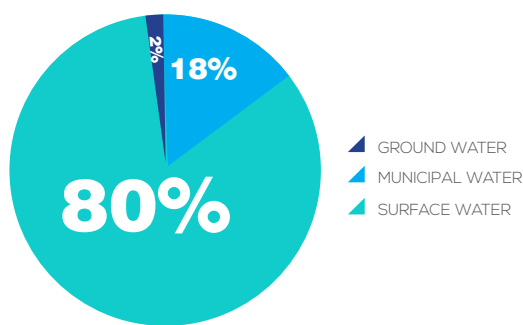
We need water both due to process requirements, especially cooling, and as well as a part of our products. Most of our water requirement is met from surface water where we draw water from available surface water

bodies. Municipal supply is mostly used in our offices and R&D centres. At some places, we also draw groundwater through pumps but its share is very minor in our total water balance. Along with energy, water is also a key area in our sustainability agenda and we have committed to a reduction target of 20% by 2020. In 2013, our absolute water consumption increased by 4.5 % from 2012 levels. However considering that our total production increased by 12% during the same period, we achieved higher level of efficiency in water usage. Our water consumption per tonne of product has decreased from 59m<sup>3</sup> per tonne of production in 2012 to 55m<sup>3</sup> in 2013 and in fact shows a 42% reduction since 2011.

**TABLE 7: WATER CONSUMPTION**  
AT DYSTAR

CONSUMPTION FROM WATER SOURCES (M <sup>3</sup> )	2011	2012 <sup>a</sup>	2013
GROUND WATER CONSUMPTION	194,660	115,599	119,578
MUNICIPAL WATER CONSUMPTION	3,244,336	1,333,786	1,654,851
SURFACE WATER CONSUMPTION	5,821,265	5,353,361	5,334,869
TOTAL WATER CONSUMPTION	9,269,530	6,802,705	7,109,298

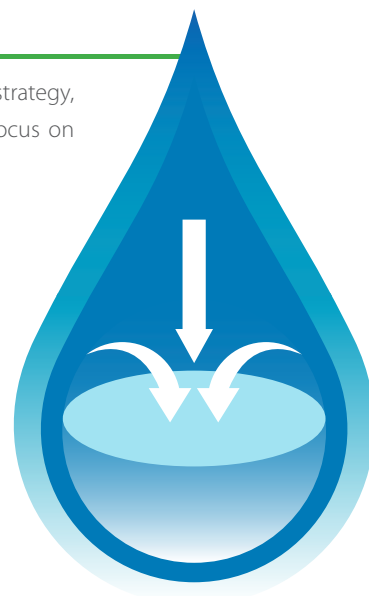
**FIGURE 10 : WATER SOURCES 2013**



## WATER MANAGEMENT

As part of our water management strategy, other than process efficiencies, we focus on two main areas:

- Recycling of water
- Effluent Management



### A. RECYCLING OF WATER

At DyStar, we strive to recycle water as much as possible without compromising on our process or product quality. Our operations require huge quantities of steam. At most sites, we recover the condensate and reuse it as process water. The recycled water is also used in the cooling systems. Most of the water used in cooling systems gets evaporated. The rest is used for non-production activities such as cleaning of equipment, vessels and floors.

Water for cooling purpose is kept strictly separated from any chemical process. Cooling takes place through indirect heat exchange via plate or bundle heat exchanger systems or jackets in reactor vessels and other equipment. Cooling water does not get contaminated; it is strictly monitored and can be directly reused or sent back to rivers. In 2013, we recycled 1,688,019 m<sup>3</sup> of water which is 23.84 % of our overall water consumption.

**TABLE 8 : RECYCLED WATER QUANTITIES 2013**

TOTAL WATER RECYCLED (M <sup>3</sup> )	
YEAR	RECYCLED WATER
2011	1,780,000
2012	1,691,079
2013	1,688,019

### B. EFFLUENT MANAGEMENT

We discharge our water in accordance with the local rules and regulations at all our sites. Quality of discharged water is maintained within the stipulated limits. All our production units either have their own wastewater treatment units or are connected to external facilities. We are permanently monitoring and analysing our waste water before discharging to state certified treatment facilities.

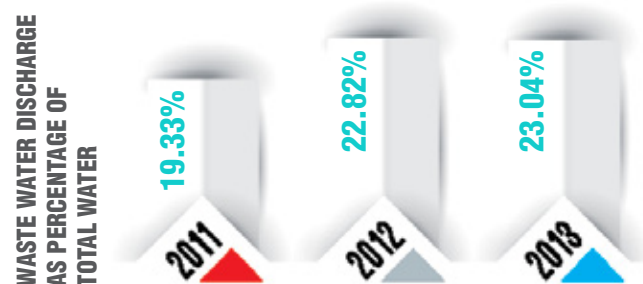
We use a variety of techniques - neutralization, coagulation and sedimentation, aerobic and anaerobic ponds and reactors, vacuum evaporator, ultrafiltration and reverse osmosis and other processes for treatment at various locations. We do not allow any of our wastewater to be reused by another organization.

