ARCHROMA
LIFE ENHANCED

SUSTAINABILITY
REPORT

Financial Year 2018

OUR COMPANY **4**

SAFE **22**

EFFICIENT **54**

ENHANCED **66**

APPENDIX **80**

CONTENTS

OUR
COMPANY

WHO WE ARE

101

Markets served by Archroma.

4 320 + 1

Number of shades in the inspirational **Archroma Color Atlas**

+

the custom shade specific for you.

51

Locations in 34 countries.

56

Diverse employee nationalities.

40%

Of our employees are **located in Asia,** aligned with our customer base.

29%

31%

40%

- Americas
- EMEA
- Asia

7 719

Number of Stock Keeping Units (SKU) delivered to customers.

2 984

Number of employees in the Archroma global family.

132

Years of chemical and **colorant manufacturing experience.**

WHAT WE DO

67%

Sales into the textile industry.

9%

67%

24%

- Brand Performance Textiles
- Paper & Packaging
- Coatings, Adhesives & Sealants

0.47

The total reportable incident rate per **200 000 hours worked.**

2 931

Number of **cutomers in Asia** which represents 39% of the number of customers.

USD 1.4 B

Sales in FY2018, representing a 10% increase over previous reporting period.

6 + 4

Groundbreaking Innovations + Systems launched in FY2018.

16 740

Additional **metric tons** sold in FY2018.

>10 000

Ecological compliance certificates issued to customers.

MESSAGE FROM ALEXANDER WESSELS

It's our nature.

With public awareness finally arising about global warming, climate change, and the social, health and ecological impacts of human and business activities, it is simply not possible to do "business as usual" as we used to call it in the past.

The need for transparency and traceability in supply networks has become critical if improvements are to be made by all of us in our value chains. We therefore actively engage with our relevant stakeholders in order to support and progress initiatives that are bringing concrete and ambitious solutions and innovations in this area. We feel that only through active positive participation will we be able to bring about measurable change.

At Archroma, we believe that we can make our industry sustainable, and we keep on challenging the status quo - and ourselves - to do just that. As you will discover in this sustainability report for our financial year FY 2018, we strive on creating every day, everywhere essential contributions aimed at making the value chain more sustainable in the industries we serve.

That is why, for instance, we introduced a completely new way of operating and serving our customers. We call it The Archroma Way: safe, efficient, enhanced, it's our nature. In FY2018 we therefore started to serve our markets with innovations and solution systems developed along these principles of safety, efficiency and enhanced value, focused on natural resources reduction thereby decreasing our customers' environmental "footprint".

Similarly, we launched in FY2018 our new Denisol¨ Pure Indigo, a breakthrough indigo dyestuff that is free of aniline, a substance locked into the indigo pigment during the dyeing process classified as category 1 acute aquatic hazard and potentially toxic for workers in the denim industry. The substance is therefore starting to feature on the restricted substance lists (RSL) of some major clothing brands and retailers.

We also decided to prepare this sustainability report of Archroma in accordance with the Global Reporting Initiative (GRI): Core option. In order to initiate this style of reporting, many of the disclosures, baseline measurement and targets have been set. Future reporting will indicate our progression towards these targets and additional disclosures as they become available.

You will therefore be able to discover throughout the following pages all Archroma's efforts and initiatives to drive sustainability into our industries, from our own specialty chemicals manufacturing operations, the technologies that we develop and that allow positive impacts for our customers and for the final consumers.

We hope that the following report will give you an insight into what we do, how we do it and, more importantly, why we do: because after all, it's our nature!

Yours sincerely,
Alexander Wessels
CEO

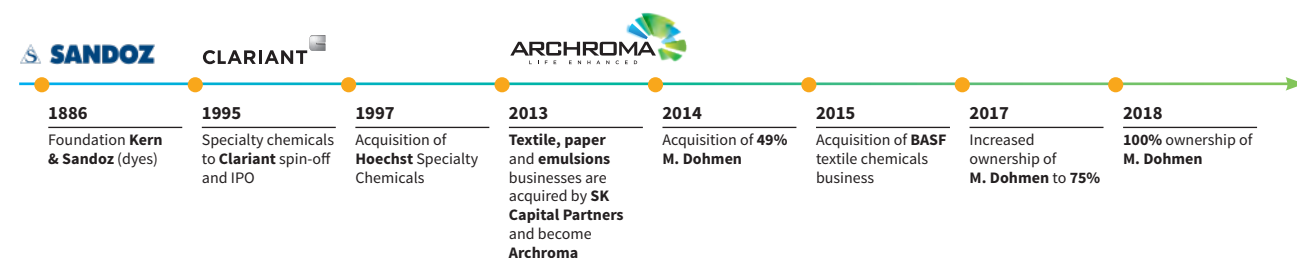(October 2013 to December 2019)

ABOUT THE REPORT

- **This report covers the Archroma's 4th financial year (FY2018), from 1st October 2017 to 30th September 2018.**

- **The report covers Archroma's sustainability approach and strategy, summarizing the sustainability performance and associated activities.**

- **The scope of the report covers all wholly owned subsidiaries and any joint ventures where we have a majority shareholding and significant influence on operations.**

- **The data and Information for this report come from Archroma's official documents both those publicly available and internal reports.**

- **This report has been prepared in accordance with the Global Reporting Initiative (GRI): Core option.**

OVERVIEW

Archroma is a global color and specialty chemicals company headquartered in Reinach near Basel, Switzerland. It operates with approximately 2 900 employees over 35 countries and with 25 production sites. Archroma innovates, creates, manufactures and sells specialty chemicals to 101 countries and is split into three core business units – Brand & Performance Textile Specialties (BPT), Packaging & Paper Specialties (PP), and Coatings, Adhesives & Sealants (CAS) – to deliver specialized performance and color solutions to meet customers' needs in their local markets, touching and coloring people's lives every day, everywhere.

Archroma is passionate about delivering leading and innovative solutions, enhancing people's lives and respecting the planet. The company is committed to challenging the status quo in the deep belief that it can make its industry sustainable; an approach reflected in its innovations, world class quality standards, high service levels and cost-efficiency.

OUR HISTORY

1886	1995	1997	2013	2014	2015	2017	2018
Foundation **Kern & Sandoz** (dyes)	Specialty chemicals to **Clariant** spin-off and IPO	Acquisition of **Hoechst** Specialty Chemicals	**Textile, paper** and **emulsions** businesses are acquired by **SK Capital Partners** and become **Archroma**	Acquisition of **49%** **M. Dohmen**	Acquisition of **BASF** textile chemicals business	Increased ownership of **M. Dohmen** to **75%**	**100%** ownership of **M. Dohmen**

The heritage of the company dates back to 1886, when Kern & Sandoz was founded in Basel, to produce textile dyes.

In 1995 Clariant was formed, as a spin-off from Sandoz, and in 1997 acquired the specialty chemicals business of Hoechst.

In September 2013, SK Capital acquired the Textile Chemicals, Paper Specialties, and Emulsions businesses from Clariant AG. The three divisions were combined into an integrated, market-focused, and collaborative company and was renamed Archroma upon becoming an independent entity.

SK Capital targets investments in the specialty materials, chemicals and pharmaceuticals sectors, working collaboratively with management to support the realization of their strategic, operational and financial objectives.

SK Capital is comprised of individuals that have spent their careers in the specialty materials, chemicals and pharmaceuticals industries as operators, owners and investors. SK capital leverages their experience to acquire companies with unrecognized potential and then work closely with management to enhance and expedite its realization.

SK Capital portfolio companies currently generate revenues of approximately USD 8 billion annually and employ approximately 8 800 people globally.
As of July 2018, SK Capital had approximately USD 3.8 billion of assets under management.

Archroma continues to grow with additional acquisitions, since its corporate carve-out from Clariant in 2013, Archroma is set on becoming a clear industry leader in supplying innovative chemistry solutions, with the goal to make the industries it serves more sustainable. Archroma made a first move in this direction when it acquired the textile chemicals business of BASF in 2015.

In July 2018 Archroma completed the acquisition of M. Dohmen SA, an international group specializing in the production of textile dyes and chemicals for the automotive, carpet and apparel sectors. This latter acquisition incorporated 3 additional production sites, located in Korschenbroich in Germany, San Vittore in Switzerland and in Ulsan, South Korea.

Due to severe financial instability in Venezuela during the previous reporting period, a decision was taken to close our production site in Maracay at the end of September 2017. We were able to relocate, wherever possible, staff and transfer production to other sites. Thus we were able to give security to our employees, minimize retrenchments and also minimize any supply interruptions to our customers.

This brings our total number of production sites to 25 distributed over all continents.

Through this direct lineage, Archroma has a knowledge and experience of chemical manufacturing and the industry spanning more than 120 years.
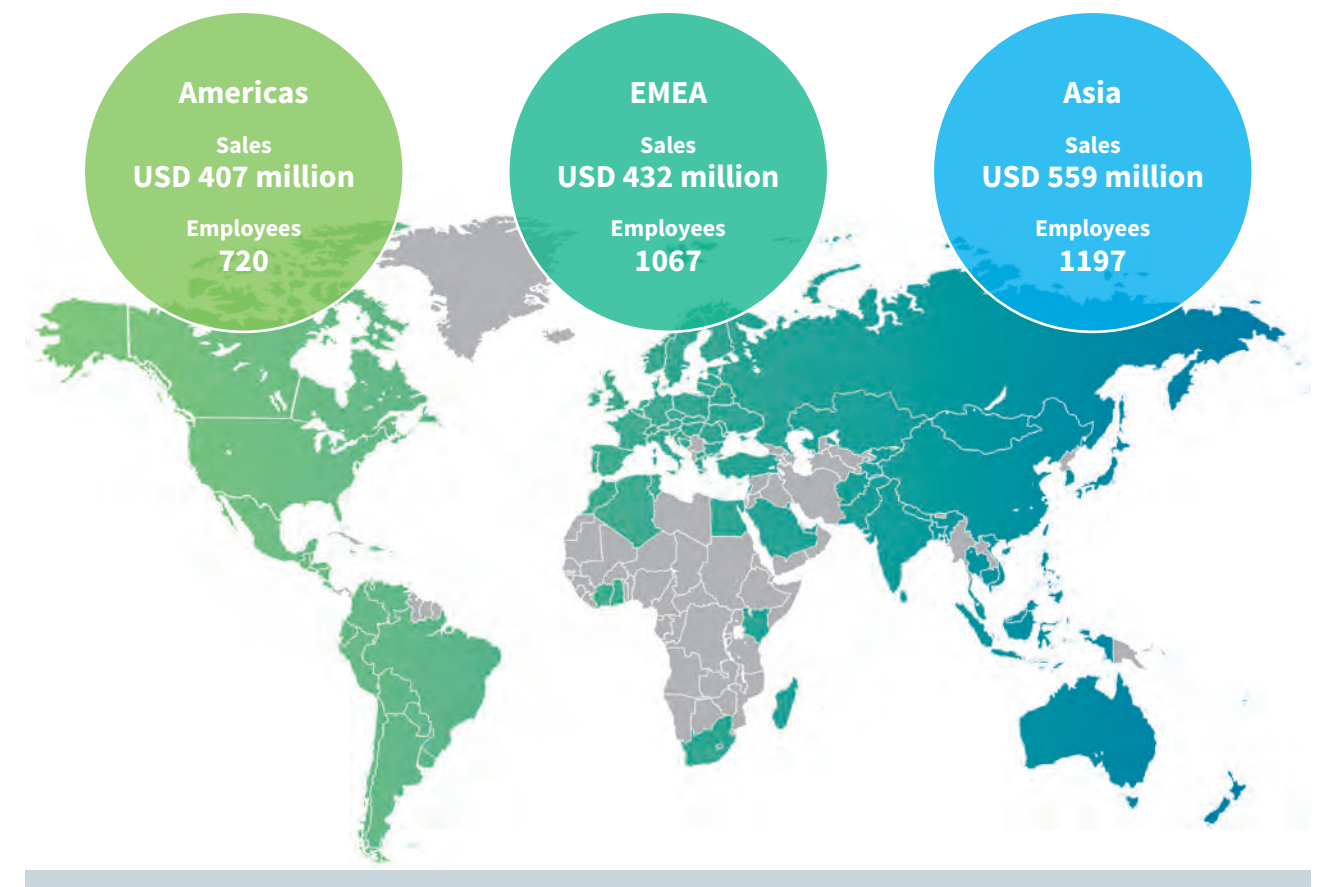
Economic Performance

Archroma's total revenue for FY2018 was USD 1.398 bn. This reflects a 10% increase over the previous reporting period. The quantity of goods sold also increased substantially to 598 thousand metric tons.

Markets served

We currently serve 101 markets worldwide. We have organized these markets into three regional zones, the Americas incorporating North, Central and South America, Europe, Middle East and Africa (EMEA) and Asia.

Global presence 101 Markets

Americas
Sales
USD 407 million
Employees
720

EMEA
Sales
USD 432 million
Employees
1067

Asia
Sales
USD 559 million
Employees
1197

OUR COMPANY

Archroma is structured into 3 business units:

BRAND & PERFORMANCE TEXTILE SPECIALTIES

From fiber to finish, Archroma's Brand & Performance Textile Specialties Business plays a key role throughout the entire textile supply chain, with special chemicals for pretreatment, dyeing, printing and finishing of textiles. Our system packages enhance the properties of apparel and other textiles in applications as diverse as high fashion, home textiles, automotive and special technical textiles.

Textile Value Chain

Archroma offers systems to processors of yarn, fabrics and garments.

Significant Systems & Services

The Archroma Way processes, validated with the 4 systems:
1. DEEP DIVE   3. CLASSIC INDIGO FLOW
2. STAMP IT SAFE   4. SMOOTH AS IRON
ONE WAY process analysis
Color Atlas, color specification and standards

Significant Brands

Fibre: Afilan®, Arkofil®

Coloration: Kieralon®, Leucophor®, Drimaren®, Foron®, Dorosperse®, Nylosan®, Denisol®, Earthcolors®, Diresul®

Fabric Finishing: Arkofix®, Nuva® N, Sanitized®

PACKAGING & PAPER SPECIALTIES

Archroma's Packaging & Paper Specialties Business provides expertise in the management of whiteness, coloration, special coatings and strength for all kinds of papers. By combining our focused product systems with the application services of our paper experts around the globe, we enhance both the optical and functional properties of packaging, paper and tissue.

Paper Value Chain and key markets

Archroma offers systems to paper manufacturers.

Significant Systems & Services

Color management

Significant Brands

Coloration: Cara®, Cartosol®, Cartazine®, Diresul®, Cartaren®, Flexonyl

Whiteness: Leucophor®

Surface & Coating: Cartabond®, Cartaguard®, Cartaseal®, Cartacoat®

Process: Cartafix®, Cartaspers®, Cartafen®, Antimussol®

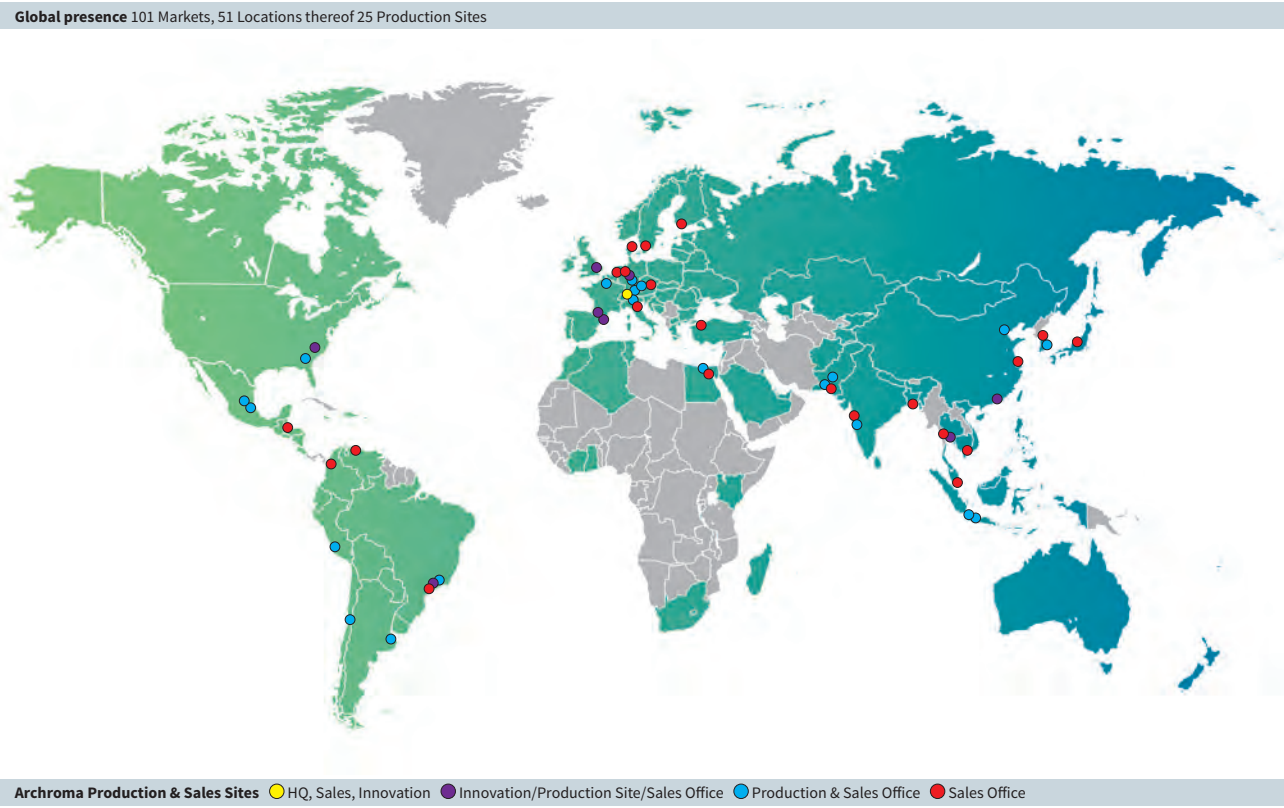## COATINGS, ADHESIVES & SEALANTS

From paints, adhesives and construction to the textile and paper industries, Archroma's Coatings, Adhesives & Sealants Business provides solutions for a wide range of applications. Literally thousands of satisfied customers have been a witness to the outstanding success of Archroma's Mowilith® emulsions since its first patent obtained in 1912.

Coatings, Adhesives and Sealants Value Chain and key markets

Paints - Decorative interior/exterior, primers, varnishes, industrial applications

Construction - Concrete applications, roofing, tiling, sealants, primers, mortars admixtures

Adhesives - Wood, paper, lamination, packaging and Pressure sensitive adhesives

Significant Brands

Mowilith®, Mowicoll®

Organization Scale

Archroma has 51 office and production sites in 34 countries worldwide. Eight of these locations are shared sites, where the sales organization is located on the same site as one of the 25 production facilities, and 26 are offices with additional service centers.

Global presence 101 Markets, 51 Locations thereof 25 Production Sites

Archroma Production & Sales Sites ⬤ HQ, Sales, Innovation ⬤ Innovation/Production Site/Sales Office ⬤ Production & Sales Office ⬤ Sales Office

OUR GOVERNANCE

Archroma has a flat management structure that allows us to effectively communicate the strategic direction throughout the organization, closely monitor the implementation of initiatives and required activities needed to implement the strategy, and to rapidly respond to the business needs, opportunities and challenges.

The main senior management decision-making body is the Archroma Global Leadership Team (LT). The LT possess a wide range of competencies, business and financial skills, chemical competence, market knowledge and international experience and are responsible to determine the strategy and structure to set the pace for current operations and future development. The LT consist of eight senior executives of the company and are responsible for the execution of the BoD-approved strategy and direction. This includes reviewing and evaluating the external current and future opportunities, threats and resultant risk to markets, the strengths and weaknesses of the current and future organization and resultant risk to the business, and to decide upon the strategic options required and the means to implement and support them. Remuneration and risk management also falls within the BoD responsibility. The LT structure incorporates all the key functions of Archroma management.

The Board of Directors (BoD) supervises the LT, on behalf of the main shareholder, and has two levels of operation. The primary function is to liaise with the LT and make final approval of the proposed strategy, the underlying tactics to achieve the strategy, and financial planning including targets.

The secondary function is to actively support specific projects within Archroma, this being dependent upon the competencies of the individual directors appointed to the board. Thus, the BoD has a two-tier working principle equivalent to a traditional single tier board.

External quality management auditing of Archroma to international standards falls within the responsibility of the Quality Management team, reporting directly to the Chief Operating Officer (COO). The compliance committee, which has the responsibility to ensure an ethical business culture through the Archroma Code of Conduct and incorporates our whistleblower policy, is also led by the COO.

Archroma Holdings Sarl Board of Directors

Barry Siadat

Siegfried Fischer

Harri Kerminen

Miguel Kohlman

Jared Kramer

Delhia Perez-Garbin

Reynald Tavoillot

Douwe Terpstra

Compliance Committee

Stephan Sielaff
Hans Lourens (FY2018)
Ana Perez
Stefan Kuehn

Alexander Wessels
Chief Executive Officer (CEO)

Archroma Leadership Team, with significant experience in the chemicals and process industries

Roland Waibel
Chief Financial Officer (CFO)

Stephan Sielaff
Chief Operating Officer (COO)

Hans Lourens
General Counsel

Marcos Furrer
President BPT, PP, CAS and Innovation

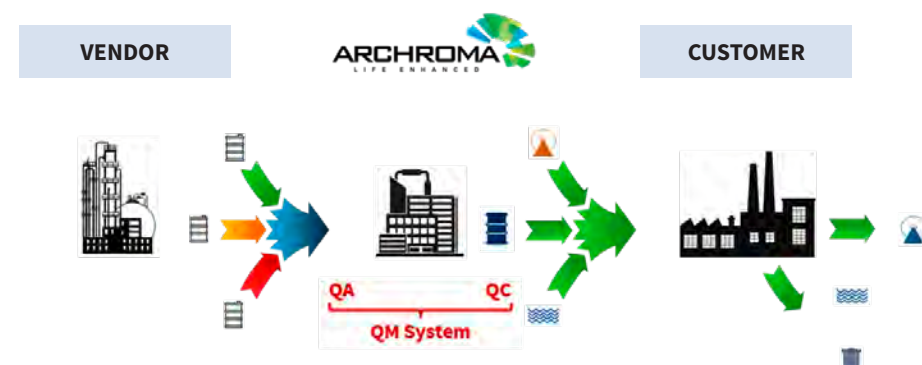**Miguel De Bellis**
President Region Americas

Michel Zumstein
President Region Asia

Beate Plueckhan
President Region EMEA

OUR QUALITY MANAGEMENT

Archroma and all subsidiaries operate to global standardized management systems:

- **SN EN ISO 9001:2015 Quality Management Systems Standard**
- **SN EN ISO 14001:2015 Environmental management Systems Standard**
- **BS OHSAS 18001:2007 Occupational Health and Safety Management System Standard**

Initial third party audit and certification in 2014, re-certified in 2017 with a current validity until July 2020. Internal audits are made throughout the year on Archroma sites by the quality management team. Ownership of the quality management system is by our Head of Quality Management disciplinary reporting to the COO and functionally to the CEO. Quality management reviews are held bi-annually with the Leadership Team to monitor progress on system development and corrective action plans.

Quality management plays a critical role in our activities, in particular quality assurance and subsequent control to prevent either the introduction of, or the production of, unwanted hazardous substances in our commercial products. This is reported in further detail in our chapter referring to "Safe".

Affiliations and Memberships

Archroma is a member of the United Nations Global Compact. This voluntary initiative is a commitment to implement universal sustainability principles and to take steps to support the United Nations goals, by aligning strategies and operations with the universal principles of the United Nations Ten Principles on human rights, labor, environment and anti-corruption; and to take strategic actions to advance broader societal goals, such as the UN Sustainable Development Goals, with an emphasis on collaboration and innovation. A requirement of this commitments is the annual submission of a "Communication of Progress" which outlines the implementation and measurement of outcome of the activities to support the ten principles, under the 4 pillars of Human Rights, Labor, Environmental and Anti-Corruption. The document can be found here: https://www.unglobalcompact.org/what-is-gc/participants/119991#cop

Archroma is a signatory of the International Council of Chemical Associations Responsible Care® Global Charter since 2014. Responsible Care is a commitment to an ethic of safe chemicals management and performance excellence in the chemical industry. It enhances public confidence and trust in the industry's dedication to safely manage chemicals throughout their lifecycle, while ensuring that chemistry contributes to improving living standards, enhancing our quality of life and protecting the environment.

Archroma is an active member of the European Chemical Industry Council (CEFIC), a non-profit organization which represents large, medium and small chemical companies across Europe. CEFIC is devoted to promoting a thriving European chemical industry that is broadly recognized to provide sustainable, safe and resource efficient solutions, foster prosperity, growth and investments in Europe and to provide safe and resource efficient solutions to meet the challenges for future generations.

Archroma is a bluesign® technologies system partner, an independent organization that represents the vision and mindset of responsible and sustainable manufacturing of textile consumer products, that acts as an independent verifier to secure trust and transparency. Archroma has over 1000 products which have been bluesign® approved for the use in manufacturing textiles with the highest degree of safety for the consumer, the lowest possible impact on people and the environment and with the responsible use of resources.

Archroma is also an associate member of the FluoroCouncil, a global organization representing the world's leading fluoro-technology companies. Founded in 2011, the members of the FluoroCouncil lead research and development to introduce new fluoro-technology products with improved environmental and toxicological profiles. Archroma assisted in the development of the 2010/2015 perfluoro octanoic acid (PFOA) stewardship program with US Environmental Protection Agency.

Archroma is a member of, and is represented on the board of, the Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers (ETAD), an independent international association for colorant-producing companies. ETAD provides a voluntary framework within which the member companies and their value chain can cooperate for the benefit of health and the environment, promote responsible care principles and product stewardship and cooperate with authorities to harmonize health and environmental regulations.

Archroma is also a member of the Association of Manufacturers of Process and Performance Chemicals TEGEWA (Textil, Gerbstoff u. Waschmittel). TEGEWA is an organization that fosters pre-competitive dialogue and collaboration of manufacturers of process and performance chemicals for industrial users.

As a member of TEGEWA and ETAD Archroma has advised towards the ZDHC Joint Roadmap (Zero Discharge of Hazardous Chemicals) programs.

Archroma is also a member of industry related associations, such as the Society of Dyers and Colourists (SDC) and the American Association of Textile Chemists and Colorists (AATCC), and as such we support their respective conventions and workstreams.

THE ARCHROMA WAY

In 2018 we redefined our internal and external approach, communication and behavior to our business. This ensures that we have a consistent approach to how we operate and communicate our core values to the markets. It also helps our organization to focus on those aspects of our business, from research and development, production all the way through to sales, which positively affect our sustainability footprint and that of our suppliers and customers. In this way we are motivated to identify and address current deficiencies in the value chains that we serve, resulting in a positive change to challenge the status quo.

This we termed the "The Archroma Way". It is defined into three elements: safety, efficiency and enhanced value. We examined how we affect these three elements both from an internal and an indirect external perspective; what we do and how we do it, how we impact and enable third parties.

As a global manufacturer and supplier of specialty chemicals and colorants to the textiles, paper and coatings industries, the impacts of Archroma's products extend far beyond our own operations. The dyes, auxiliaries, and functional finishes that we supply become the raw materials for a huge volume and variety of products. Our products have a broad range of impact on our customers and their products, affecting cost, production time, resource requirements, product quality and overall value. In many cases, Archroma products can impact the issues that matter most, or the material issues, for our customers, their customers, and the consumers who use and dispose of their products. As it travels through the supply chain, the impact of a single kilogram of an Archroma product can grow exponentially as it helps, for example in the textile industry, transform fiber to yarn to textile to finished product. Throughout our own operations, we strive to ensure that these indirect impacts are positive, and are always improving the overall value along the supply chains that we serve.

We believe that sustainability does not have to come at a higher price, and we are committed to demonstrate this to our partners by using our ONE WAY Process Simulator. The ONE WAY Process Simulator is a calculation tool designed and used by our textile processing experts to provide our customers and partners with an accurate estimate of the process costs, resource utilization, effluent discharge quality, and CO_2 emissions of the existing production process and of the newly evaluated system. This is how we validate, quantify and support the "Efficient pillar" of The Archroma Way. Further details can be found on page 63 of this report.
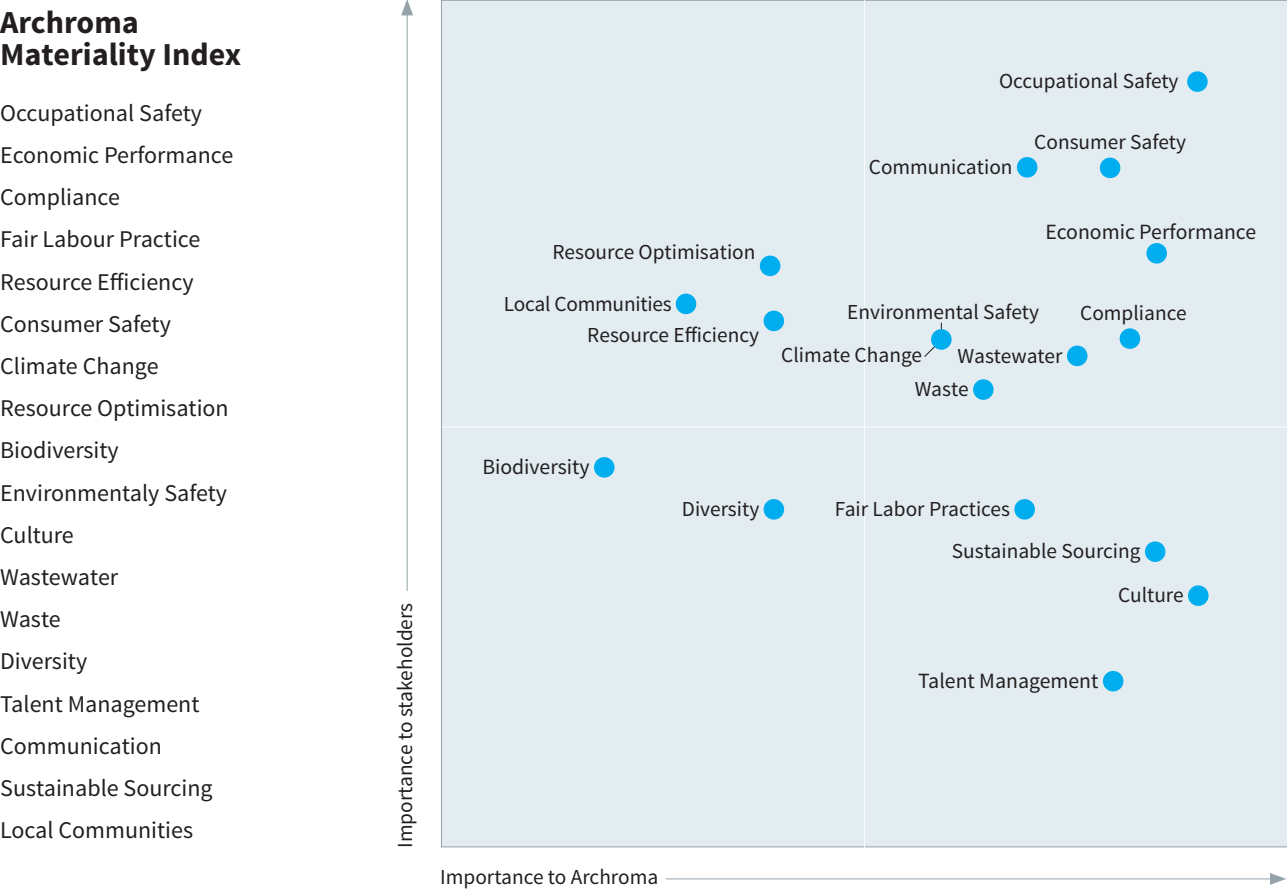
These indirect impact reductions are not just a nice story for Archroma, they are critical to our ability to succeed as a manufacturer and supplier. The industries we serve developed and grew without much regard for safety of key stakeholders or the environment. Many chemical and raw materials that started as breakthrough innovations have been driven to be cheap commodities. These are bought and sold based only on the cost per kilogram without regard for their impacts on quality, safety, or the environment. In addition, the growth of these industries was built on cheap (often free) and easy access to clean fresh water with no requirements of how that water would be used or returned to the environment. The result has been that these industries were able to grow and prosper by purchasing in-expensive low quality materials and chemicals, and make up for that by using and polluting huge volumes of water that was supplied to them at little or no cost. As we have learned more about the harms and impacts of this business model and about the scarcity and value of water, it has become obvious that the only way for these industries to sustain their business will be with raw materials and chemicals that are safe, efficient, and that add value. At Archroma, we believe that we can make our industry more sustainable, and that we will do this by providing products that are higher quality, safer, more efficient and that provide resource savings for our customers all along the value chain.