**TABLE 9: WASTE WATER DISCHARGED, 2013**

TOTAL WASTE WATER DISCHARGED (M <sup>3</sup> )	
YEAR	DISCHARGED WATER
2011	1,792,395
2012	1,552,400
2013	1,638,286



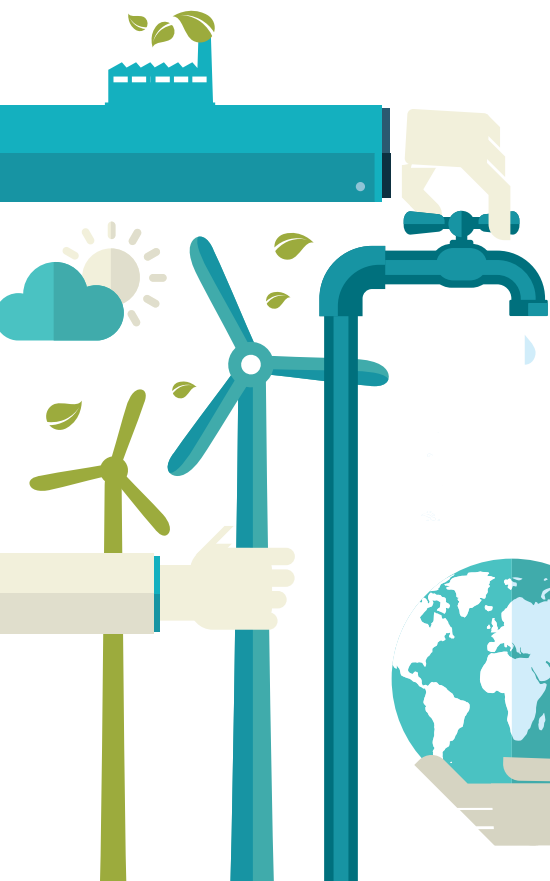
**FIGURE 11 : RECYCLED WATER**



**FIGURE 12: WASTE WATER DISCHARGED %, 2013**

**TABLE 10 : WASTEWATER TREATMENT AT DYSTAR**

PRODUCTION FACILITY	DESTINATION OF WASTEWATER	TREATMENT METHOD
SOUTH AFRICA - PIETERMARTIZBURG	DARVILL WASTE WATER	SETTLING TANKS TO ALLOW SLUDGE TO SETTLE AND
	TREATMENT FACILITY	TREATMENT FOR STABLE PH BETWEEN 6.5 - 7.5
BRAZIL - APUINA	RIVER ITAJA AÇÚ	CHEMICAL & BIOLOGICAL TREATMENT
CHINA - NANJING	NANJING CHEMICAL INDUSTRY	TREATMENT FOR HEAVY METAL OF WASTE WATER
	PARK - WASTE WATER TREATMENT	WITHIN THE FACILITY. DISCHARGED TO THIRD PARTY FOR
	PLANT	FURTHER PRE AND FINAL TREATMENT
CHINA - HANGZHOU	THE WASTE WATER TREATMENT	WASTE WATER IS TREATED THROUGH A WASTE WATER
	PLANT IN HEDZ	TREATMENT PLANT LOCATED WITHIN HZ PLANT, AND IS
		DISCHARGED WHEN COD IS BELOW APPROVED LIMITS
INDIA - ANKLESHWAR	NO DISCHARGE OUTSIDE PLANT	WASTE WATER IS FILTERED, PASSED THROUGH ULTRA-
		FILTRATION AND PASSED THROUGH 2 STAGE REVERSE
		OSMOSIS SYSTEM
PORTUGAL - MEMMARTINS	SLUDGE SENT FOR OFFSITE	DISTILLATION THROUGH A VACUUM EVAPORATOR
	TREATMENT THROUGH LICENSED	
	CONTRACTOR.	
MEXICO - NAUCALPAN	PUBLIC SEWAGE	NA
JAPAN - OMUTA	mitsui chemicals, inc. (OMUTA PLANT)	NEUTRALIZING COAGULATION AND SEDIMENTATION
THAILAND - SAMUTPRKAM	NO DISCHARGE (USED FOR GARDENING)	ANAEROBIC POND, SEQUENCE BATCH REACTOR
TURKEY - CORLU	RIVER ERGENE	BIOLOGICAL AND CHEMICAL TREATMENT
USA - REIDSVILLE	CITY OF REIDSVILLE WATER	WASTEWATER GOES THROUGH A COAGULANT TANK,
	TREATMENT FACILITY	IS PH ADJUSTED IN A FLOCCULANTS TANK, AND THEN
		PASSED THROUGH A DISSOLVED AIR FLOTATION UNIT
		BEFORE DISCHARGE



## 1.4. HANDLING WASTE

In our manufacturing process, we generate certain quantities of solid and liquid waste material both hazardous and non-hazardous in nature. Hazardous waste mainly consists of packaging material from raw material supplies as well as of some product residues and residues from the distillate recovery of solvents or from waste water treatment. Such residues are of liquid or solid nature whereas the packaging material usually is solid material (big bags, pallets, paper bags, inliner of drums, etc.). As soon as there has been any contact with chemicals we regard the packaging material as potentially hazardous. Due to the quantity of packaging material, the ratio of our hazardous waste material is more

than 50% of the total waste material. Non-hazardous waste mainly consist of paper, typical household waste material, packaging material and wooden or plywood pallets that did not have any contact with chemicals.

At DyStar, we have systems established to ensure proper treatment is done of the waste before being disposed in a safe and responsible manner.

The total amount of waste generated is proportional to our production output and in 2013, with a significant increase in production; we have also generated higher quantities of waste.

**TABLE 11 : TOTAL WASTE GENERATED**

WASTE			
	2011	2012	2013
HAZARDOUS WASTE (MT)	5,783	4,099	5496
NON-HAZARDOUS WASTE (MT)	3,378	3,911	4256
TOTAL WASTE	9,161	8,010	9752
HAZARDOUS WASTE PER t OF PRODUCTION	0.059	0.035	0.043
NON-HAZARDOUS WASTE PER t OF PRODUCTION	0.035	0.033	0.033
OVERALL WASTE PER t OF PRODUCTION	0.094	0.069	0.076

Due to the different product mix with a higher degree of backwards integration, the specific quantity per ton of total finished goods production output also increased.

We dispose all our waste material in accordance with rules and regulations set by local governments and the guidelines stated by the pollution control boards. Hazardous

waste is in general sent to licensed contractors for safe disposal. Non-hazardous waste is generally given to waste management services of local municipal authorities. None of these wastes are transported outside the physical boundaries of the country where the unit is located. Some of the key initiatives taken by our units for waste management in year 2013 are:

#### 1.) At Pietermaritzburg, Africa:

Engaged services of an external agency for segregation of waste into hazardous and non-hazardous.

This helps maintaining a more accurate account of waste generated.

A drive to adopt the three tier system was initiated and reports are generated on a monthly basis to show the amount of waste generated and the amount we have saved by recycling.

#### 2.) At Nanjing, China:

New waste collection & storage location was built and recycle regulation was established. Totally, Nanjing plant recycled 83,480kg waste.

Found the qualified supplier to recycle some nonconformity product and waste solvent thereby avoiding the incineration treatment and optimize utilization of material.

#### 3.) At Naucalpan, Mexico:

Plastic containers were taken back from customers for reusing.

#### 4.) SA Production Reidsville:

Reduction of 40% of trash to landfill by continuing our recycling program for cardboard, plastic bottles, glass, aluminum and paper

#### 5.) Singapore R&D: Following rules and principles have been enforced -

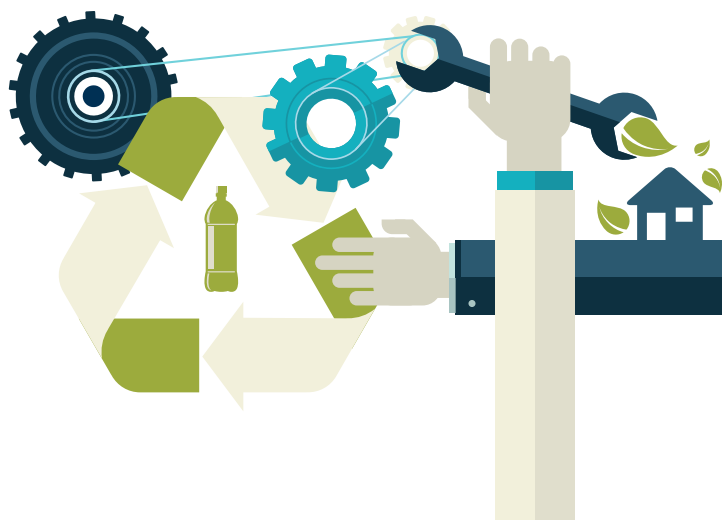
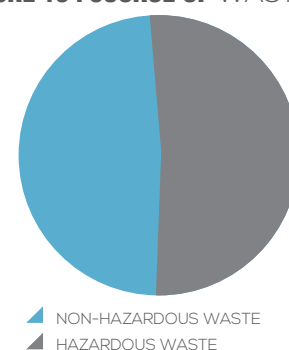
No chemical is allowed to be poured into the washing sink

Use the least water and efficient cleaning reagent to clean the laboratory glassware in order to reduce the waste generation;

Recycle and reuse the organic solvents from reactions and workup processes

Heavy duty dilution tank containing charcoal filter fixed below the sink to remove the residual organic chemicals from the waste water

Use more "green chemistry" concepts to reduce the waste discharge in new product development

**FIGURE 13 : SOURCE OF WASTE %**

## 1.5. SPILL MANAGEMENT

At DyStar, we have well defined spills management procedures. We saw a number of spills in 2012 and have made a concerted effort to train our employees and contractors on safe material handling procedures. As a result of this activity, number of spillage incidents has gone down from 14 in 2012 to 3 in 2013. Our target is zero spills and we are working towards this goal.

Corrective actions were taken for all spillage

incidents. Operators were made aware of the impacts and were asked to ensure safer handling in future. Production and maintenance teams increased their efforts to identify weak points in operation (e.g. gaskets, pipe connectors, pressure conditions, handling of drums and bags) and implemented preventive actions to reduce the risk of spill incidents further.