Innovation at Archroma does not take place in a silo, but is a collaborative effort to get inputs from multiple stakeholders in order to identify problems to solve, prioritize them and align them with solutions. Great ideas can come from any part of the organization, and a key part of our management approach to innovation is to engage with internal expertise and also with our externally facing teams, sales and value chain interaction teams, in order to get their input on imminent challenges and opportunities facing our key mill customers and their key brand customers.

These insights enable us to focus on our customers, and to prioritize the projects that will have the greatest impact to them. Our product stewardship organization provides insights into the dynamic landscape of public concerns and government regulations pertaining to the chemical industry. This collaboration ensures that Archroma is leading in our efforts to produce chemicals that are safe to use in a responsible manner. External collaboration is also an important part of our approach, and we have strong relationships with leading raw material suppliers and the technology providers who make the machinery necessary for our customers to use our products. This collaborative and engaging foundation ensures that our approach to innovation is strategic, intentional, and purposeful.

SAFE – It's our nature to protect.
Safety comes first. Central to all our activities is our deeply rooted goal to protect people and our planet – safe to use, safe to wear and safe to release.
This affects not only our internal manufacturing processes, but also encompasses to our upstream suppliers, our downstream customers and the communities in which we operate.

EFFICIENT – It's our nature to rethink sustainable manufacturing.
Innovating production processes that minimize resource use and that maximize productivity that impacts our internal manufacturing, as well as those of the value chains in which we participate.

ENHANCED – It's our nature to add another level of value.
Enhancing organizations is critical. Additional effects, functionalities, abilities and aesthetics give additional value, helping consumers achieve their goals, for a life enhanced.

After all, **it's our nature....**

ENHANCED
EFFICIENT
SAFE
THE ARCHROMA WAY

OUR MATERIAL TOPICS

Archroma Materiality Index

Occupational Safety
Economic Performance
Compliance
Fair Labour Practice
Resource Efficiency
Consumer Safety
Climate Change
Resource Optimisation
Biodiversity
Environmentaly Safety
Culture
Wastewater
Waste
Diversity
Talent Management
Communication
Sustainable Sourcing
Local Communities

Importance to stakeholders

Importance to Archroma

Plotted topics: Occupational Safety, Consumer Safety, Communication, Economic Performance, Resource Optimisation, Local Communities, Resource Efficiency, Environmental Safety, Compliance, Climate Change, Wastewater, Waste, Biodiversity, Diversity, Fair Labor Practices, Sustainable Sourcing, Culture, Talent Management

The Archroma Way

SAFE (Reducing Risk)

Occupational Safety	Environmental Safety
Compliance	Wastewater
Consumer Safety	Waste
Climate Change	Communication
Biodiversity	Sustainable Sourcing

EFFICIENT (Process Efficiency)

Resource Efficiency
Resource Optimisation

ENHANCED (Quality of Life)

Economic Performance	Diversity
Fair Labor Practice	Talent Management
Culture	Local Communities

Communication with stakeholders is done both in a formal and ad hoc manner, dependent upon the stakeholder groups' requirements and relevancy to the Information.

Stakeholders	Inbound	Outbound
Society	Survey, news monitoting	Internet, news release
Authorities, Legal Bodies	Legal department, 3rd party service providers	Legal department
Regulatory Bodies	Product Stewardship Department	Product Stewardship Department
Investors	BoD meeting	BoD meeting
Employees	Structured meetings, ad hoc	Cascade, newsletter, intranet
Customers	Salesforce, CSD, news monitoring	Salesforce, CSD, Internet, Product Information, news release
Suppliers	Specialist department (e.g. Procurement, QM)	Specialist department (e.g. Procurement, QM)

From these stakeholder engagement activities and internal analysis, Archroma has assessed what are the topics most material to both our external stakeholders and our business, and have prioritized them accordingly, with those topics occupying the top right quadrant having greatest priority.
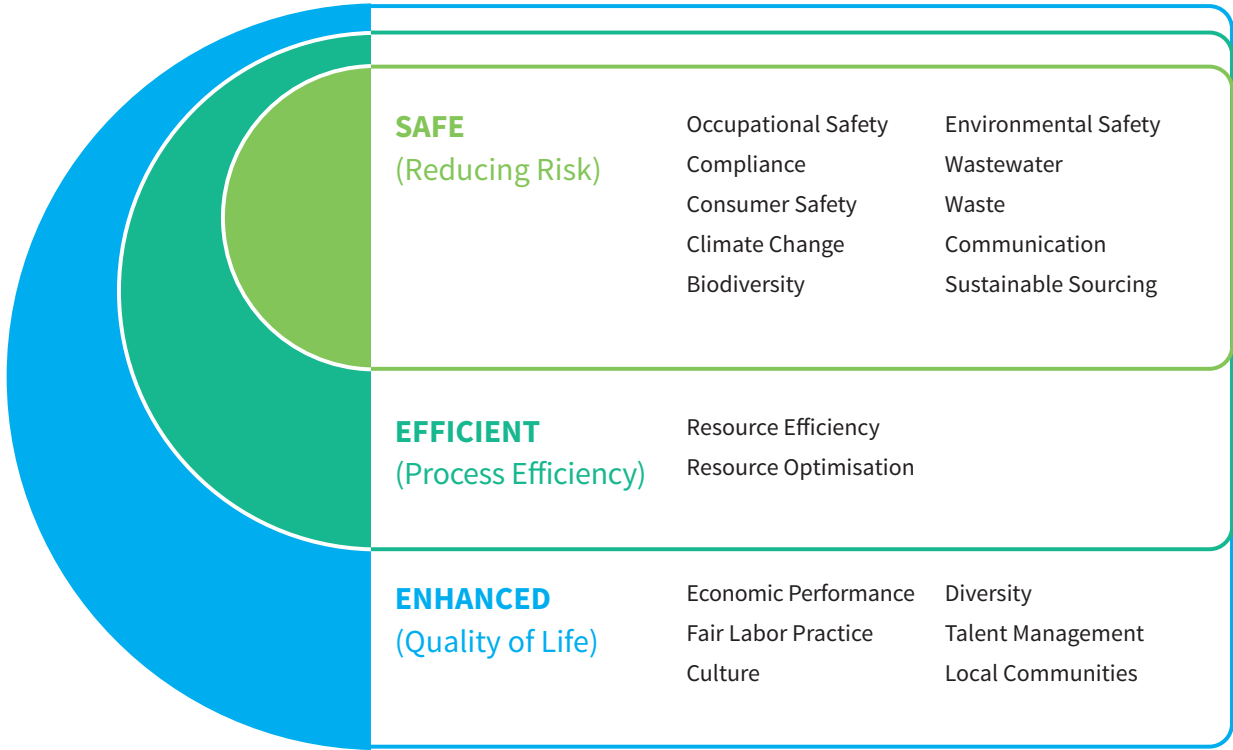
The subsequent topic, which have been identified by our external/internal stakeholders as being material to our business, have also been clustered into The Archroma Way, and will be presented in the following pages under the three pillars of Safe, Efficient and Enhanced.

This report has been prepared as a Global Reporting Initiative referenced standard basis, on the basis of the Core option. The material references can be found within the GRI Content Index within the Appendices on page 88.

Any questions regarding the report or its contents should be directed to:
James Carnahan
Global Sustainability Manager
james.carnahan@archroma.com

SAFE

2023 TARGET
SAFE

Occupational safety
Zero accidents
- Total reportable incident rate per 200 000 hours worked of less than 0.2 incidents

Consumer safety
Safe to use
- All sales products compliant to the Archroma MRSL

Environmantal safety
Protecting our planet
- Carbon neutral
- -40% water abstraction in water stress areas
- No hazardous waste to landfill

SAFE – IT'S OUR NATURE TO PROTECT.

SAFETY IS ARCHROMA'S UNCOMPROMISED TOP PRIORITY IN OUR WORLDWIDE ACTIVITIES, TO GUARANTEE THE PROTECTION OF PEOPLE AND THE ENVIRONMENT. WE SET GOALS FOR SAFETY, SECURITY AND ENVIRONMENT WHICH ARE VALID THROUGHOUT THE ENTIRE COMPANY, MONITOR AND EVALUATE ALL ASPECTS OF OUR ACTIVITIES.

OCCUPATIONAL SAFETY

This topic refers to our internal focus, management and performance for the safety of our employees. Chemical manufacturing is a specialized process involving the handling and storage of large volumes of chemical substances of varying hazardous natures, synthesis processes requiring complex machinery often using high temperatures and pressure, and waste streams that require particular treatment before being able to be discharges back into the environment.

Archroma has developed 12 "Life Saving" rules as a general guideline, as we are all responsible for safety, each employee is trained on these rules and gives a signed commitment to ensure they are followed.

Accountability for occupational safety lies with the Chief Operating Officer (COO) and the Global Safety, Health and Environment (SHE) manager. Each site manager has a zero Lost Time Accident (LTA) and Occupational Incident (OI) target. This has resulted in the overall Total Reportable Rate (TRR) of 0.47 incidents measured per 200 000 hours worked for the reporting period. This shows a slight improvement over the previous reporting period (FY2017 TRR 0.5). This is well below the U.S. National Safety Council chemical manufacturing industry average of 2.0 for 2017. The TRR target for FY2023 is less than 0.2 incidents per 200 000 hours worked.

Archroma 12 Life Saving Rules

NO DRUGS WHILST WORKING NO ALCOHOL AT WORK NO SMOKING OUTSIDE DESIGNATED AREAS

WORK WITH A VALID PERMIT WHEN REQUIRED

PROOF THAT ATMOSPHERE IS SAFE BEFORE ENTERING IN A CONFINED SPACE

LOCK OUT, TAG OUT AND TRY OUT BEFORE WORK ON MACHINES OR EQUIPMENT BEGINS

OBTAIN AUTHORIZATION BEFORE LINE BREAKING

OBTAIN AUTHORIZATION BEFORE OVERRIDING OR DISABLING CRITICAL SAFETY EQUIPMENT

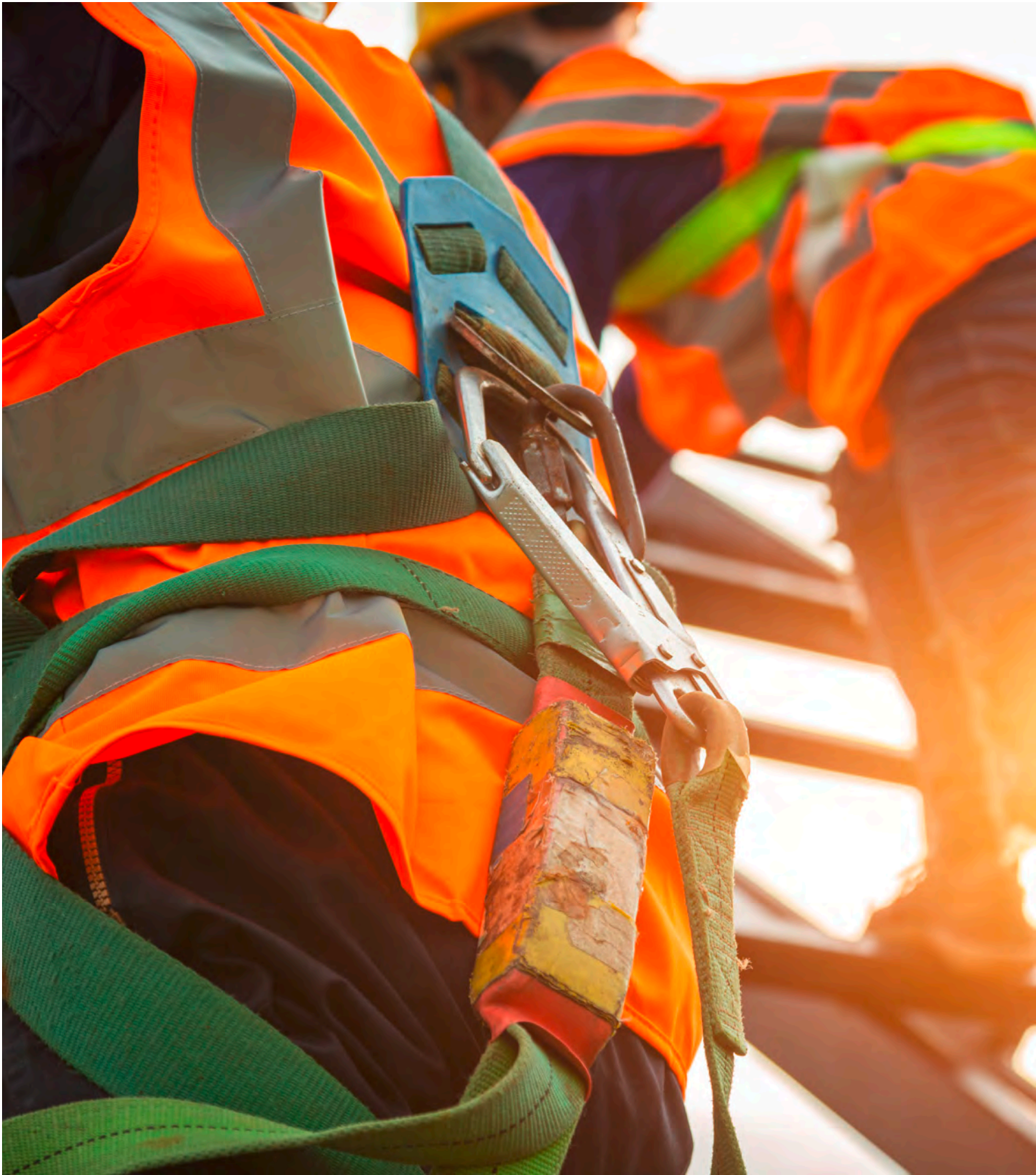**PROTECT YOURSELF AGAINST A FALL WHEN WORKING AT HEIGHT**

LIFTING AND HOISTING: DO NOT ENTER A DANGER ZONE WHERE OBJECTS CAN FALL

COMPLY WITH MANAGEMENT OF CHANGE WHEN REQUIRED

FOLLOW YOUR JOURNEY MANAGEMENT PLAN

WEAR YOUR SEATBELT

DRIVE RESPONSIBLY AND COMPLY WITH LOCAL LAW

Occupational Health and Safety Risk and Emergency Management

Comprehensive assessment of risks related to our operations and products are prerequisite to our business processes. Local and global emergency organization is in place to ensure comprehensive emergency management and response.

We take initiatives to reduce safety and health risks in the production, storage, distribution and usage of our products and in the disposal of waste. In order to manage the risks associated with chemical manufacturing, process hazard analyses are conducted. Each manufacturing site has its own risk portfolio, particular to the manufacturing processes and chemicals used for that site. The primary aspects are fire, toxicity and chemical contact. This risk portfolio is reviewed every 3 years, or earlier when an additional manufacturing process has been initiated on the site.

Each manufacturing site has a dedicated Safety and Environment Officer (SEO), who reports on a monthly basis to the global Safety, Health and Environment (SHE) manager. Individual goals are set for each site. There are three safety pillars; prevention of incidents, training and safety audits.

Incident Prevention

To support prevention Archroma operates an observation program in order to identify opportunities for improvements which can then be distributed across all sites. We have found this approach particularly successful identifying actions for continuous improvement, and this is also monitored on a monthly basis.

Training

To support training every site has a comprehensive training program that has been developed specifically for that site and focused upon specific knowledge improvement requirements. Broader reached training for the organization are conducted by regular webinars. These cover more general topics, which maintains the awareness within the organization towards our current safety performance and allows experience sharing and allows all employees to participate in safety.

Safety Audits

Site safety audits against the guidelines are conducted on a 3 year programs. These audits are conducted over one week by internally qualified safety experts at a frequency of 8 - 10 sites per annum. The audits are conducted against 25 comprehensive guidelines which describe all safety processes, the transportation, storage and use of all materials. Any corrective action plans are set and monitored against a specific timeframe.

Key established toll manufacturers are audited by qualified person(s) for their safety performance, this is an area that we are expanding on In the future.

In FY2018 we have 15 trained auditors, additional auditors to be trained in FY2019 onwards, and a specific target has not as yet been defined.

General visitors to the sites undergo a safety briefing before entrance, which is the responsibility of the hosting Archroma employee, covering the 12 "life-saving" rules in addition to site specific risks and hazards. Third party contractors employed for specific maintenance or construction contracts are trained before commencement of the particular contractual work. New employees will be trained before and in parallel to their duties, and are afforded additional supervision.

General health improvements are managed on a local level at the sites. No global initiatives have been conducted during the reporting period.