**TABLE 12 : SPILLS 2013**

LOCATION OF SPILL	PRODUCT(S) SPILLED	TOTAL VOLUME OF SPILL (ANNUAL NUMBER)
SOUTH AFRICA - PIETERMARITZBURG	BUTYL ACRYLATE - CHEMICAL SPILL ON SOIL SURFACE	0.3 M <sup>3</sup> (1 SPILL)
TURKEY - KIMYA CORLU	LAVA® SPERSE KDS - CHEMICAL SPILL ON SOIL SURFACE	0.09 M <sup>3</sup> (2 SPILLS)
	LAVA® CELL BLU - CHEMICAL SPILL ON SOIL SURFACE	
TOTAL		0.39M <sup>3</sup> (3 SPILLS)

## 2. PROVIDE RESPONSIBLE PRODUCTS AND SERVICES

'Product Stewardship' and 'Industry Outreach' are the two forces that define our sustainable product and services endeavor. We produce a wide variety of industrial chemicals to cater to the clients in the textile and leather industry. Some of these chemicals may prove to be harmful to human health in case of uncontrolled exposure to them. Therefore, constant attention is given to quality control for such potentially hazardous chemicals. We ensure that risk of heavy metal contamination is minimal in our products. At the same time, it is our aim to provide our customers with high quality and widest range of products and services.

### 2.1. PRODUCT STEWARDSHIP

Product Stewardship is a core value of the DyStar brand. For us, product stewardship means responsibility to continuously reduce any negative safety, health and environmental impact from our products. We assess all of our products for health & safety impacts at each stage of the product lifecycle – Devel-

opment of product concept, R&D, registration, Manufacturing and Production, Marketing & Promotion, Storage, distribution and supply, Use & service and disposal, reuse or recycling.

DyStar has built its core strength in Product Stewardship through continuous research and innovation. Our R&D is driven by the need to provide healthier, safer and more ecologically-compatible products for the apparel industry.

#### 2.1.1. PRODUCT SAFETY REACH® UPDATE

REACH® (the Registration, Evaluation, Authorization and Restriction of Chemicals) is the European Community Regulation on chemicals and their safe use to protect the environment and health, which came into effect on June 1, 2007. REACH® continues to be the most demanding international chemical legislation. REACH® implementation and compliance has been a key priority at DyStar even before the legislation came into force.

The REACH® Regulation places greater responsibility on the industry to manage the risks from chemicals and to provide safety information on products. The regulation requires manufacturers and importers to gather information on the properties of their chemical substances, to facilitate their safe handling, and to register the information in a central database administered by the European Chemicals Agency (ECHA) in Helsinki, Finland. DyStar is in a position to declare that its products do not intentionally contain any of the 155 substance groups that have been proposed in the ECHA®Candidate List of Substances.

In 2013, we also successfully complied with Phase II of the regulation - the registration all chemical substances in the tonnage band 100 – 1000 tons/year by 31<sup>st</sup> of May 2013 – and submitted another 20 registration dossiers by the end of the year, most of them as Lead Registrant.

Besides our competence in textile dyes,



these dossiers make use of our huge archive of toxicological and eco-toxicological testing reports that we have collected over many years. These registrations already cover most of the high volume textile dyes that DyStar supplies to the European market. DyStar focuses on registrations in the second tonnage band.

Since the market for textile dyes is dominated by specialties, the number of chemicals will increase significantly in the coming years up to the 2018 deadline. Owing to this, we have already submitted the next registration dossiers to ECHA® as we intend to register all individual substances contained in our products within the respective deadlines

### 2.1.2. TRANSPARENCY IN LABELLING & COMMUNICATIONS

Owing to our global supply chain and customers, it becomes imperative that our labeling practices are consistent with internationally recognized standards such as CLP and GHS. We offer a wide range of products. By following the international standards, we are able to provide our global clientele details about the components and other relevant information related to our products. The Global Corporate Communications team at DyStar has developed a Corporate Design Manual that specifies all forms of communication materials for its employees. Strict adherence to this manual ensures standardization of the company logo, brand colors and corporate typefaces. This document was updated in the reporting period to incorporate any required additions / changes.

DyStar's Code of Conduct emphasizes on informing its customers that they are being offered environmentally sustainable solutions. We take utmost care to ensure that our products are made, handled, transported, and disposed safely. Our commitment to the corporate principles and goals of maximizing safety and environmental protection guides new product and process development,

handling of products, operation of plants, and responsible use of resources.

DyStar provides substantial information about the safe handling, storage, transport, use, and disposal of its products to its customers, sales partners and distributors. DyStar also welcomes the UN activities on development and revision of the "Globally Harmonized System of Classification, Labeling and Packaging of Chemicals (GHS)" and its national implementations.

DyStar reviews and updates its Hazard Labels as well as Safety Data Sheets, for substances and mixtures, in compliance with the national regulations or standards respecting individual transitional periods for implementation. This helps us ensure that information on physical hazards and toxicity from chemicals is available in order to enhance the protection of human health and the environment during handling, transport and use of chemicals, and to facilitate global trade activities.

There have been zero incidents of non-compliance with voluntary codes or regulations resulting in a fine or penalty, warning in the reporting period.

### 2.1.3. SUSTAINABLE MATERIAL USAGE

An important aspect of our product stewardship is sustainable material usage. Our process requirement is such that we cannot use any recycled material as our raw material. However, we ensure that all are raw materials are utilized efficiently.

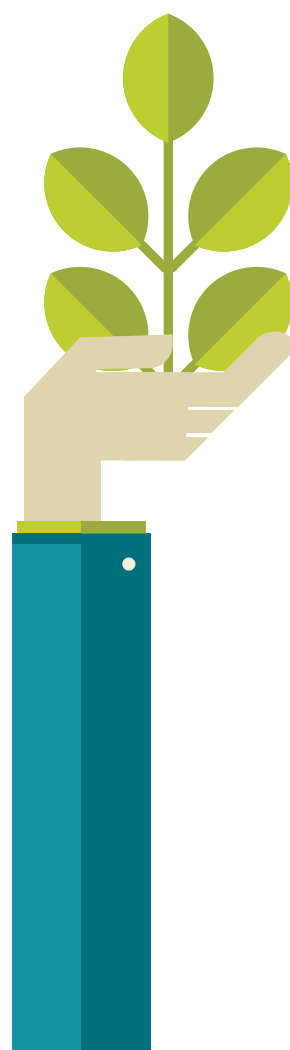
We also recycle our packaging material wherever possible. In order to make our packaging more sustainable, we are relooking at our packaging requirement and working to either reduce our consumption or use sustainable material as source for packaging material. Some of the initiatives we have taken in past few years are:

1. Packaging and selling products in IBC con-



## INFORMATION PRESENT ON DYSTAR PRODUCT LABELS

- Content, particularly with regard to substances that might produce an environmental or social impact
- Safe use of product
- Disposal of the product and environmental/social impacts





tainers of 1000 kg capacity instead of 50 or 200 kg drum.

2. Cleaning and reusing IBC and PE drums, which contained raw materials for finished products.
3. Plastic IBCs and drums are emptied by customers and returned to our supplier for cleaning and reuse.
4. All products, where applicable, are put into the recycling program for plastic containers.
5. We buy recycled PLCD200, 200 liter drums for packaging our products at the site in Nautcalpan, Mexico.
6. At our manufacturing site in Nanjing, China, the plastic bags of indigo powder are sent back to the supplier for recycling and reuse.

## LEADER IN INNOVATION

### Innovation is one of the core values at DyStar.

We have an active Research & Development Department tasked with developing new products and processes for synthesis and application to support our leading position in the textile dyes and auxiliaries industry.



**Remazol® Onyx RGB & Remazol® Midnight Black RGB, Remazol® Ultra Rubine RGB, 5 Dianix® XF2 dyes, Dianix® ECO Black HF and Indanthren® Navy SR-N Coll.**



### 2.1.4. SUSTAINABLE INNOVATION

Innovation is one of the core values at DyStar. We have an active Research & Development Department tasked with developing new products and processes for synthesis and application to support our leading position in the textile dyes and auxiliaries industry. Our rich heritage of over 150 years of R&D, including intellectual property inheritance from our antecedent companies, has resulted in more than 1,700 patents and patent applications worldwide.

We build strategic collaborations with customers, industry partners, institutes and universities, to help us anticipate our customers' needs and meet them too. Our high performance textile dyes and auxiliaries have improved ecological and toxicological profiles, and are of a consistently high quality that enables optimized coloration and superior technical, environmental and economic performance.

One of the key innovation goals for DyStar's R&D is to help customers achieve new milestones in terms of product and process excellence, including shorter or more economical dyeing procedures, reduced water and energy consumption, and lower waste,

water, and polluting effects. DyStar launched several new dyes and auxiliaries in 2013.

Some major highlights involving new patented chemistry are Remazol® Onyx RGB & Remazol® Midnight Black RGB, Remazol® Ultra Rubine RGB, 5 Dianix® XF2 dyes, Dianix® ECO Black HF and Indanthren® Navy SR-N Coll. The Jettex® range for digital printing was also extended and new auxiliaries including the Evo® Xen series and a fluorine-free water repellent agent were introduced.

### 2.1.5. SUSTAINABLE SOLUTIONS FOR ALL FIBERS

Recently, with the increase in consumer interest and the establishment of third party Certification systems a greater focus has been given by the textile companies to the production of sustainable fibers. New alternatives have been investigated, developed and introduced to the market. Challenges arise when these fibers have to be processed in the industry using the available dyestuffs, auxiliaries, and chemicals. The Best Available Technology has to be identified in order to maintain the sustainable nature of the fiber and to achieve sustainability in processing in order to deliver the sustainable end product. DyStar anticipated these challenges well ahead due to its network of contacts with innovative fiber producers and started its

research on the applicability of our dyestuff ranges for the various sustainable fiber bases. With environmentally compliant dyestuffs, highly experienced process expertise and a solid foundation of textile industry knowledge, DyStar can help its customers face the upcoming challenges of the new eco fibers and contribute towards realizing sustainability in the textile supply chain.

### 2.2. INDUSTRY OUTREACH

DyStar has committed itself to working in partnership with groups that are seeking to reduce the environmental impact of the textile supply chain and in particular on minimizing the use of hazardous chemicals. The details of such commitments are given in our Sustainability Report 2012<sup>7</sup>. Brief updates on these activities:

#### 2.2.1. ZDHC (ZERO DISCHARGE OF HAZARDOUS CHEMICALS)

DyStar is an active member of the Technical Advisory Committee (TAC) of the ZDHC Group and our Sustainable Textile Solutions business unit provided expert input and on-the-ground assistance in the development of an audit protocol for ZDHC. DyStar has created a positive list of products in keeping with its "Zero Discharge of Hazardous Chemicals" commitment. This list includes those DyStar products that do not contain as

intentional ingredients any of the 11 chemical groups restricted by the ZDHC group. In fact, the vast majority of our products do not contain any of these chemicals as ingredients. DyStar has always been committed to the highest standards of product safety and through its econfidence® program is actively supporting the objectives of the ZDHC Group.

As an example DyStar had already stopped the use of alkylphenolethoxylates (APEOs) in the manufacture of all global dyestuff and pigment preparations before the 2001 European Union agreement on a program for the cessation or phasing-out of AP and APEO, and the 2003 EU directive 2003/53/EC introducing marketing restrictions on AP and APEO.

### 2.2.2. SUSTAINABLE APPAREL COALITION (SAC)

The Sustainable Apparel Coalition comprises brands, retailers, manufacturers, government, and non-governmental organizations and academic experts, representing more than a third of the global apparel and footwear market. The Coalition is working to reduce the environmental and social impacts of apparel and footwear products around the world. DyStar joined the SAC in 2012 and has supported the development of the Higg Index as a common tool for assessing the sustainability of supply chain partners. In particular DyStar is supporting the implementation of the Chemical Management module of the Higg Index at wet processing facilities through capacity building programs run by Sustainable Textile Solutions.

### 2.2.3. BLUESIGN®

Having joined the bluesign® platform as a system partner in 2008, DyStar now has more than 900 textile dyes and pigment preparations, and more than 200 textile auxiliaries listed in the bluefinder® database. This gives manufacturers the widest possible choice of quality products to choose from when producing bluesign® approved fabric.



### 2.2.4. OEKO-TEX® STANDARD 100

In 2013, DyStar updated its brochure giving product selection guidance for articles required to comply with Oeko-Tex® Standard 100 (Version 4/2013), the most widely used textile Eco label worldwide.

### 2.2.5. GLOBAL ORGANIC TEXTILE STANDARD (GOTS®)

DyStar was one of the first companies to have its products approved to the GOTS® standard and now has an extensive range of products approved to Version 3.0 of the standard.

DyStar's testing laboratory subsidiary, Texanlab is one of the few laboratories that has capabilities of testing Dyes, Chemicals and Auxiliaries for the Textile Chemicals, Auxiliary and Dyes industry as well as for the Processing Industry to GOTS® Standards.

Since 2007, Texanlab has tested over 2800 samples for compliance to GOTS® standards. It works closely with leading certification agencies to organize seminars to build awareness

## REALIZING SUSTAINABILITY

DyStar has committed itself to working in partnership with groups that are seeking to reduce the environmental impact of the textile supply chain and in particular on minimizing the use of hazardous chemicals.



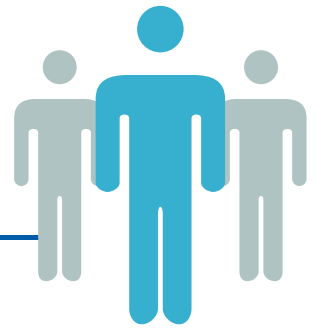
about GOTS® standards and organic cotton.

### 2.2.6. SUSTAINABLE TEXTILE SOLUTIONS®

At DyStar, our Sustainable Textile Solutions (STS) division helps brands and retailers monitor and improve the capability of their supply chains to achieve compliance with their environmental, health and safety standards. The services we offer include:

1. Restricted Substances Lists (RSL) Compliance Assessment
2. ZDHC Benchmarking & Improvement
3. Textile Mill Efficiency Assessment
4. Chemical Inventory Management
5. Root Cause Analysis

STS supports the ZDHC group in creation of its audit tool. During 2013 STS carried out over 150 chemical management/ZDHC audits on behalf of its clients. STS also provides training to brands, retailers and their industry partners on chemical management.



## 3. PROMOTE ETHICAL PRACTICES

### 3.1. STRONG GOVERNANCE

Governance at Dystar is driven by our Board of Directors and Senior Management team comprising of five members each. Together they are responsible for guiding the company to achieve our long terms goals in a transparent and sustainable manner.