CONSUMER SAFETY

Of high importance to our value chains – more focus is being made to ensure that products used in manufacture do not pose a health and safety risk to the users and final consumers. Environmental health is referred to under the other topics of climate change, resource optimization, wastewater and waste management.

The Product Stewardship organization is fully integrated within Archroma's processes in order to ensure that hazardous chemical risks are identified and controlled. Current and future knowledge of regulatory authorities' requirements, often specific to countries and regions, is essential. In addition, other value chain stakeholders influence market demand (consumers, brands, NGOs) and the resultant required specification in order to manage the risk of chemistry that poses a hazard to consumers and the environment. All these requirements have to be gathered, consolidated and communicated to all related internal stakeholders to ensure that product design, innovation, registration, production and resultant application conforms to these changing requirements. The Product Stewardship organization has the gatekeeper function for raw material sourcing and production processes. An essential process required in specialty chemical manufacturing is a competent chemical inventory management system incorporated in master data management systems.

The Product Stewardship organization has three dedicated testing laboratories at its disposal in order to control and confirm product compliance to market-related restricted substance lists specifications, in addition to regulatory requirements. These laboratories are located in Pakistan, India and China. In order to support the necessary regulatory support processes and market required compliance certifications, we have invested in a dedicated global team, trained and qualified with the necessary scientific knowledge in order to deliver the highest standard of product stewardship in the industry. How we interact with the respective value chains is reported under the topic of communication.

At Archroma, we focus on safety because, "It's our nature to protect". For our innovation efforts, this means making chemical products that are safe to manufacture, safe to use by our customers, safe for consumers using our products, and safe for our environment at every stage of our products lifecycle. To enable this, we have developed a market-related Manufacturing Restricted Substances List (MRSL), designed to limit unintended hazardous substance contaminants in our commercial formulations. This allows us to communicate our commitment for product safety to external stakeholders in a robust and efficient manner. Through effective portfolio management, we are committed to optimizing our entire product range so that by the end of 2023 all of our commercial formulations meet the criteria of this policy, the Archroma MRSL.

For our downstream stakeholders, this means we take a continuous improvement approach to minimizing and eliminating toxic and hazardous chemical ingredients and impurities from our products. This approach is important, because we are always learning more about the impacts of chemicals, and we want to always be a leader in safe products.

In addition to conforming to the regulatory and market specific requirements concerning limitation of hazardous substances, we also examine ways in which we can deliver products which not only comply with, but dramatically exceed current levels of purity. This is in line with Archroma challenging the status quo. An example of this during this reporting period was the development of Denisol™ Pure Indigo. Our market analysis revealed that aniline was starting to appear on various market-related restricted substance lists in the textile industry. Aniline is a substance which is hazardous both to the environment and to human health. Consequently we conducted a risk analysis on our product portfolio to determine levels of aniline within our products and initiated a research project in 2016 to determine whether improvements could be possible to reduce aniline exposure.

Indigo, which is predominantly used in the textile denim industry, is a colorant which contains aniline as an unnecessary contaminant, with levels often exceeding 6 000 ppm.

A direct result of this project was the development of our pre-reduced indigo product Denisol™ Pure Indigo 30 Liquid, which contains levels of aniline below the limits of detection according to industry standard test methods.

This product was introduced to the market in May 2018, bulk production started in our Jamshoro plant, Pakistan, in September 2018. Further information with an explanatory video can be found at https://www.archroma.com/innovations/the-purest-indigo
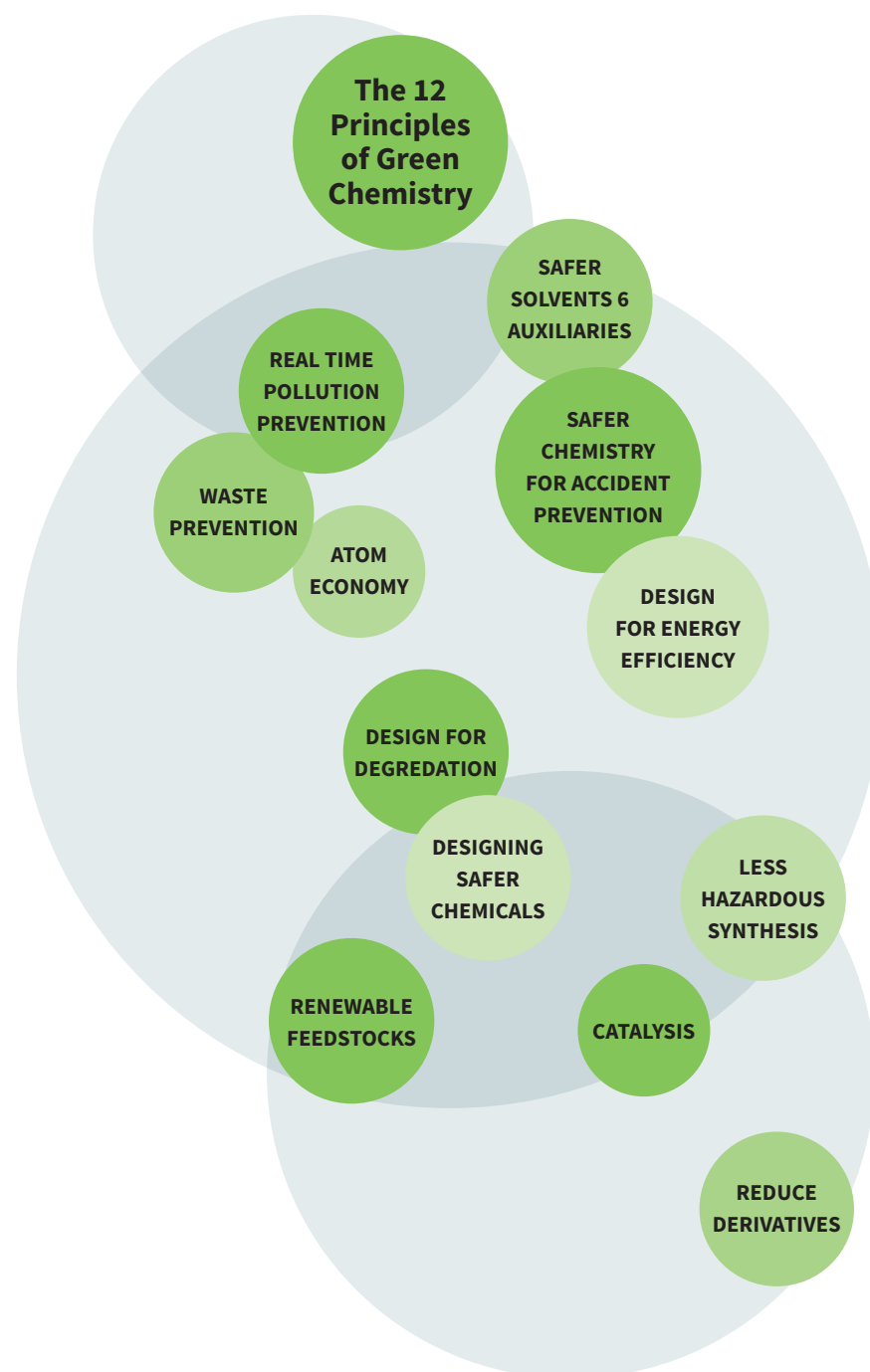
ENVIRONMENTAL SAFETY

We take initiatives to reduce environmental risks in the production, storage, distribution and usage of our products and in the disposal of waste. This includes the efficient use of energy and resources and the continuous improvement of our processes to minimize the impact of our activities on the environment. We apply a simple concept of analyzing our production processes to, where possible, avoid or reduce emissions and waste, and dispose of waste in an environmentally acceptable manner. We comply with all local regulations, and have online effluent monitoring in major sites which allows a control mechanism to achieve and surpass emission limits.

Accountability for environmental management lies with the Chief Operating Officer (COO) and the Head of Manufacturing (MAKE). Manufacturing processes are developed in line with green chemistry principles; maximizing process yields which ensures that minimum waste is generated, and to minimize unintentional contaminants of raw materials and intermediates within the final product. Production technology, that is the implementation, installation, monitoring and resultant improvements of production processes, is globally managed in two areas; Chemicals, and Dyes & Optical Brightening Agents. This has been done due to the distinctly differing natures of chemistries involved In these two areas.

Short term and long term key performance indicators and associated targets are defined for each production site for energy use, waste and effluent, both in absolute terms and per unit of production. These are monitored on a monthly basis by the manufacturing department and corrective actions taken where necessary. In addition, specific projects are initiated regarding operational excellence, especially in process simplification and production yield improvement.

The 12 Principles of Green Chemistry

- SAFER SOLVENTS 6 AUXILIARIES
- REAL TIME POLLUTION PREVENTION
- SAFER CHEMISTRY FOR ACCIDENT PREVENTION
- WASTE PREVENTION
- ATOM ECONOMY
- DESIGN FOR ENERGY EFFICIENCY
- DESIGN FOR DEGREDATION
- DESIGNING SAFER CHEMICALS
- LESS HAZARDOUS SYNTHESIS
- RENEWABLE FEEDSTOCKS
- CATALYSIS
- REDUCE DERIVATIVES

Non-conformances

There are strict guidelines covering environmental safety non-conformities. All sites have at their disposal a well prepared and trained emergency response team to cover spills, fires, accidents or any other incidents. Training of these teams is conducted on a regular basis, and certified to conform to local regulations. The magnitude and/or the impact of an incident will determine the response level according to the global emergency management procedures, by either the Local Emergency Management (LEM) team or the Global Emergency Management (GEM) team. The local authorities are notified and the appropriate remedial actions taken. Archroma employees are always a part of any emergency team, even if Archroma is not the site owner, as in some cases we have shared sites with third parties.

In addition to the specialized training received by the emergency management teams, all production employees are trained on safety, energy, waste and wastewater management as a part of the Archroma Academy "MAKEXPERT" initiative, developed to build knowledge from a bottom-up approach. This initiative also builds a good platform to define improvements towards achieving the particular annual and long term goals.

During the reporting period we did not receive any significant fines or non-monetary sanctions for non-compliance with environmental laws and/or regulations.
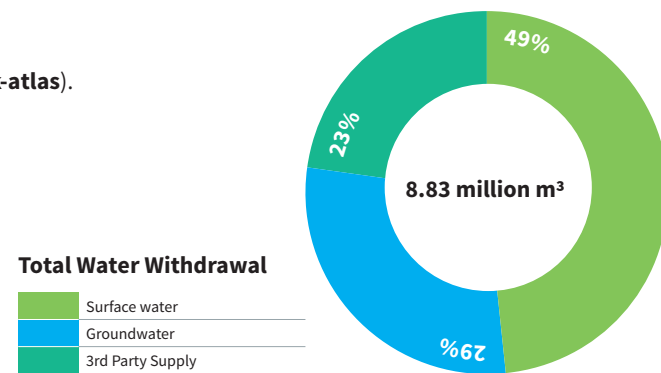
Air Emissions

Airborne emissions from the production plants include exhaust gas from operations and boiler flue gas. All production plants are equipped with modern facilities to collect and treat air emissions. All air emissions are continually monitored and meet with the relative standard limits as stipulated by local environmental authorities.
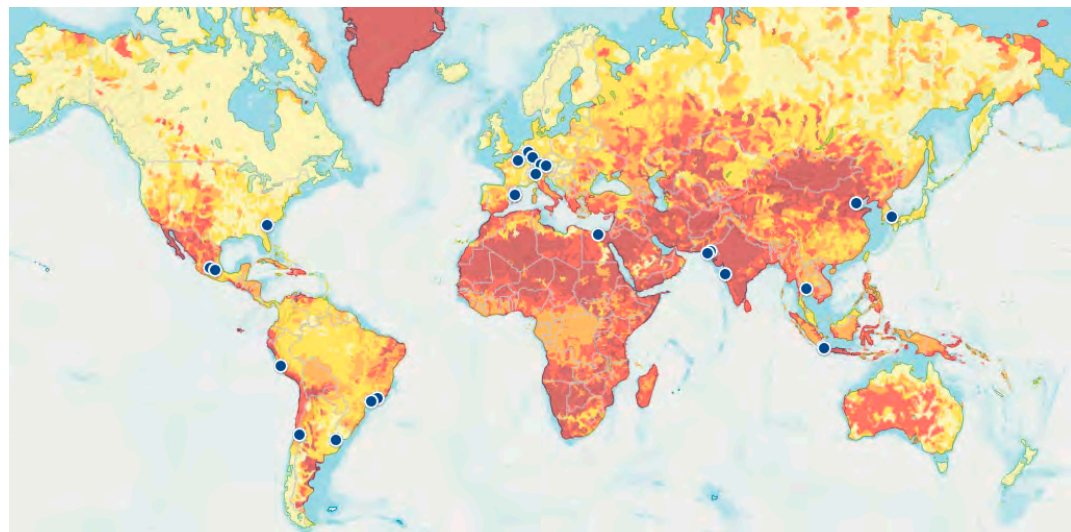
Water & Effluent

Water is a critical resource for Archroma during chemical manufacture. It is primarily used as a processing aid in cooling, cleaning and air scrubbing/washing, and as a raw material in the production of commercial liquid based formulations, such as liquid dyes and polymeric dispersions and is also evaporated during spray drying in the production of dry formulations.

Archroma withdrew a total of 8.83 million m³ of water in FY2018, which represents a 26% increase compared to the reported figure for FY2017 (7.00 million m³), however this figure was under-reported, as cooling water in one of our sites had been omitted from the total (1 068 347 m³). Taking this into consideration our FY2018 withdrawal represents a 9.3% increase over the previous reporting period. Of the total withdrawn 49% is sourced from surface water and 29% from groundwater. The remaining 23% being supplied from third parties (such as corporation water supply, industry site services).

10 of our production sites are located in water stress areas
(as defined by the WRI Aqueduct Water Risk Atlas
https://www.wri.org/resources/maps/aqueduct-water-risk-atlas).

8.83 million m³

49%

23%

29%

Total Water Withdrawal

- Surface water
- Groundwater
- 3rd Party Supply

Water Stress Areas

Production Site	Baseline Water Stress Rating
Lurin, Peru	Extremely high (>80%)
Maipu, Chile	Extremely high (>80%)
Zarate, Argentina	Extremely high (>80%)
Ameriya, Egypt	Extremely high (>80%)
Tianjin, China	Extremely high (>80%)
Santa Clara, Mexico	High (40-80%)
Salvatierra, Mexico	High (40-80%)
Jamshoro, Pakistan	High (40-80%)
Landhi, Pakistan	High (40-80%)
Ulsan, South Korea	High (40-80%)

Baseline water stress measures the ratio of total water withdrawals to available renewable surface and ground water supplies. Water withdrawals include domestic, industrial, irrigation, and livestock consumptive and non-consumptive uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users.

In these sites Archroma withdrew 1.33 million m³ of water in FY2018. Only 5% of the water withdrawn in these areas was sourced from groundwater, 57% from surface water. The remaining 38% was supplied by third party water suppliers, and of this 97% originated from surface water. Thus we are minimizing any effect on the aquifer in water stressed areas. In order to reduce the depletion of this valuable resource in these areas, our target will be to reduce water withdrawal in these sites by 40% to a total 798 000 m³ withdrawn in 2023.

| ARCHROMA TOTAL			
	FY2018	**TARGET 2023**	
Stress Water Abstraction (m³)	1 329 966	**797 980**	-40%
Hazardous Waste to Landfill (mt)	382	**ZERO**	
Local Communities			

One of these sites is our site in Jamshoro, Pakistan. As we have employed water recycling to reuse 70% of the required water for the plant, as a part of the "Sustainable Effluent Treatment" system established in 2012, we only withdraw 737 264 m³ from the Indus River in the reporting period. As a product raw material, and to allow for evaporation loss, we consumed 362 572 m³, the remaining water, 374 692 m³, was supplied to the local community for drinking water.

1.33 million m³

3%

57%

38%

5%

97%

**Water Withdrawal –
Water Stress Sites**

- Surface water
- Groundwater
- 3rd Party Supply

3rd Party Supply Source

- Surface water
- Seawater
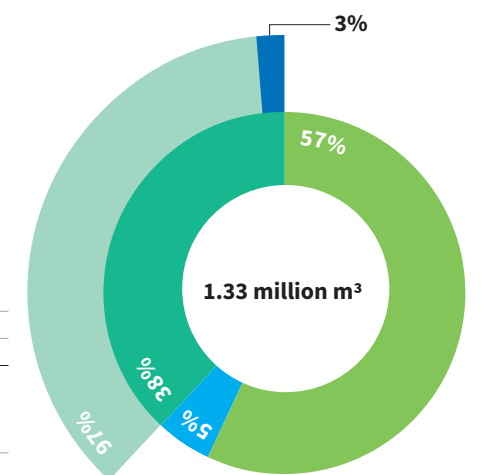
Water consumption in FY2018, which is water used, for example, as a raw material, to generate steam or lost through evaporation, amounted to 2.09 million m³ which represents 24% of the total water withdrawn. In the water stressed areas water consumption increases to 39% of water withdrawn, which is indicative of the water recycling initiatives used in these production sites.