Our board members are industry experts with years of expertise in handling corporate affairs and governance. They oversee and support promotion of transparency and good corporate governance in the company's policies and operations. The board is headed by a Chairman who is not an executive officer of the company. Our board comprises of all male members. Primary responsibility of the board includes:

- Oversee the utilisation of financial resources
- Appointment and compensation of senior management
- Risk management and ensuring compliance with laws and business ethics
- Review business plans and the strategic direction of the company on a quarterly basis

The Group CEO and President develops strategic plans and policies in consultation with senior management, which are presented to the Board for approval. Senior management also periodically sensitize the employees about ethical business practices and DyStar's expectations through company meetings and various other internal communication channels. Simultaneously, our employees are given direct access to senior management to raise their concerns or suggest any improvements in our policies or operations through our Open Door Policy.

We have also established two core committees to assist the Board and the senior management in performing its tasks. Primary responsibilities of these committees are:



#### BOARD OF DIRECTORS

**Mr. Ruan Weixiang, Chairman**

**Mr. Manish Kiri, Director**

**Mr. Chang Sheng, Director**

**Mr. Xu Yalin, Director**

**Mr. Amit Mukherjee, Director**



#### SENIOR MANAGEMENT

**Mr. Harry Dobrowolski, Group CEO & President**

**Mr. Viktor Leendertz, Group CFO**

**Mr. Eric Hopmann, Sales Area Management – Europe**

**Mr. Klaus Kadletz, Sales Area Management – TAME (Turkey, Africa & Middle East)**

**Mr. Ron Pedemonte, Sales Area Management – Americas / DTS**

#### AUDIT COMMITTEE

Conduct an independent review of the effectiveness of the financial reporting process  
Examines company's internal controls through regular audits.

#### REMUNERATION COMMITTEE

Review and recommend remuneration framework for the management and employees  
Ensure remuneration and Human Resource policies of the company are aligned with its strategic objectives  
Ensure the policies are well-suited for recruitment, motivation and retention of employees.

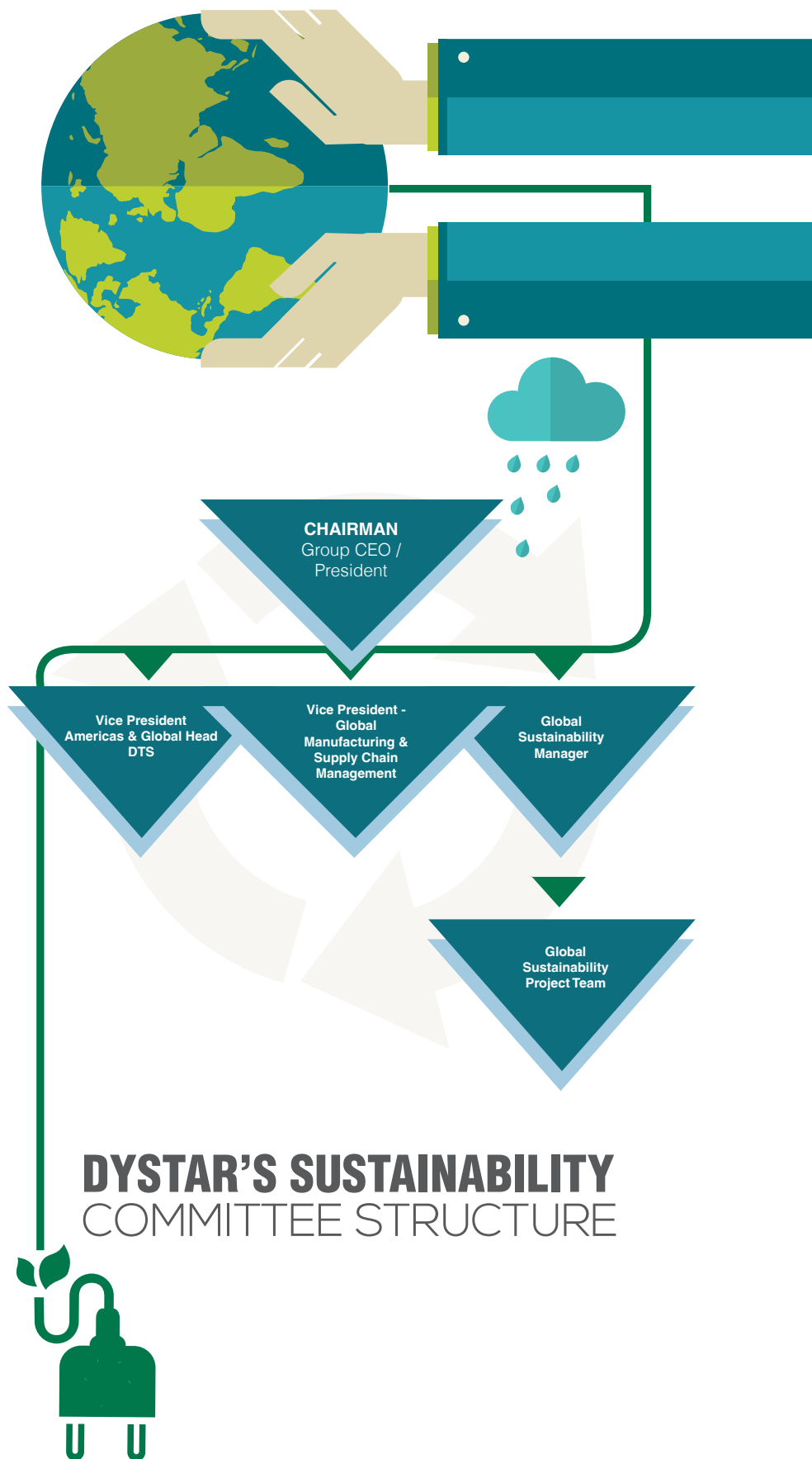
## GOVERNANCE FOR SUSTAINABILITY

Given our strong focus on sustainability, we have also created a Sustainability Committee for driving the sustainability agenda in the company. The committee is four member strong and is headed by our Group CEO and President.

While the committee is responsible for designing and monitoring sustainability strategy of the group, the ground level operations are handled by a team which includes heads of Production and Supply Chain and designated sustainability champions in different countries.

Our Global Sustainability Manager is the spokesperson for the company on sustainability related issues and is responsible for communicating and executing the company's strategy to the external stakeholders and internal sustainability team. Primary responsibilities of the committee are:

- Formulate and direct DyStar's sustainability strategy
- Set sustainability agenda for DyStar Group and identify sustainability goals and initiatives
- Select the GRI performance indicators for the company and reviews annual sustainability data
- Review the overall progress of sustainability targets, environment management systems, health and safety, and ethical code of conduct



# OUR CODE OF CONDUCT

At Dystar, we strive to conduct our business activities with utmost integrity and in line with our code of conduct<sup>9</sup> which is integrated with our core values. This code is binding for all our employees and the companies who are a part of the DyStar Group.

Our code of conduct guides us on our management approach both for internal stakeholders and external stakeholders. Within the organization, it promotes transparent operations, employee satisfaction, and health and safety parameters. Externally, it promotes healthy competition, customer satisfaction, respect for local laws and above all high product quality.

## COMPLIANCE

Being an international organization with operations across 13 countries, it is our responsibility to ensure we conduct our operations in accordance with the local laws and regulations.