Water consumption (m³)	All areas	Areas with water stress
TOTAL	**2 088 996**	**512 339**

COMMUNICATION

In line with its third culture pillar: Customer & Market Focus, Archroma committed to the protection of the information and data of its customers, and partners in general.

Whilst Archroma needs to have access to the information and data that is required to operate its business and better serve the needs of its customers, the company is also extremely careful to comply with the laws and regulations related to data privacy, fair competition or intellectual property, as well as with the expectations of its customers and partners in this respect.

To do this, the Archroma Code of Conduct contains rules and guidelines aiming to the protection of sensitive and confidential customer information. All our employees are trained to the Archroma Code of Conduct to ensure that awareness is high on compliance issues, via an annual online training as well as regular live or web-based meetings.

Archroma has a whistleblowing policy and a COMPLIANCE OFFICER in place to ensure that suspected non-compliance incidents can be signaled, even anonymously, and properly inquired.

Archroma's IT systems, including internet and intranet management systems, databases, Customer Relations Management (CRM) tools and other operating systems, are strongly protected by solid firewalls and password-protected accesses. The company has established an Information Security Officer during the reported period.

For the most sensitive and confidential cases, projects are handled in secure online data rooms that can be accessed only after the Archroma employees involved in the project have agreed to a non-disclosure and confidentiality obligation.

In the reported period, Archroma recorded no incidents nor complaints related to the theft, loss, or leaks of customer information, and no incidents of breaches of confidentiality.

As part of this core commitment of "Safe", we believe that providing accessible and adequate information to our stakeholders (our customers, partners, and their employees, as well as authorities, NGOs and consumers) about the environmental and social impacts of our products is essential.

In particular, we produce information and documents aimed at allowing our stakeholders to make informed purchasing choices or specifications, and then to handle, use and dispose of our products in a safe, efficient and sustainable manner.

Some of this documentation is highly regulated such as:

- Material Safety Data Sheets (MSDS) - which are providing information regulated under the United Nations Global Harmonized System (GHS) about potential health hazard, product classification, presence of dangerous ingredients, and the instructions on Personal Protection Equipment (PPE) and safe handling. Whereas standards such as GHS may not be applicable in all countries or may differ from one country to another, Archroma follows the highest applicable standard wherever its products are manufactured or delivered.

  MSDS are therefore available in all countries where we operate, and available in the local language. These are made available to concerned stakeholders via a dedicated web interface fed by a specific Environmental Health and Safety (EHS) module within our SAP IT infrastructure: Archroma employees and contracted warehouses, companies providing us with emergency assistance services, and key distributors. MSDS are also proactively distributed to customers on initial orders, and subsequent annual orders or whenever there are changes in product composition, or substance hazardous classification.

- Packaging labels - which provide GHS and transport handling information aligned on the product MSDS in a more visual form such as danger and hazard pictograms. To ensure alignment between labels and MSDS, Archroma is using the same specific SAP module that feeds directly to the label printers available on all Archroma packaging sites.

  Each country will either follow the GHS or have its own classification standard. In every eventuality Archroma will comply both with the GHS and, in addition, with the standard applicable in the country of production and destination, and in local language.

  Archroma also creates documents that are not regulated but are requested from our customers by their customers, as well as brands and retailers:

- Compliance certificates - which are established on request from customers and aim to certify compliance of Archroma products to a number of industry standards that apply in their markets.

These standards can be edicted by

1. Regulatory authorities, such as FDA food contact approval, the ISEGA certification by the German Federal Institute for Risk Assessment (BfR), the Blue Angel, Nordic Swan or EU Eco-label.
2. Third-parties such as bluesign technologies or Cradle to Cradle Products Innovation Institute .
3. Brands and retailers with their own specific requirements such as restricted substance lists (RSL's) and/or manufacturing restricted substance lists (MRSLs).

In total, Archroma maintains a library of about 32 000 of the above mentioned documents. Annually we receive about 10 000 requests for documents, and this is increasing as markets become more sensitive regarding hazardous substance content and the inherent risk to the consumer and the environment.

In order to be able to support this demand, Product Stewardship at Archroma is managed focusing on three areas:

1. Laboratory support to ensure compliance of our products and resultant manufactured products to the health, safety and environmental standards of authorities, or brands and retailers.

2. An advocacy program, aimed at assisting authorities, NGOs, brands and other stakeholders to increase understanding of the environmental and social impact of our products and their chemical components. Archroma has grown as a respected partner and regularly consults on topics and ingredients which are under scrutiny or evaluation.

3. An annual operating plan with strict targets and monitoring tools and processes aimed at increasing the efficiency of product stewardship at Archroma with timely updates of regulatory documentation.

Archroma has strict internal guidelines in place to ensure that eco-toxicological information is established, maintained and communicated following the highest standards.
Archroma communicates directly with our customers with standard documents aimed at directing customers in the most efficient use of Archroma products to maximize levels of productivity and minimize resource usage.

This information is provided in the form of:

• Technical Data Sheets (TDS) - which are established for each product and provide information about its technical properties (for example appearance, pH, density etc.), application field, typical application recipe, available packaging and handling recommendation.

An online database of product TDS is maintained and managed by the respective product manager and is accessible to all Archroma sales and marketing organizations for communication to customers.

All new global products are launched with a package addressed to the marketing & sales organization and containing:

1. An internal launch letter containing information on e.g. the marketing positioning, business opportunity, production site, packaging options, and the available certifications.

2. The respective technical data sheet(s).

3. The respective material safety data sheet(s).

4. Promotional information to support the new product(s), such as promotional flyers, supporting technical customer presentations, etc.

Innovations are also further introduced to the marketing & sales organization in dedicated webinars allowing deeper training and question and answer (Q&A) sessions.
The marketing & sales organization is then responsible for the introduction of the product to the customers and market, supported on an ad hoc basis by media activities such as press releases and advertisement, or social media activities. All products removed for the portfolio or reformulated also trigger a similar information notification process to the sales organization.

COMPLIANCE

Archroma fully supports and complies with the 1948 United Nations Universal Declaration of Human Rights. Archroma does not undertake any business with any country or regime with known human rights abuses. Archroma fully supports and complies with United States Sanctions Laws and the European Union Restrictive Measures and regulations.

For Archroma, there is no other way to do business than in a sustainable and responsible way. Archroma is therefore committed to act with integrity and in strict compliance with the law.

Archroma has a Code of Conduct for employees, signed by the Chief Executive Officer and publicly available, which sets out the binding rules and guidelines to the employees and officers of Archroma. This enables employees to rely on the Code as a navigation guide, and one another's good judgement, to uphold a high standard of integrity for the individual and Archroma.

Each employee is required to give a personal commitment to meeting the Code of Conduct; and in the reporting period, all employees were trained on the Archroma Code of Conduct, followed by a questionnaire requiring 80% pass rate. Archroma conducts re-training on an annual basis.

Archroma takes responsibility for its employees, its customers, its suppliers, its other stakeholders and the environment in order to achieve profitable long-term business development. Archroma commits maintaining ethical and sustainable operation and business development in all activities according to its own Code of Conduct and Responsible Care®.

The Archroma Code of Conduct links all Archroma employees around the world in a collective commitment to integrity and excellence in all they do, by providing tools that will guide them in making consistent, sustainable decisions.

Archroma also has a WHISTLEBLOWING POLICY in place that allows the anonymous reporting of any suspicious situation of violations of our Code of Conduct or the law.

In addition, Archroma and its affiliated companies are committed to integrity and an open culture where everybody feels secure in seeking advice or raising concerns, and has confidence that reports are handled in a professional and transparent way. To help in its ability to provide advice and enable employees to report concerns or misconduct, the Archroma Code of Conduct and Whistleblower Policy are essential element of integrity is the commitment to an open culture where people feel secure in seeking advice and in raising concerns. Archroma ensures a retaliation-free environment to anyone who comes forward in good faith to ask questions or report violations.

Archroma strictly prohibits all forms of corruption and any business conduct that could create the appearance of improper influence. Archroma applies a zero tolerance policy regarding bribery in every kind of commercial setting.

These principles are summarized in three rules:

1. No bribery under any circumstance;

2. Do not accept or offer kickbacks, even if moderate in value;

3. Third parties hired by Archroma are subject to these above principles.

It is a duty and responsibility of all employees and associated persons to take whatever reasonable steps are necessary to ensure compliance with this policy. According to the company's Code of Conduct and Whistleblower Policy, employees shall immediately disclose to the company any knowledge or suspicion of plans to offer, promise or give a bribe or to request, agree to receive or accept a bribe in connection with the business of the company.

Archroma has set up a Compliance Committee and a COMPLIANCE OFFICER holding regular meetings and responsible for investigating any potential violations in a professional and consistent manner, while safeguarding fundamental legal principles such as confidentiality, fairness and objectivity.

Any breach of the Code of Conduct is reported to the Compliance Committee, investigated and if necessary prosecuted according to the company's disciplinary procedure and/or criminal action, should the case apply.

Regular internal audits are performed. The audit plan is based, in addition to other elements, on the Corruption Perception Index, that is published annually by Transparency International.

Risk Management

Risk management is an ongoing area of attention at Archroma. The company has a Risk Management Policy in place since 2015 and has been undergoing regular risk evaluation reviews.

Archroma identified early on the need to assess our risk management and led to a first risk assessment workshop in November 2015. This initial review was performed following the most generally accepted standards for risk mapping; being done every 3 years and leading to address defined action plans supported by the Leadership Team and Board of Directors.

At the end of our FY2017, Archroma decided to strengthen its approach to risk management and assigned the responsibility to a dedicated Head of Risk Management & Internal Audit, reporting to a member of the Leadership Team, namely the Chief Finance Officer. Therefore risk management is under the responsibility of the Head of Risk Management & Internal Audit who works with the support of external risk management specialists which will be contracted at the beginning of FY2019.
With that nomination, Archroma has a risk assessment manager dedicated to operate as a catalyst to identify, map and address risk areas in the company.

Archroma initiated the risk management project with the objective first to have an overview of what are the main risks and then we will go into the small areas or more specific areas like health & safety. Risk management is a very broad topic and therefore requires to be prioritized to identify the areas that require initial first.

Archroma has put in place an assessment report comparing where we are at the end of FY 2018 with regards to our ambitions and to industry benchmark. This report will serve as the basis for Archroma's action plan to increase our preparedness, methodology and processes towards risk management.

In particular, Archroma is in the process of implementing a risk management platform where risk owners occupational risk, health and safety, IT security, etc. will be clearly identified, where risks and management of risks will be consolidated and centralized, and managed when it comes to actions set-up and follow-up, providing a clear overview of risk management at Archroma.

The only risk specifically mentioned by the GRI criteria is very much focused on societal risk or climate change, but we know from a commercial perspective there are many other risks, and Archroma has identified about 45 areas of potential risks, for example environmental risk, credit risk, raw material supply etc., that we monitor and assess on a regular basis.

The need was for stronger focus identified and highlighted through the audit committee of the board of directors of Archroma. Our approach to risk management was well perceived from our external stakeholders, such as our external auditors, but the management team identified a potential for a more systematic approach.

In FY2018 the team started to update the total risk profile, proceeded to its mapping and to draw the company's risk management action plan for deployment in FY2019. In order to better support its risk management going forward, the company also decided to implement a tool where it is possible to map and rate risk in terms of likelihood and impact. This will allow to consolidate the results, and to set the action plan and the overall company audit plan considering the risk element.

The data will be gathered on a standalone platform and will be transferred in the Risk Team tool, a professional software for risk management.

Audits are also used as a source of risk identification, one that allows to avoid unidentified risks to fall down the cracks of what the team may have missed in our periodical reviews.

The company is careful to raise awareness about risk management across the organization. The most effective factor in doing so is the annual frequency of the risk assessment, and action planning and execution. The effectiveness of the approach is demonstrated by the fact that our insurance and financial partners are taking Archroma's risk-mitigating efforts in account when calculating our insurance premium level.

"Archroma is taking the matter of risk management at heart as a way to make its business sustainable," says Jaime Jimenez at Aeon. "They do that on a purely voluntary basis without any regulatory requirement to do so. This is truly superlative compared to the standards we see amongst peers in the industry!"

A PASSION FOR SAFETY

The work of her colleagues across the organization is a constant source of inspiration to Montserrat Bel, a passionate member of Archroma's Global Hazard Communication team.

Montserrat Bel may have been with the company for nine years, but she still finds inspiration all around her at work. "What I find most inspiring at Archroma is the knowledge of the experts," she says, many of whom she has to connect with through her role in Global Hazard Communication. Since 2018, she has been deputy to the Global Head of Hazard Communication, Eleonore Braun – having joined back in 2010 as an intern.

Montserrat is a **product stewardship expert,** but her role frequently requires her to supplement her own expertise in areas like chemical regulation with the knowledge of colleagues from across the organization. The changes at Archroma over the last few years have made it easier to work across departments, she believes.

The challenge of constantly engaging with new ideas can be truly fascinating. "Sometimes, I get lost in email chains just for the fun of seeing, for instance, the chemical background of our products, how a molecule is developed, how a lab process is transformed into an industrial process…" Montserrat is full of respect and admiration for the work her colleagues do. "You would not believe what our experts know and are capable of, and I am lucky to witness it, even if only partially."

Her commitment to hard work has enabled her to blossom throughout her career at Archroma.

Montserrat isn't just passionate about her work. Outside the office, she unwinds by playing the piano, whether for herself or to entertain her children and husband. "Music is food for my soul and mind," she says.

Her family life, of course, feeds back into her work, and is a key reason she appreciates Archroma's philosophy.

"AS A MOTHER OF TWO, I HOPE WE CAN LEAVE A SUSTAINABLE INDUSTRY AS A LEGACY."

SUSTAINABLE SOURCING

For Archroma, sustainable sourcing is critical as our vendor network (suppliers) has a large influence on our production and our resultant systems sold to our customers. Not only in terms of the raw material conformance to specification (quality), but also for product hazardous chemical contamination that directly affects the safety of our products and the environmental pollution in production and when in use.

Our aim is to establish mutually beneficial relationships with our third party suppliers and contractors in order to support our services on the basis of our internal safety, health, environment and quality standards, which incorporates Corporate Social Responsibility and Responsible Care. We require our suppliers and service providers to adopt standards comparable to Archroma's policies. Our vendors shall also bind their own suppliers to a similar level of compliance.

A vendor's sustainability performance affects our own overall sustainability profile as well as our brand image in the industry and therefore vendor management, including sustainability criteria, is essential. As a specialty chemical manufacturer, we have extensive knowledge and experience in purchasing, handling and inventory control for chemical raw materials.

Sustainable Sourcing Vendors & Spend

Americas
Vendors
2659
Thereof 15% Direct
Spend
USD 173 million

EMEA
Vendors
2308
Thereof 26% Direct
Spend
USD 362 million

Asia
Vendors
2434
Thereof 26% Direct
Spend
USD 323 million

Procurement within Archroma is a complex operation that encompasses integrated strategies to deliver optimized value for both direct and indirect purchasing needs of the organization. Due to the nature of specialty chemical manufacture and multiple manufacturing sites located in various global regions, raw material vendors are very diverse in nature and location. Archroma sources >7 200 raw materials for our direct purchasing needs from >1 600 vendors. This requires dedicated processes to ensure the on time, and in full, delivery of quality compliant raw materials at optimized cost. In order to do this, we manage procurement within the three pillars of cost, quality and supply security.

Ownership of procurement is by the Head of Global Procurement, who reports to the Chief Operating Officer. The procurement operation is staffed with a team of 69 employees who are located within the regions, half of which are located in the Asian region, a third located in EMEA and the remainder in the Americas.

Cost

Procurement decisions are based upon the total cost of ownership principles taking into consideration not only the direct costs but also incorporating the indirect costs such as handling, inventory management, quality assurance, administration and payment. This is monitored using our SAP enterprise resource planning system.

Our annual procurement spend in FY2018 was USD 859 m, 42% of which in EMEA, 38% in Asia and the remainder in the Americas.