For this, we have established a Global Compliance Function to ensure adherence of processes, rules of actions, laws and standards, social accountability guidelines, code of conduct, company guidelines and management directives by DyStar staff. This function is driven by:

- 1.) Our Global Compliance Officer who is responsible for ensuring compliance at all locations. He is supported by a team of designated officers responsible for local compliances, and
- 2.) Group Legal Counsel who is responsible for interacting with governmental authorities in cases of deviation and also advises employees on laws and regulations, and legal considerations in case of deviation and non-compliance



## CODE OF CONDUCT

- **Compliance with laws and regulations**
- **Protect Intellectual property rights**
- **Fair competition**
- **Separation of private and company affairs**
- **Safety, health and environmental protection**
- **Product and service quality**
- **Relationships with employees**
- **Cooperation with authorities**



## GLOBAL COMPLIANCE FUNCTIONS – OBJECTIVES

- **Foster a culture of honesty and high ethical standards**
- **Evaluate and mitigate risks for the Company**
- **Raise awareness among employees on the need for adherence to laws and regulations**
- **Improve public image of the Company**



## DYSTAR LIST OF INTERNATIONAL CERTIFICATIONS & MANAGEMENT SYSTEMS

**ISO 9001: 2008**  
**ISO 14001:2004**

### 3.2. EMPLOYEE RELATIONS

DyStar believes in building life-long relationships with its workers. It is our constant endeavour to provide safe and productive workspace for all our employees. We aim to meet our aspiration to become an 'employer of choice' in the industry. In order to meet this objective, we strive to provide a professionally challenging and engaging workplace for our diverse workforce.

#### WORKFORCE TRAINING

We put a lot of emphasis on keeping our workforce up-to-date with the latest technological trends through training programs and production-line enhancements. We regularly review the training requirements of employees and based on that an annual training calendar is prepared. Some of the trainings completed in the year were on safety production, pressure vessel & Forklift.

Our total training hours increased by 145% in 2013 from year 2012. This was due to shifting of our operations from closing units to other locations. Additional training was provided to the plant employees on equipment handling, safety and operations as part of the process.

#### OUR HEALTH & SAFETY PERFORMANCE

Following a precautionary approach towards health and safety, DyStar has developed and implemented a policy for plant safety and hazard prevention as part of its "Guidelines for Responsible Care in Environmental Protection and Safety". Herein, in the design stage of plants, we identify and assess the hazard potential, and risks associated with processes. Keeping such risks to the minimum is one of the essential criteria for the final choice of the design and processes. New machines to be installed on-site and new products to be launched in the market undergo requisite safety assessment as per the legal norms. Our subcontractors also have to

follow strict guidelines to work on our sites.<sup>10</sup> The implementation and training is ensured by the Ecology, Health, Environment and Safety (EHES) departments at each of our sites.

We fulfil our responsibility to provide sufficient protection to our employees from direct and long-term health risks by identifying such hazards and providing information, training, and suitable protection. Both new and experienced employees are trained regularly on health and safety issues through safety camps, toolbox talks and safety campaigns. We ensure that the employees ad-

here to our strict measures on PPE usage. Periodical medical checkups, followed by special treatment for those suffering from particular health issues are arranged for the employees.

We comply with all applicable local and national health, safety regulations and labor laws, such as COIDA (Africa), ISHL (Japan), and OSHA (USA). We also promote environmental protection and safety through detailed internal guidelines for the employees.

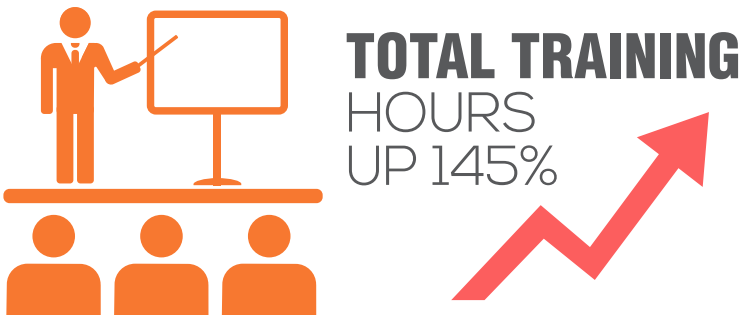


TABLE 13: EMPLOYEE TRAINING HOURS

DETAILS	2011	2012	2013
TOTAL LOST DAYS – INJURY	34	266	184
LOST DAYS RATE	2.42	27.55	16.01
TOTAL OCCUPATIONAL DISEASE INCIDENTS	0	0	0
OCCUPATIONAL DISEASE RATE	0	0	0
TOTAL WORKPLACE INJURIES	8	9	25
INJURY RATE	0.57	0.93	2.18
FATALITIES	0	0	0

TABLE 14: DYSTAR'S SAFETY RECORD

10 For more details on Occupational Health and Safety, refer to DyStar's Sustainability Report 2012



With strict adherence to the health and safety policy and practices, DyStar has successfully ensured zero fatalities in the last three reporting periods. In year 2013, 25 injuries were reported from our sites. Though the number is higher than 9 injuries reported in 2012, the severity of these injuries was lower, leading to lesser number of lost days. This is significant progress towards safety of our employees at workplace. No cases of occupational disease were reported this year across any of our operational units.

In 2013, our total workforce increased to 2195 from 2000 in 2012. This includes permanent, temporary, expat, and contract employees. Our employee turnover rate is 7.43% for year 2013. 156 employees left the organization in the year.

### 3.3. HUMAN RIGHTS PRACTICES

Dystar remains committed to operate in accordance with the ten principles of UNGC. We have set out our commitment to the Social Accountability Declaration in the form of a directive in the company's Code of Conduct. We analyse and respond to every infringement of this formal obligation. We also ensure that our suppliers and sub-contractors act according to this Declaration, as long as we have the power to do so.

We have not done any formal assessment of our operations for human rights violation, we do not support or tolerate child Labour and forced or compulsory labor within our area of responsibility. We do not tolerate discrimination on any basis. All our employees have the freedom of association, right to form and join trade unions, and collective bargaining. The representatives of trade unions have access to their members at the workplace.

## INTERNATIONAL PRINCIPLES

### DYSTAR IS COMMITTED TO

- The international Labor Organization's (ILO) core labor standards and Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (MNE Declaration)
- The Universal Declaration of Human Rights
- The OECD Guidelines for Multinational Enterprises
- The United Nations Global Compact Ten Principles
- SA8000 Standards
- The Responsible Care Global Charter

## SOCIAL ACCOUNTABILITY DECLARATION

### – KEY POINTS

- **Child Labour**  
Dystar does not support or tolerate child Labour within its area of responsibility
- **Forced Labour**  
DyStar does not engage in or support the use of forced labor
- **Health and Safety**  
DyStar does everything it can to provide a safe and healthy working environment
- **Freedom of Association, Right to Collective Bargaining**  
DyStar respects the right of all personnel to form and join trade unions and to bargain collectively
- **Discrimination**  
DyStar does not tolerate discrimination on based on any race, ethnic origin, gender, religion, philosophy, political or union membership, disability, age or sexual orientation.
- **Disciplinary Practices**  
DyStar does not engage in or support the use of corporal punishment, mental or physical coercion and verbal abuse of its employees.
- **Working Hours**  
DyStar complies with applicable laws and standards
- **Remuneration**  
DyStar ensures that the wages paid always meet at least legal or industry minimum standards
- **Management Systems**  
We regularly review and check the adequacy and effectiveness of this directive, and strive to improve its contents.



### 3.4. KEY SOCIAL INITIATIVES IN 2013

DyStar's social responsibility has been defined keeping with main points of SA 8000, an international standard on accountability and the principles of Responsible Care®. We believe in creating value for the society through community development activities. In our operations, local teams are responsible for identifying and executing social initiatives based on the needs of the local community.

We work earnestly to minimize any negative impact our operations may have on local communities and surrounding areas. In the reporting period, we received only one complaint - at our Pietermaritzburg plant in South Africa. The people in the surrounding areas complained about the odour in the air and attributed it to our plant's operation. To

address their concern, we executed a three stage process:

STAGE 1 : Operational changes : A rigid program was implemented and procedures were overhauled for our entire process (scrubbers, extractor hoods, bulk loading and off-loading couplings) to process all possible emissions during production were neutralized before been emitted into the atmosphere. We trained our employees to reinforce methods to prevent the escape of fugitive fumes. We also invited ideas from our employees to assist in identifying any potential way of preventing fugitive fumes in our production process. We discontinued the polymer emulsion production which was the key contributor to the odour problem.