Quality

Within procurement, quality is managed within four areas. Conformance to specification, the indirect benefits from the use of our products in subsequent manufacturing, internal handling of raw materials and finally the environmental impacts, both in terms of direct in our own manufacturing, and indirect for our customers' manufacturing. In chemical manufacturing, clear specifications are essential - not only to specify the intended raw material substance, but also to ensure that hazardous chemical contaminants are specified out of the raw material. Our extensive in-house chemical knowledge allows us to determine these specifications, within the technical grades necessary for the industries that we serve. To monitor compliance to specifications we administer a number of standard operating procedures, dependent upon the vendor's historical performance and risk profile. These measures can include pre-shipment sample analysis, application trials and normal inbound quality control checks.

Archroma has a process in place to evaluate raw material composition and their compliance to local regulations and the Archroma raw material eco-toxicological specifications. If the raw material is found to be deficient to the standard, the raw material product and/or supplier will be discontinued.
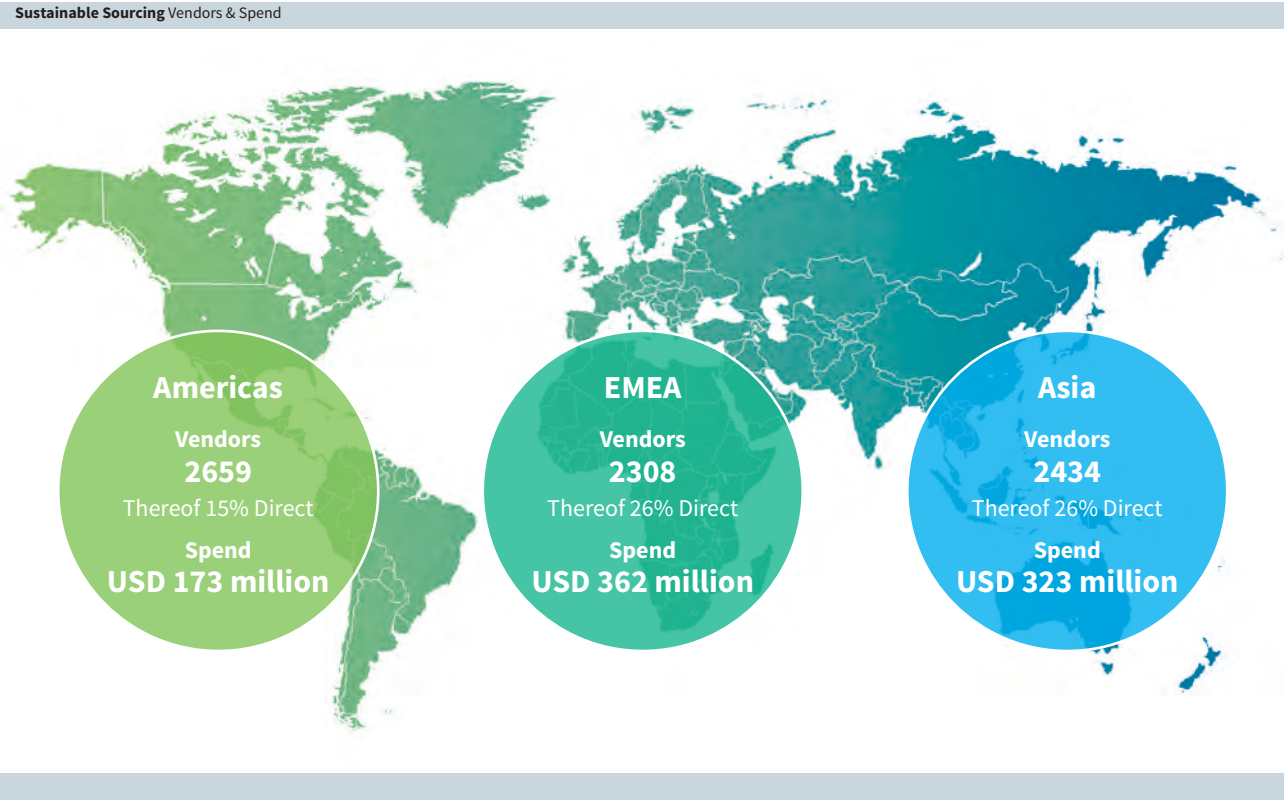
Supply Security

Many of the required raw materials can only be manufactured using hazardous substances and methods that pose a high risk for human and environmental health. Welcome advances in regional and local environmental protection has increased scrutiny at some vendors, resulting in manufacturer closures and resultant supply shortages. To avoid supply interruptions we closely monitor our vendors to give early warnings in the case of a potential raw material shortage. To limit our resultant exposure we have created teams of global category procurement managers to monitor and ensure supply and to work closely with our internal product management, innovation and manufacturing teams to ensure supply and develop alternative strategies for single sourced raw materials. Projects are in place to identify replacement substances for raw materials that are, for example, no longer available, require a higher specification, or to offer more economic alternatives. In addition to this, mechanisms are in place to ensure that the products specific to our system packages can be manufactured and are aligned to the business needs. However for some highly specific raw material substances we currently have only one approved vendor. We source more than 50% of direct and indirect goods and material from suppliers located in the same country as the respective Archroma manufacturing plant. This mitigates risk in the supply chain, for example lead-times and also supports the local industry.

Due to the nature of the specialty chemicals that we manufacture, a significant part of our feed stocks are sourced from within India and China. Due to this high regional exposure, dedicated sourcing teams have been set up in Thane (India) and Tianjin (China) respectively. This increases the diligence in those markets to supplement the global procurement category managers.

Vendor selection and management at Archroma is a systematic approach based upon compliance to our suppliers code of conduct (**https://www.archroma.com/compliance**).

The historical and anticipated performance, the experience as a vendor and the financial stability of the vendor are regularly assessed to determine compliance to the supplier code of conduct. In addition, all vendors are monitored on a monthly basis using "on time/in full" metrics for supply performance measurement. Vendor risk assessment may introduce additional measurement criteria to mitigate supply risk, such as the vendor safety infrastructure and dangerous goods managing capabilities.

Archroma communicates to and expects its vendors to share its commitment towards ethical business practices, human rights and labor standards, anti-corruption and not to allow modern slavery and child labor. All suppliers have been screened qualitatively and excluded from business relation in case of obvious non-compliance.

In addition we engaged Ecovadis at the end of FY2018 to screen and certify our suppliers on our behalf to gather vendor data on environmental, labor, fair business and sustainable procurement practices to identify risks in our upstream supply chain. This will be used to steer our supplier selection from 2019 onwards. Ecovadis will initially focus on those vendors located in the strategic supply markets of India and China.

Vendors with insufficient audit results are approached for corrective action.

CLIMATE CHANGE

Greenhouse gas (GHG) emission management is included in our overall environmental management process. Results per production site are consolidated into tons of carbon dioxide equivalent (tCO$_2$e) in both absolute amounts and in terms of intensity (emission per unit of production). Monthly data is gathered centrally from our production sites and forms the basis for monitoring against, and if necessary corrective actions for, the annual targets. Conversion and emission factors used for the report were in consultation with the Greenhouse Gas Protocol developed by World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). As the GHG emissions are directly related to energy consumption, operative targets are expressed in energy intensity (GJ/t produced). Further details can be found in this report under "Resource Efficiency".

For this reporting period we have not considered non-production sites (offices, off-site warehousing etc.). We will be initiating measure to include these metrics in future reports, but our expectation is that the overall impact on our total emissions will be relatively low.

Scope 1 and scope 2 GHG emissions for FY2018 amounted to 99 576 tCO$_2$e. This represents a 2.9% increase compared to FY2017 (96 798 tCO$_2$e). Of the total for FY2018, 4 198 tCO$_2$e are attributed to the additional plants that came into the Archroma site portfolio due to the M. Dohmen acquisition. If these emissions are excluded, for direct comparative reasons, our absolute emissions would have decreased by 1.5% in comparison to the previous reporting period. The data for the Maracay site, Venezuela, has not been included in both the current and previous reporting period to allow direct comparison.

Scope 1 emissions amount to 51 285 tCO$_2$e, representing 51.5% of the total scope 1 & scope 2 emissions. Of this 47 327 (92%) is derived from the combustion of natural gas, the remainder consisting of diesel and heating oil. None of the Archroma sites use coal as a fuel for on-site generation of energy.

Scope 2 emissions amount to 48 291 tCO$_2$e, representing 48.5% of the total scope 1 & 2 emissions. Of this 38 312 tCO$_2$e (79%) is derived from purchased electricity, the remainder 9 978 tCO$_2$e from purchased steam.

Our target will be carbon neutrality for scope 1 and scope 2 emissions in 2023, deriving annual targets to reduce intensity levels, with the objective to off-set the remaining absolute GHG emissions.

Scope 3 emissions have not been calculated or estimated for Archroma for the reporting period, due to the complexity of raw material supply distributed between global and local vendors to the sites and the distribution to the industries which we serve. This will be an area of focus for the future and our target is to establish a baseline for the FY2020 reporting period. After this has been done, targets will be established to positively impact the results.

For the required fossil fuel based emission factors, we have used the 2018 Defra Greenhouse Gas Emission Factors, developed by the UK Department for Business, Energy & Industrial Strategy and the UK Department for Environment, Food and Rural Affairs. Electricity emissions factors have been determined from the data supplied by the respective energy provider.
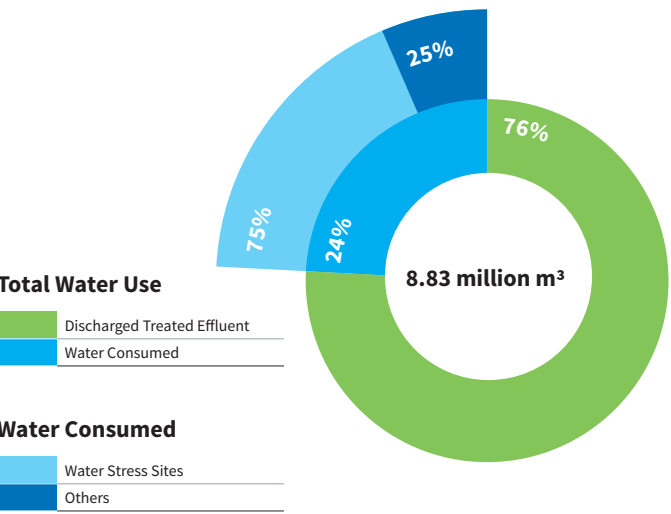
WASTEWATER & WASTE

Water being discharged into open watercourses is an important topic regarding environmental pollution. It is a basic requirement that manufacturing industry should discharge the water back into the ecosystem without additional pollution load. How efficiently we manage and treat our effluent is of concern to all stakeholders, especially regarding hazardous waste – and as such this is a reported under a separate topic "Waste". Any significant spills would also be reported under this topic. We also have an opportunity to report on the positive influence of our technology systems on downstream customer's wastewater discharge.

All production plants have, or access to, wastewater treatment facilities that use physical and biochemical treatment processes. All discharged treated wastewater are in compliance with the relevant standard limits and mass loading requirements as stipulated by local environmental authorities.

Archroma discharged a total of 6.74 million m³ of water, 66% of this discharged to surface water after suitable treatment to ensure conformity to the local requirements. The remainder is discharged to third party effluent treatment sites for further processing before being discharged to surface water. The total discharge represents 76% of total water withdrawn for operations.

Total Water Use
- Discharged Treated Effluent
- Water Consumed

Water Consumed
- Water Stress Sites
- Others

8.83 million m³

25% 76% 75% 24%

There were no incidents of significant spills in the reporting period. There were no cases of any water bodies/habitats significantly affected by water discharges and/or runoff in the reporting period.

Solid/semi-solid waste generation (excluding wastewater) and disposal and possible pollution to landfill is a topic of concern for the industries – this includes any waste generated from off-specification production. The management of hazardous classification and resultant disposal routes is of critical concern.
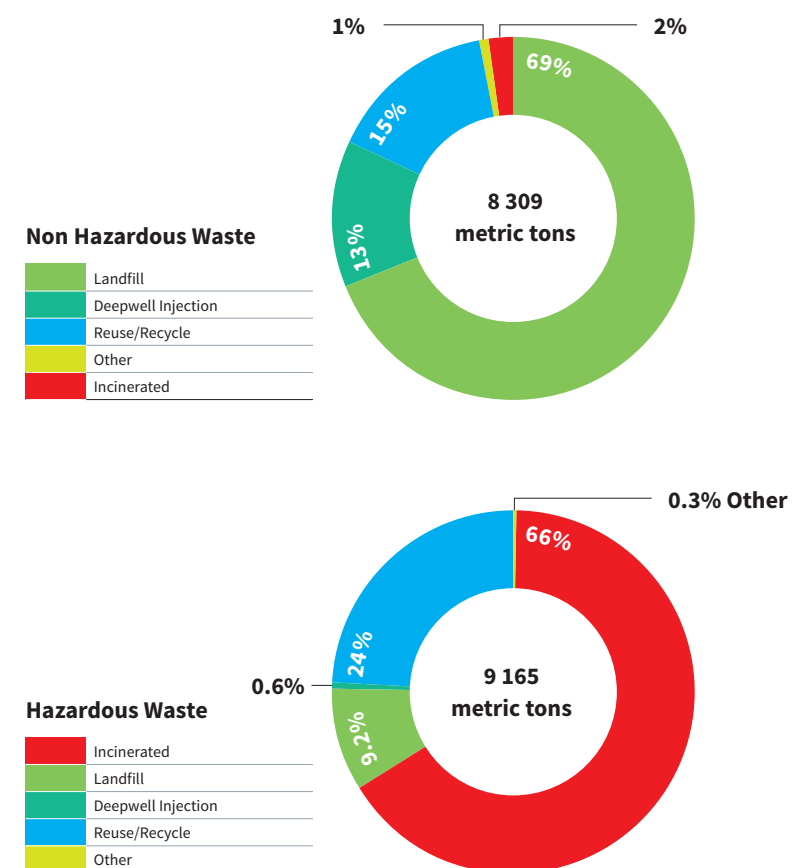
Waste management forms a part of the overall Archroma Environmental Safety Management process. The majority of waste is generated as a result of the intrinsic chemical manufacturing processes and their specific process yields, raw material packaging materials and residues from on-site effluent treatment plants. Wherever possible waste is analyzed whether it can be recovered and/or reused and recycled. The hazardous classification of waste, and resultant disposal methods, is made according to the specific national regulations governing the production site. There are no significant transboundary transport of hazardous waste.
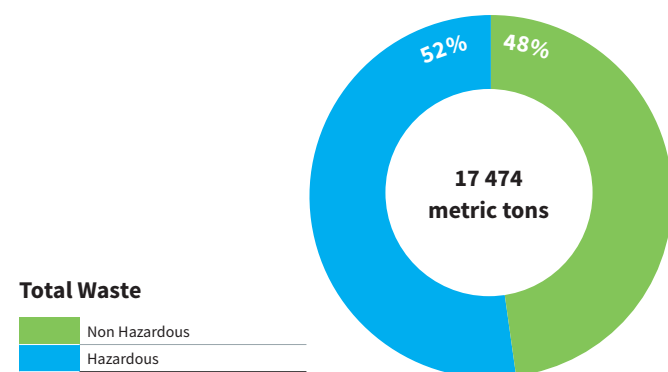
The total waste generated for FY2018 was 17 474 metric tons, of which 52% (9 165 metric tons) was classified as hazardous.

Of the total waste 36% (6 209 metric tons) was disposed by incineration, 44% (7 710 metric tons) was disposed to landfill, and 20% (3 455 metric tons) reused, recovered or recycled.

Of the hazardous waste, 65% (5 999 tons) was disposed by incineration. An amount of hazardous waste, 10% (840 metric tons) was disposed in appropriately licensed landfill/deep well injection sites.

Total Waste

■	Non Hazardous
■	Hazardous

52% 48%

17 474 metric tons

1% 2%

15%

13% 69%

8 309 metric tons

Non Hazardous Waste

■	Landfill
■	Deepwell Injection
■	Reuse/Recycle
■	Other
■	Incinerated

0.3% Other

66%

24%

0.6%

9.2%

9 165 metric tons

Hazardous Waste

■	Incinerated
■	Landfill
■	Deepwell Injection
■	Reuse/Recycle
■	Other

BIODIVERSITY

How we influence the biodiversity in our various locations is important to us and NGO stakeholders. None of our production sites are within biodiversity areas, as identified by the World Database of Key Biodiversity Areas (http://www.keybiodiversityareas.org/home).

However we are sensitive to biodiversity and as such we know that there are 5 sites that are within a 10 kilometer proximity to biodiversity sites:

Production Site	Key Biodiversity Area
La Motte, France	Forêt Compiegne
El Prat de Llobregat, Spain	Llobregat Delta
Ameriya, Egypt	Wadi El Natrun
Roha, India	Phansad Wildlife Sanctuary
Bangpoo, Thailand	Inner Gulf of Thailand

In the reporting period there were no incidents or activities at our sites that could pose a threat to any endangered species, and therefore no additional prevention or remediation activities have been initiated. In the interim we are extra vigilant to ensure that no such incidents or activities occur at our any of our sites.

Specific projects that were completed in FY2018
- The installation of ozone effluent treatment to our site In Tianjin, China in order to exceed the local requirements of effluent color and nitrogen content.
- Additional air scrubbers installed in Jamshoro, Pakistan, and El Prat de Llobregat, Spain.
- Effluent reduction measures in Salvatierra, Mexico, and Zarate, Argentina.
- Move to 100% renewable sourced electricity supply for Resende, Brazil.

BRINGING SAFETY INTO PRODUCTION

Ilker Ravis never lost his focused, despite studying alongside his full-time job and taking care of his family. He knows only determination and hard work gets you further in your career.

"We need only one thing: to be hardworking." Ilker Ravis, Plant Engineer at Archroma Germany in Wiesbaden, has taken on these words from Mustafa Kemal Atatürk as his motto. Ilker has been with the company since 1995. In that time, he has worked his way up from an apprenticeship to his current role.

One experience that especially demonstrated Ilker's commitment to hard work was his decision to study alongside his job. In 2012, he chose to pursue a degree in process engineering, supported by the company, at the University of Applied Sciences, Bingen. During this time, he also worked as deputy plant engineer – before being additionally given the role of plant foreman. And even while maintaining two jobs – and keeping his family happy – he completed his studies in 2016.

Ilker enjoys using his knowledge and experience as a chemical technician, as well as the planning and organizational skills he picked up from his further training. His recent promotion to plant engineer was a challenge, but a successful one: "After a very short familiarization period, I had to make sure that the day-to-day business ran smoothly," he says. "But thanks to good colleagues I managed this very well, I think."

Married with two children, Ilker is also a keen traveller, fond of exploring other cultures and ways of life. And he knows how to find inspiration in the wider world, so that he returns to work filled with fresh ideas: "I am inspired by everything that distracts me, relaxes me or demands my attention. This frees up resources in the brain, and the solution is suddenly there."

"WE NEED ONLY ONE THING: TO BE HARDWORKING."

CASE STUDY: STAMP IT SAFE

As mentioned above, Archroma has aligned its business model with its purpose and core values in order to make its industry sustainable. This we termed the "The Archroma Way". It is defined into three elements: Safety, Efficiency and Enhanced value.

We examine and highlight how we positively affect these three elements both in the systems we create and in the solutions we provide to our markets.

We design our systems in line with this approach. All of these incorporate the "Safe" pillar, plus the additional pillars of "Efficient" and "Enhanced" wherever applicable.

A good illustration of this would be the STAMP IT SAFE system.

This system aims to produce prints that are not only colorful but also soft and safe, so that our love for fashion does not compromise the well-being of our loved ones.

The difficulty comes from the fact that pigments are fixed to the fabric using binders that can often contain carcinogenic substances. In addition, these binders can also feel quite rough to the touch.

The STAMP IT SAFE system is an ideal answer to these challenges.

STAMP IT SAFE
THE ARCHROMA WAY

A formaldehyde-free* printing system for soft fabrics which is better for you and our planet

STAMP IT SAFE / Main benefits in a nutshell

- Safe products from a reliable global partner who applies international safety standards
- Achieves similar fastness and hand feel as reactive prints
- Reduces significantly the water and energy consumption and the carbon footprint and waste water impact
- Easier to handle:
  - Print pastes preparation
  - Matching shades with the Printofix® range
  - Longer storage stability of printing pastes

'SAFE' WITH:
STAMP IT SAFE system

FORMALDEHYDE FREE* | ZDHC COMPLIANT | bluesign® APPROVED | GOTS APPROVED

SAFE

'EFFICIENT' WITH:
STAMP IT SAFE system compared to benchmark classical reactive printing

ONE WAY
SCORE
CARD:

PROCESS TIME -46% | WATER CONSUMPTION -100% | ENERGY CONSUMPTION -45% | CO₂ EMISSION -47%
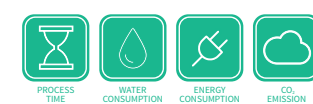
EFFICIENT

* Below limits of detection

STAMP IT SAFE / A formaldehyde-free* printing system for soft fabrics which is better for you and our planet

Helizarin® SFT liq c
Binder
- High fastness

Luprintol ® SE liq
Fixing agent
- Fast fixing agent to boost wet fastness

Luprintol® Soft VSN liq
Softener
- New generation softener engineered for pigment printing

EFFICIENT

EFFICIENT

Resource efficiency
Only using what we must
- -15% Energy per metric ton (t) produced
- -10% Water per metric ton (t) produced
- -25% Solid waste per metric ton (t) produced

Customer resource optimization
Making our industry sustainable
- 35% Sales from "Sustainable Collections"

IT'S OUR NATURE TO RETHINK SUSTAINABLE MANUFACTURING.

INNOVATING PRODUCTION PROCESSES THAT MINIMIZE RESOURCE USE AND THAT MAXIMIZE PRODUCTIVITY THAT IMPACTS OUR INTERNAL MANUFACTURING, AS WELL AS THOSE OF THE VALUE CHAINS IN WHICH WE OPERATE.

RESOURCE EFFICIENCY

Resource efficiency has been split into two separate topics; internal and external – see "Resource optimization" below. This is to distinguish between our own footprint responsibility and our influence on the value chain. Water discharge is dealt with under a separate topic due to its importance to environmental pollution. External influence can only be an estimation based on sales data and relative performance of our systems vs. an industry "standard".

Overall production in FY2018 increased by 6.7% to 479 thousand metric tons (kt) in comparison to the previous reporting period.

ENERGY

Energy is required for the production of specialty chemicals. The sources of energy are derived from the combustion of fossil fuels to generate heat, and electricity to run the manufacturing equipment and associated services, such as IT infrastructure and cooling apparatus.

The main fossil fuels are natural gas, diesel and heating oils, none of the production sites use coal as an energy source. Electricity and, in some cases, steam is purchased from third parties.

In order to calculate the quantity of energy consumed in our production processes, amounts of fuel, electricity and steam are converted into gigajoules of energy using conversion factors available in the GHG protocol, as previously described in this report.

Energy efficiencies are closely monitored within the Environmental Management process, with annual targets set according to forecasted production plans. Individual production processes are analyzed, with respect to their energy requirements, and resultant process improvements devised in orer to reduce the energy intensity, with associated annual targets which may be site and/or product specific.

The total amount of energy consumed by Archroma for FY2018 was 1 345 TJ, which represents a 9.8% increase in comparison to FY2017. This equates to an average of 2.81 GJ per tonne of production, a 2.5% increase over the previous reporting period.

Our medium term target for 2023 will be to reduce this by 15% to 2.39 GJ per ton of production.

Total energy consumption (TJ)

1 Terajoules (TJ) = 1 000 Gigajoules (GJ)

Energy intensity (GJ per metric ton produced)

Target -15%
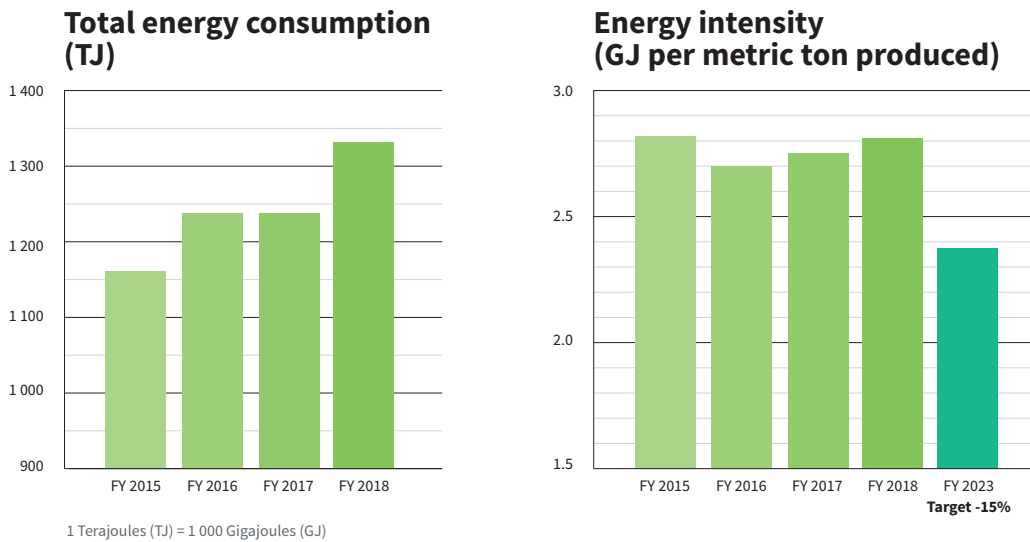
WATER

As mentioned previously, water is a critical resource for Archroma during chemical manufacture. It is primarily used as a processing aid in cooling, cleaning and air scrubbing/washing, and as a raw material in the production of commercial liquid based formulations, such as liquid dyes and polymeric dispersions, and is also evaporated during spray drying in the production of dry formulations.
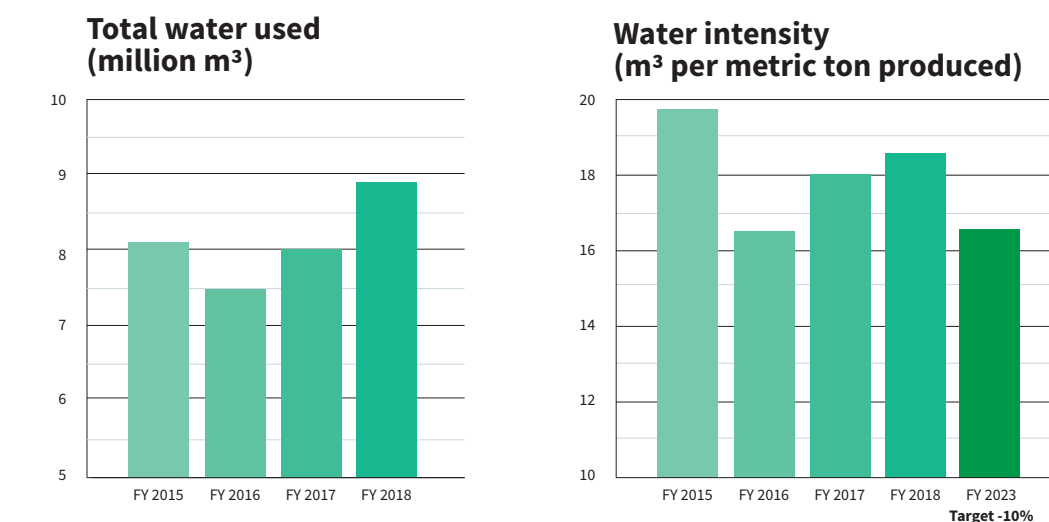
Water use is closely monitored within the Environmental Management process.

From a total withdrawal perspective, the current water intensity equates to an average of 18.48m³ per tonne of production. This represents a 2.5% increase over the previous reporting period (FY2017 revised to 18.05m³ water/ton).

Our medium term target for 2023 will be to reduce this by 10% to 16.6 m³ per ton of production. In those sites where the water intensity is high, water cooling, where the water is withdrawn, used and discharged back into water courses unaltered, is used. These sites are not located in water stressed areas.

From a water consumption perspective, that is water predominantly being used as a raw material, the intensity is 4.37 m³ per ton of production. This figure will vary dependent upon the types of products being produced whether liquids or dry formulations.

Our medium term target for 2023 will be to reduce this by 10% to 16.6 m³ per ton of production.

Total water used (million m³)

FY 2015	FY 2016	FY 2017	FY 2018

Water intensity (m³ per metric ton produced)

FY 2015	FY 2016	FY 2017	FY 2018	FY 2023 Target -10%

A DEEP DIVE INTO CLEAR WATER

Claire Bordy dives as deep into her work and interactions with colleagues worldwide as she does under the clearest waters around the globe.

Claire Bordy joined Archroma in 2017 as Business Development Manager for Paper Dyes, bringing with her more than 15 years' worth of knowledge in the paper industry in chemicals sales and coloration."

The international nature of Archroma means that Claire faces the challenge of how best to work with customers and sales teams from all around the world. But it's not just a challenge, she says: this is also "probably the most interesting" task that she faces – especially as it gives her the chance to be in contact with so many different cultures.

Closer to home, her own team's differences in personalities and experiences are another positive aspect of her work, she says: "the differences are inspiring and a good source of ideas."

Outside of the office, one passion of Claire's is diving. Going underwater, she says, "is like discovering a new world. Each dive is a break from normal life, a deep breath into a quiet and 'silent' world, which refreshes me."

Claire has dived deep into her work at Archroma, too, and is working toward a cause she believes in. "I'm proud to work in a company whose vision focuses on our industry becoming more sustainable."

"NORMALITY IS A PAVED ROAD. IT'S COMFORTABLE TO WALK BUT NO FLOWERS GROW ON IT."

WASTE

Waste generated during chemical manufacture is directly related to the type of chemical synthesis employed. The more reactive the chemical process, chemical yields tend to be higher and resultant waste generate low. Wherever possible waste is recovered and reused as a function of improving process efficiencies. However, in some instances, waste, both hazardous and non-hazardous, is generated which cannot be recovered and reused and has to be disposed of in a suitable manner, as has been reported previously.

By using the "atom economy" within the 12 green chemistry principles, processes are being continually optimized to reduce waste and increase yields. This is normally achieved by modifying production processes to the best available chemical manufacturing, often these improvements are as a result of internal projects driven from our process technology centers of excellence.

Our total solid waste generated in FY2018 was 17.5 Ktons. This represents an intensity of 37 kg per ton of production.

Our medium term target for 2023 will be to reduce this by 25% to 28 kg per ton of production.

Total solid waste (kt)

Solid waste Intensity (kg solid waste per metric ton produced)
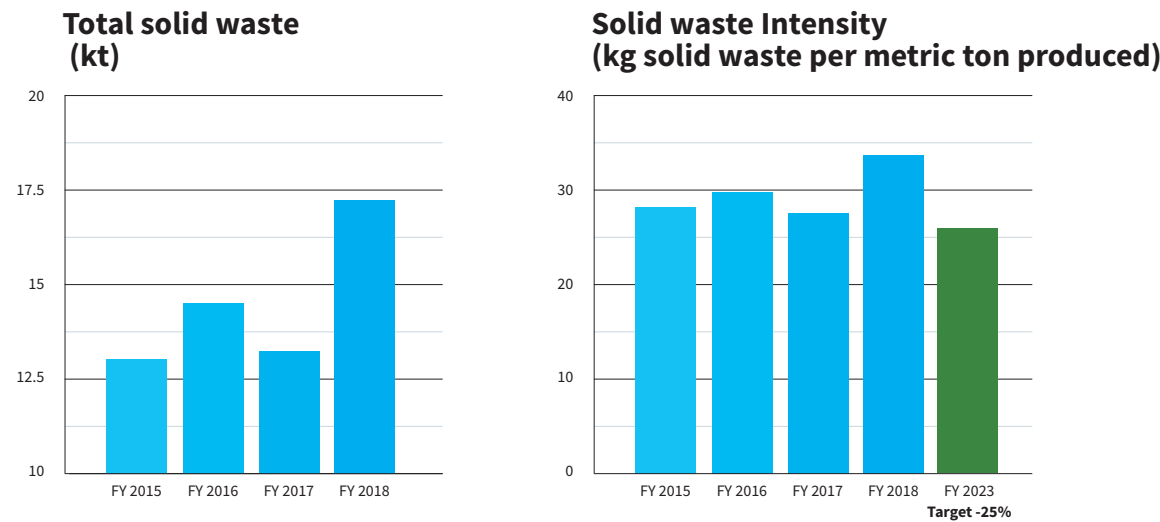
TRANSPORTING THE INDUSTRY FOR THE BETTER

As head of a rapidly expanding business line, Aamir Shamsi knows how to achieve success. His journey with the company stretches back 20 years and is a story of going after success.

Aamir Shamsi's passion for sport fuels his ambition. "You can't score a goal without taking a shot," he says: success doesn't arrive on its own. And as Archroma has grown, he has found ever more success within the company.