STAGE 2: Stakeholder Engagement: We established a forum to develop a response protocol and the various stakeholders were

given contact numbers on whom to contact should they experience any odour problems. Any odour complaints were immediately attended to and feedback was given to relevant stakeholder. We are maintaining a database to match the complaints to any situation, e.g., was it attributed to the manufacture of a particular product or activity on that day or was there any off-loading of monomers.

STAGE 3: Set Acceptable Intensity and Frequency Standards: We are in process of setting an acceptable benchmark for frequency and intensity of odour with input from neighbors and community members

Since June 2013 there have been zero complaints received from any stakeholder on the issue. We did not receive any other complaint against any of our office and laboratory facilities in the reporting period.

#### Supporting HIV/AIDS affected in Africa:

Our production unit in Pietermaritzburg, Africa supports Tabitha Ministries that provide assistance to the communities of Pietermaritzburg to care for those affected by HIV/AIDS. They also run the Hope Centre for orphaned and abandoned children ranging in ages from birth to 6 years old. DyStar makes monthly donations to assist them in their efforts

#### Helping the disabled in Brazil :

Our Brazil production unit regularly donates money to a charitable entity - APAE to support the cause of integrating the differently-able people into the society

#### Food Donation in USA:

The employees of DyStar's production unit in Reidsville, USA, participated in the Rockingham County Food Drive on two separate occasions. Over 200 pounds of canned food was collected for the community. The employees of DyStar's Reidsville plant also collectively donated meals to a needy family through the Kiwanis Club

#### Disaster Management in Japan:

DyStar's production plant in Omuta, Japan has representation in the Association for Disaster Prevention of Omuta city, and the Association of Factory Fire Prevention of the city from May, 2012 to April 2014. The site manager is the Vice President for the former association.

#### Community Assistance in Mexico:

During 2013, to extend our support to the communities affected by hurricane in parts of Mexico, DyStar's production plant in Naucalpan, Mexico donated clothes and toys to the affected communities. Money was donated to Hidalgo State donation for providing food to hurricane victims, and Guerrero State donation to donate used computers to schools





# DATA AT A GLANCE

KPI	Description	2011	2012			2013		
Economic								
EC1	Economic Value Generated (USD)	–	764,138,154			822,864,771		
	Economic Value Distributed (USD)	–	774,529,892			772,997,639		
EC6	Economic Value Distributed (USD)	502,218,771	526,028,854			706,682,221		
	Amount Spent on Local Suppliers (USD)	282,266,532	263,173,985			434,856,785		
Environment								
EN1	Raw Materials (MT)	–	103,188			111,275		
	Packaging Material (MT)	–	4,577 <sup>14</sup>			4,770		
	Associate Materials (MT)	–	1,002			1742		
EN3	Direct Energy Consumed (kWh)	145,286,560	84,511,631			93,295,159		
	Direct Energy Consumed (GJ)	523,032	304,242			335,862		
EN4	Indirect Energy Consumed (kWh)	265,197,203	224,203,606			251,606,027		
EN8	Total Water Consumed (m³)	9,269,530	6,802,705			7,109,298		
EN10	Total Water Recycled (m³)	1,780,000	1,691,079			1,688,019		
EN16	Total Direct GHG Emissions – Scope 1 (tCO <sub>2</sub> e)	31,019	18,097			18,554		
	Total Indirect GHG Emissions – Scope 2 (tCO <sub>2</sub> e)	142,670	123,615			141,245		
	Total GHG Intensity (tCO <sub>2</sub> e/ton of production)	1.783	1.20			1.26		
EN21	Total Wastewater Discharged (m³)	1,792,395	1,552,400			1,638,286		
	Wastewater intensity per t of production	18.40	13.48			–		
EN22	Hazardous Waste (MT)	5,783	4,099			5496		
	Non-Hazardous Waste (MT)	3,378	3,911			4256		
	Total Waste	9,161	8,010			9752		
	Hazardous waste per t of production	0.059	0.035			0.043		
	Non-Hazardous waste per t of production	0.035	0.033			0.033		
	Overall waste per t of production	0.094	0.069			0.076		
EN23	Total number and volume of spills	38.1m3 (14 spills)	38.1m³ (14 spills)			0.39 m3 (3 spills)		
EN30	Environmental Protection Expenditure (USD)	7,148,359	8,147,284			8,971,565		
Labor Practices & Decent Work								
LA1	Total Workforce	2419	2000			2195		
LA7	Total Lost Days – Injury	34	266			184		
	Lost Days Rate	2.42	27.55			16.01		
	Total Occupational Disease Incidents	0	0			0		
	Occupational Disease Rate	0	0			0		
	Total Workplace Injuries	8	9			25		
	Injury Rate	0.57	0.93			2.18		
	Fatalities	0	0			0		
LA10	Training Hours	Total	Male	Female	Total	Male	Female	Total
	Senior Mgmt.	2004	209	92	301	477	88	565
	Middle Mgmt.		292	199	491	1,048	1,117	2,165
	Admin/Support Staff	3512	736	500	1,236	1,461	2,934	4,395
	Technical Staff		478	456	934	4,113	4,619	8,732
	Production Workers /Supervisors	1518	8,858	163.00	9,021	12,004	1,576	13,580
	Average hours	2334	2115	282	23970	3,820	2,066	5,887
	Total	7034	10,571	1,410	11,983	19,103	10,334	29,437

G3.1 Content Index			
Profile Disclosure	Description	Level of Reporting	Location of Disclosure
1.1	Letter from the CEO	Fully	Letter from CEO, 1
1.2	Description of key impacts, risks, and opportunities.	Fully	Letter from CEO, 1
2.1	Name of the organization.	Fully	About DyStar, 4
2.2	Primary brands, products, and/or services.	Fully	Our Products & Solutions, 5 - 6
2.3	Operational structure of the organization (divisions, operating companies, subsidiaries, and joint ventures)	Fully	About DyStar, 4
2.4	Location of organization's headquarters.	Fully	About DyStar, 4
2.5	Number of countries where the organization operates	Fully	About DyStar, 4
2.6	Nature of ownership and legal form.	Fully	About DyStar, 4
2.7	Markets served	Fully	About DyStar, 4
2.8	Scale of the reporting organization	Partially	About DyStar, 4
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	About the report, 3
2.10	Awards received in the reporting period.	Fully	No awards received in the reporting period
3.1	Reporting period	Fully	About the report, 3
3.2	Date of most recent previous report	Fully	About the report, 3
3.3	Reporting cycle	Fully	About the report, 3
3.4	Contact point for questions regarding the report or its contents.	Fully	About the report, 3
3.5	Process for defining report content.	Fully	About the report, 3
3.6	Boundary of the report	Fully	About the report, 3
3.7	State any specific limitations on the scope or boundary of the report	Fully	About the report, 3

3.8	Reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities	Fully	About the report, 3
3.9	Data measurement, calculations, assumptions and estimations	Fully	About the report, 3
3.10	Any re-statements of information provided in earlier reports, and the reasons for such re-statement	Fully	About the report, 3
3.11	Significant changes from previous reporting periods	Fully	About the report, 3
3.12	Location of the Standard Disclosures	Fully	GRI Index
3.13	External assurance for the report	Fully	About the report, 3
4.1	Governance structure of the organization	Fully	Promote Ethical Practices, 25
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully	Promote Ethical Practices, 25
4.3	Number of members of the highest governance body that are independent and/or non-executive members.	Partially	Promote Ethical Practices, 25
4.4	Mechanisms for shareholders and employees to provide recommendations	Fully	Promote Ethical Practices, 25
4.7	Qualifications and expertise of the members of the highest governance body regarding sustainability	Fully	Promote Ethical Practices, 25
4.8	Mission Statement/ vision and other company codes	Fully	About DyStar, 4; Our Code of Conduct, 27
4.9	Procedures of the highest governance body identification and management of sustainability performance	Fully	Promote Ethical Practices, 25 - 26
4.12	Economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Fully	Our Code of Conduct, 27; Human Rights Practices, 29
4.13	Memberships in associations	Fully	Our Membership, 7
4.14	List of stakeholder groups engaged by the organization.	Fully	Stakeholder Engagement , 11
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	Stakeholder Engagement , 11
4.16	Approaches to stakeholder engagement	Fully	Stakeholder Engagement , 12

4.17	Key topics and concerns raised through stakeholder engagement and company's response	Fully	Stakeholder Engagement , 12
<b>Disclosure on Management Approach</b>			
DMA	Economic performance	Fully	Letter from CEO, 1; Our Economic Performance, 8
	Environment aspects : Energy, Water, Emissions, effluents and waste, Products and services, Compliance	Fully	Sustainability Approach At DyStar, 9
	Environment aspects : Transport & Overall	Partially	Sustainability Approach At DyStar, 9
	LA : Employment, Labor/management relations, Occupational health and safety, Training and education, Diversity and equal opportunity	Fully	Employee Relations, 28
	HR : Non-discrimination, Freedom of association and collective bargaining, Child labor, Prevention of Forced and compulsory labor	Partially	Human Rights Practices, 29
	SO : Local communities	Partially	Social Initiatives, 30
	SO : Compliance	Fully	Social Initiatives, 30
	PR : Customer health and safety, Product and service Labelling , Compliance	Fully	Provide Responsible Products and Services, 21
	PR : Marketing communication	Partially	Provide Responsible Products and Services, 21
<b>Economic</b>			
EC1	Direct economic value generated and distributed	Partially	Our Economic Performance, 8
EC6	Policy, practices, and proportion of spending on locally-based suppliers	Fully	Our Economic Performance, 8
<b>Environmental</b>			
EN1	Materials used by weight or volume	Fully	Data at a Glance, 31; Sustainable Material Use, 22
EN2	Recycled input materials	Partially	Sustainable Material Usage, 22
EN3	Direct energy consumption	Fully	Energy Consumption, 13
EN4	Indirect energy consumption	Fully	Energy Consumption, 13
EN5	Energy saved	Fully	Energy Consumption, 13

EN6	Initiatives to provide energy-efficient products and services, and reductions achieved	Partially	Energy Consumption, 13
EN8	Total water withdrawal by source.	Fully	Water Consumption, 17
EN10	Percentage and total volume of water recycled and reused.	Fully	Water Consumption, 17
EN16	Total direct and indirect greenhouse gas emissions	Fully	Managing Our GHG emissions, 15
EN21	Total water discharge by quality and destination.	Fully	Water Consumption, 17
EN22	Total weight of waste by type and disposal method.	Fully	Handling Waste, 19
EN23	Total number and volume of significant spills.	Fully	Spill Management, 21
EN26	Initiatives to mitigate environmental impacts of products and services	Partially	Provide Responsible Products and Services, 21
EN27	Reclaimed packaging materials	Partially	Sustainable Material Usage, 22
EN29	Environmental impacts of transporting products, goods and workforce	Partially	Ensure Sustainable Operations, 13; Provide Responsible Products and Services, 21
EN30	Total environmental protection expenditures and investments by type.	Fully	Data at a Glance, 31
<b>Social: Labor Practices and Decent Work</b>			
LA1	Total workforce	Partially	Employee Relations, 29; Data at a Glance, 31
LA2	Total number and rate of employee turnover	Partially	Employee Relations, 29
LA7	Rates of injury, occupational diseases, lost days and work-related fatalities	Fully	Our Health and Safety Performance, 28; Data at a Glance, 31
LA10	Training Hours	Fully	Workforce Training, 28; Data at a Glance, 31
<b>Social: Human Rights</b>			
HR5	Operations identified with risk to right to exercise freedom of association and collective bargaining and actions taken	Fully	Human Rights Practices, 29

# GRI INDEX

HR6	Operations identified with risk of incidents of child labor, and actions taken	Fully	Human Rights Practices, 29
HR7	Operations identified with risk of incidents of forced or compulsory labor, and actions taken	Fully	Human Rights Practices, 29
<b>Social: Society</b>			
SO1	Prevention and mitigation measures for any potential or actual negative impacts on local communities.	Partially	Social Initiatives, 30
SO7	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Fully	There have been no legal actions
SO8	Monetary value and number of cases for non-compliance with laws and regulations.	Fully	None
<b>Social: Product Responsibility</b>			
PR1	Life cycle stages and percentage of significant products and services assessed for health and safety impacts	Fully	Provide Responsible Products and Services, 21
PR2	Monetary value for non-compliance concerning health and safety impacts of products and services.	Fully	None
PR3	Information provided on products and services	Fully	Transparency in Labelling & Communications, 22
PR4	Monetary value for non-compliance with regulations and voluntary codes concerning product and service information and labeling	Fully	Transparency in Labelling & Communications, 22
PR7	Monetary value for non-compliance with regulations and voluntary codes concerning marketing communications	Fully	None
PR9	Monetary value for non-compliance concerning the provision and use of products and services.	Fully	None

# UN GLOBAL COMPACT INDEX

## The Ten Principles of the United Nations Global Compact

UNGC Principle	Description	Page
<b>1</b>	Support and respect protection of internationally proclaimed human rights	Code of conduct, 27 ; Our Health and Safety Performance 28; Human Rights Practices, 29
<b>2</b>	Make sure business is not complicit in human rights abuses	Code of conduct, 27 ; Our Health and Safety Performance 28; Human Rights Practices, 29
<b>3</b>	Uphold freedom of association and the effective recognition of the right to collective bargaining	Code of conduct, 27 ; Our Health and Safety Performance 28; Human Rights Practices, 29
<b>4</b>	Support elimination of all forms of forced and compulsory labor	Code of conduct, 27 ; Our Health and Safety Performance 28; Human Rights Practices, 29
<b>5</b>	Support effective abolition of child labor	Code of conduct, 27 ; Our Health and Safety Performance 28; Human Rights Practices, 29
<b>6</b>	Eliminate discrimination in employment and occupation	Code of conduct, 27 ; Our Health and Safety Performance 28; Human Rights Practices, 29
<b>7</b>	Support a precautionary approach to environmental challenges	Not reported
<b>8</b>	Undertake initiatives to promote greater environmental responsibility	Ensure Sustainable Operations, 13
<b>9</b>	Encourage the development and diffusion of environmentally friendly technologies	Provide Responsible Products and Services, 21
<b>10</b>	Work against all forms of corruption, including extortion and bribery	Not reported



## Statement GRI Application Level Check

GRI hereby states that **DyStar Group** has presented its report "DyStar Sustainability Report 2013" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level B.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see [www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf](http://www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf)

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 19 of September 2014

A handwritten signature in black ink, appearing to read "Ásthildur Hjaltadóttir".

Ásthildur Hjaltadóttir  
Director Services  
Global Reporting Initiative



*The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. [www.globalreporting.org](http://www.globalreporting.org)*

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 02 of September 2014. GRI explicitly excludes the statement being applied to any later changes to such material.