Aamir joined Clariant in 1999, fresh out of his studies, and has been with the company ever since. After the transition to Archroma, his responsibilities stayed the same on paper – but there has been one important change. As Head of Denim and Casual Wear in Pakistan, Aamir has seen his business line expand considerably. Denim and casual wear is an important, rapidly growing part of Archroma's business portfolio, and the company and its partners have become leaders in this area.

"I have always been different," says Aamir. His drive to succeed means that he relishes setting ambitious targets and challenging the status quo, and that Archroma's deep-set belief in making the industry sustainable is well-suited to him. He also appreciates the working culture at Archroma, and the freedom that his job gives him to optimize his own performance. "My strong belief in change and adaptability pushes me forward and allows me to achieve my ambitions," he says.

Aamir describes his 20 years with the company as a "fascinating journey," and his career at Archroma proves that it's possible to expand, develop, and achieve real change, even while remaining in the same, significant role. As a keen cyclist and runner, he knows the value of staying on track and keeping your eyes on the big prizes, however far away they seem – such as transforming the industry for the better.

"SUCCESS DOESN'T DRIVE ON ITS OWN."

RESOURCE OPTIMIZATION

At Archroma, our efforts to reduce resource requirements and reduce both our direct and indirect impacts start with our innovation process focused on identifying problems to solve and opportunities to support our mission to make the industries that we serve more sustainable. This is more than altruistic effort to save the planet, it is a material issue to sustain our business. If we are not continually working to reduce our indirect impacts and help our downstream stakeholders conserve valuable resources, our business opportunities will vanish along with the clean water and inexpensive energy necessary to support our industry. These efforts require a management approach to innovation that places value on improving indirect impacts, minimizing or eliminating toxicity, and improving resource efficiency through effective collaboration and stakeholder engagement.

As we have previously reported, our primary focus is on safety. Our second focus for our innovation efforts is on efficiency, "It's our nature to rethink sustainable manufacturing". The industries we serve rely on huge amounts of clean fresh water and energy to make their products. As these valuable resources become more scarce and expensive, we must help our customers find ways to reduce water and energy consumption, and to improve the quality of their effluents and emissions. For water, this is truly considering all of our interactions with water as a shared resource, and helping our industry ensure that we can maintain and grow our level of production to meet the needs of our growing population. Through chemical innovation, we are able to identify marginal gains that add up to significant resource savings for our downstream customers. As these gains become more difficult to realize in a single product, we are finding ways to innovate by combining efficient products into systems, which become even more effective for resource reduction when they are used together. In some cases, this system approach is also enabling a reduction in the need for commodity chemicals like salt and caustic soda and this is greatly improving the quality of the effluents that are discharged by our customers.

An Archroma system which deliver efficiency improvements to our customers is communicated as the "Sustainable Collection".

THE ARCHROMA WAY / Safe + Efficient = The Sustainable Collection

THE SUSTAINABLE COLLECTION BY ARCHROMA

SAFE – IT'S OUR NATURE TO PROTECT
A solid core: Our deeply rooted goal to protect people and our planet. Safe to use, safe to release and also safe to wear.

EFFICIENT – IT'S OUR NATURE TO RETHINK SUSTAINABLE MANUFACTURING
Innovating application processes that minimize resources and maximize productivity, both in our and our customers' manufacturing as well as by setting ourselves ambitious sustainability goals.

ONE WAY

In our communication we also clearly identify the resource optimization potential for the customer, however in order to be relevant to our customer, it is essential that we be able to accurately measure and track these resources savings.

Archroma has created the award winning ONE WAY Process Simulator to quantify these reductions in impacts. It can be used in a mill to define the processes they use by capturing very detailed information about their production capabilities and their costs for key resource inputs. We can then calculate the potential savings by converting to a more efficient chemical product or system and a more efficient process of applying it. ONE WAYis designed to report both the total resource savings in liters of water or joules of energy, and can also calculate critical business metrics like savings in cost, chemical use, and production time. The ONE WAY tool has been an innovation in its own right, but has also helped us to measure and quantify the indirect impacts of our innovation efforts and to communicate these to our customers and other stakeholders.

Due to the broad nature of our product range and customer base, it may be difficult to calculate all of our indirect impacts, but the ONE WAY tool allows us to quantify what is possible with a specific technology, and then to estimate the overall impact of that technology based on how much we have sold. In the future, this methodology could be used to set targets and expectations for our overall indirect impacts and resource savings.

CASE STUDY:
DEEP DIVE

As mentioned earlier, Archroma has aligned its business model with its purpose and core values in order to make its industry sustainable.
This we termed the "The Archroma Way". It is defined into three elements: Safety, Efficiency and Enhanced value.

We examine and highlight how we positively affect these three elements both in the systems we create and in the solutions we provide to our markets.

We design our systems in line with this approach. All of these incorporate the "Safe" pillar, plus the additional pillars of "Efficient" and "Enhanced" wherever applicable.

A good illustration of this would be the DEEP DIVE system.

This system aims to allow the consumer to enjoy dark shades that do not fade in the wash, but without using excessive resources to manufacture them.

DEEP DIVE
THE ARCHROMA WAY

A complete system for highly efficient coloration with less water

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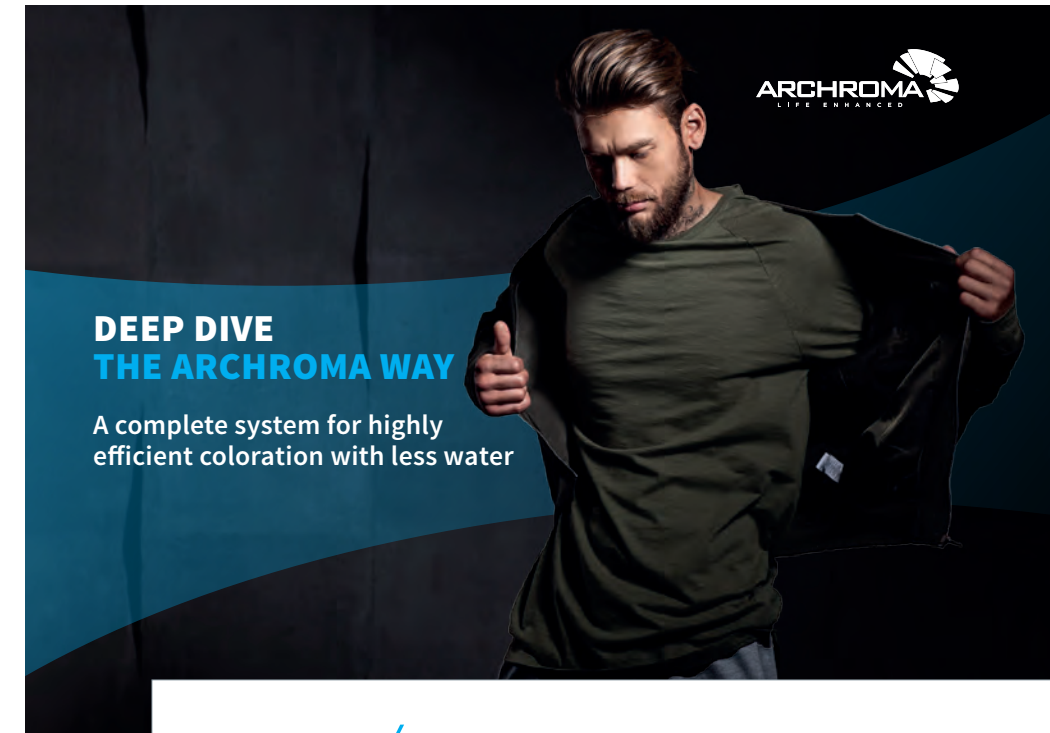
DEEP DIVE / Main benefits in a nutshell

- Safe products from a reliable global partner who applies international safety standards
- Less waste water
- Less salt:
  - Less waste water treatment needed
  - Less to carry: Happy worker!
- Time savings in production = Increased opportunity time

'SAFE' WITH:
Pre treatment, Dye and DAX selection, washing auxiliary and neutralization agent

ZDHC COMPLIANT | bluesign® APPROVED

SAFE

'EFFICIENT' WITH:
Isothermal 60° process, at LR 6.1 compared to benchmark reactive exhaust process LR 6.1

EFFICIENT

ONE WAY SCORE CARD:

PROCESS TIME -22% | WATER CONSUMPTION -29% | ENERGY CONSUMPTION -23% | CHEMICAL USAGE -31% | CO₂ EMISSION -23%
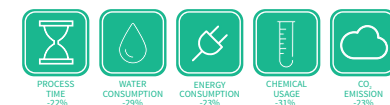
DEEP DIVE / A complete system for highly efficient coloration with less water

Blue Magic
All-in-one pretreatment
- Activated pretreatment that uses less caustic
- Technology which requires less processing and rinsing

Cyclanon® XCW
Efficient removal of hydrolysate
- Faster wash off
- Less washing baths
- Optimum fastness

Drimaren® Ultimate HD
High build-up reactive dyes system
- Less dye required to match shades
- High level of exhaust and fixation to reduce quantity of hydrolysates
- Less salt to carry: Happy worker!

ENHANCED

2023 TARGET
ENHANCED

Diversity
More persectives, more solutions
- 40% woman in management
- Maintain multicultural demographics

Talent management
Investing in our family
- 90% empolyees attend Archroma academy modules

Fair labor practice
A deeply satisfying job
- Less absenteeism
- Fewer voluntary resignations

IT'S OUR NATURE TO ADD ANOTHER LEVEL OF VALUE.

ENHANCING ORGANIZATIONS IS CRITICAL.
ADDITIONAL EFFECTS, FUNCTIONALITIES, ABILITIES
AND AESTHETICS GIVE ADDITIONAL VALUE, HELPING
CONSUMERS ACHIEVE THEIR GOALS, FOR A LIFE
ENHANCED.

FAIR LABOR PRACTICE

At Archroma, people are the core of our business.

We operate with the core belief that only by aligning personal and business goals can we achieve sustainable growth. This in turn helps us drive our core purpose of continuously challenging the status quo in the deep believe that we will make the industry more sustainable.

Archroma fully supports and complies with the 1989 United Nations Convention of the Rights of the Child and the 1998 International Labor Organization Declaration on Fundamental Principles and Rights at Work. Archroma does not undertake any business with a company that uses forced or child labor.

Archroma recognizes the dignity, privacy and personal rights of all individuals; working together with various ethnic backgrounds, cultures, religions, ages, disabilities, races, sexual identity, worldview and gender. Archroma does not tolerate discrimination against anyone based on these characteristics or any other comparable offensive behavior. These principles extend to all employment decisions including recruiting, training, evaluation, promotion and reward.

Archroma also recognizes the freedom of association, and the right to collective representation and bargaining. Archroma operates in many countries worldwide and, as such, has an extremely diverse workforce.

Archroma does not tolerate any acts of harassment or bullying, whether done by an employee or non-employee, in any form, including physical actions, verbal or written remarks or visual depictions, or any unwelcoming behavior that has the purpose or effect of creating an intimidating, hostile or offensive work environment.

We have a contract of employment clearly states terms and conditions of employment including remuneration, amount of paid leave. Company benefits, performance measurement processes, grievance and disciplinary procedures are communicated to each employee.

We ensure that our notice periods are in line with country legislative requirements / procedure for significant operational changes.

We actively work with our employee representative bodies in different sites to drive healthy employee employer relations. Our employee representative bodies work very closely with the management teams to ensure that our workforce understands our culture and is engaged in productive work. We also discussed and sign Collective bargaining agreements, where applicable, that help the union bring forward issues which are relevant and can be addressed in a systematic and a structured manner.

All changes to bargaining agreements, where applicable, are compliant with the local requirements related to notice periods for changes, consultation and fair negotiation employment are practices.

Based on our current labor policies and type of operations and people working with us - Archroma does not foresee a high risk with respect to human rights violation.

Since its inception in October 2013, Archroma has set itself high labor practice standards throughout the entire employment cycle, from hire to exit.

Archroma operates along three guiding principles

1. Global standards aiming for the same treatment for all employees wherever they are located.

2. Compliance with global and local regulations and best-practice.

3. Compliant, open and transparent relations management with employee representative bodies.

To ensure that these guiding principles are enforced at all times, Archroma has:

- Global policies and processes, reinforced when adequate or required by local policies and processes.

- Approval processes to ensure appropriate level of control, up to the Leadership Team and Board of Directors, for hiring, developing, and exiting of employees, as well as of course compensation & benefits.

- Control and monitoring tools such as repots, analytical data, targets and benchmarks.

- Human Resource (HR) managers dedicated to each country who are accountable to ensure fair treatment at all stages of the employment cycle, compliance to local rules and regulations, as well as consistency of practice within and between the global and country framework.

- A global HR management system where the personnel and remuneration information related to Archroma employees is securely stored and accessible to monitor and control fairness across the organization.

- And a global HR Management Team (HRMT) collectively responsible for setting direction in line with company strategy and ensuring fair HR and labor practice globally.

Archroma employees are encouraged raise questions and issues or signal a breach or incident related to their working conditions and treatment, and they are free to choose the way they feel the most comfortable to do so, either via the line manager, HR country managers or the works council, union or employee representatives of the country of location of the employees, or via the COMPLIANCE OFFICER who can be contacted anonymously and in a confidential manner for any inquiries required by the employee.

This right is guaranteed and protected by the Archroma Code of Conduct and Whistleblowing Policy, and all the above-mentioned routes are regularly used.

In particular, as a multinational company with 51 sites worldwide, Archroma is strongly attached to diversity as one of its core values, and the Archroma Code of Conduct clearly set the expected compliance in this area.

During the reported period, the HRMT identified an improvement potential in HR data management, performance reviews and talent development. The new online management system called "myHR" has been developed during the reported period and introduced in its last days.

Compensation and Benefits

Archroma commits to provide competitive and fair compensation that includes all pay and benefits, providing a "Total Compensation" package consistent with the varied practices in different regions of the world. The employee package typically includes base pay and, as appropriate, variable pay. In order to support the group's growth goals, the variable pay plans will make clear distinctions between high and low performance, resulting in different levels of pay-out.

All of our compensation and benefits for permanent and temporary employees are in line with local legislation.

Our family support policies include maternity and paternity benefits and provide additional leave over and above the stipulated leave entitlement by local law to ensure that are employees can focus on their children and not have to make sacrifices between the needs of the workplace and home.

Archroma has two variable pay plans in place: The Group Incentive Plan (AGIP) for non-sales employees and the Archroma Sales Incentive (ASIP) for the sales force. Targets are established and communicated in the beginning of each financial year.

In the FY2018, the bonus payout for AGIP has been established at a rate of 58% of target.

We globally use survey data from Mercer and Aon Hewitt to ensure that we have competitive market data for building salary market ranges. Our usage of this data helps us have checks and balances, in place to ensure that the always stay above minimum local wage and in most cases be very competitive in our compensation and benefits. We do not have workforce that is paid majority at or below minimum wage.

Average	Gender		
Compa-Ratio	**Female**	**Male**	**Total**
Senior Executive	N/A	N/A	N/A
Senior Management	77.2	80.6	80.1
Middle Management	100.8	109.6	107.8
Junior Management	100.6	105.9	104.0
No Management	95.5	117.1	114.0
Total	**98.8**	**112.4**	**109.4**

A STRONG SENSE OF OWNERSHIP

Chess and mahjong enthusiast Orion Wu puts his sharp strategic mind to work as Head of Business Development in China.

The market may have changed a lot since Orion Wu first joined Clariant in 2007 as a lab technician, but Orion believes Archroma is continuing to adapt effectively. He is now Head of Business Development in China, and the business he oversees has shifted its strategy profoundly in recent years.

Before the company became Archroma, Orion explains that "our regional business development followed the global product portfolio and strategy." But today, the focus has moved towards an emphasis on local market and customer focus: local solutions to local challenges. He cites the Lanasyn® M-CFL and Foron® Black RD-GWF dyestuff ranges, and the upgrade of the Umidol® chemical range as examples of products carefully tailored into system solutions to increase productivity or create value for local markets.

Archroma is well suited to this kind of flexibility, Orion suggests: "Archroma is more open and efficient" than a larger organization. It also has a culture that nutures "a strong sense of ownership." He describes the company culture in six powerful words.

Orion's strategic mindset is nourished by the ancient games of chess and mahjong. Chess makes you think about what will happen next, while mahjong reminds you not to forget about your rivals. Both are important lessons in sustainable growth, which, as Orion explains, "comes through either innovation or competition."

Competition may be crucial, but for Orion, Archroma is like a family. Working together is fundamental to its success, as the best and most original ideas stem from great teamwork.

That sense of ownership at Archroma is key: it "encourages us to keep improving ourselves – and Archroma as well."
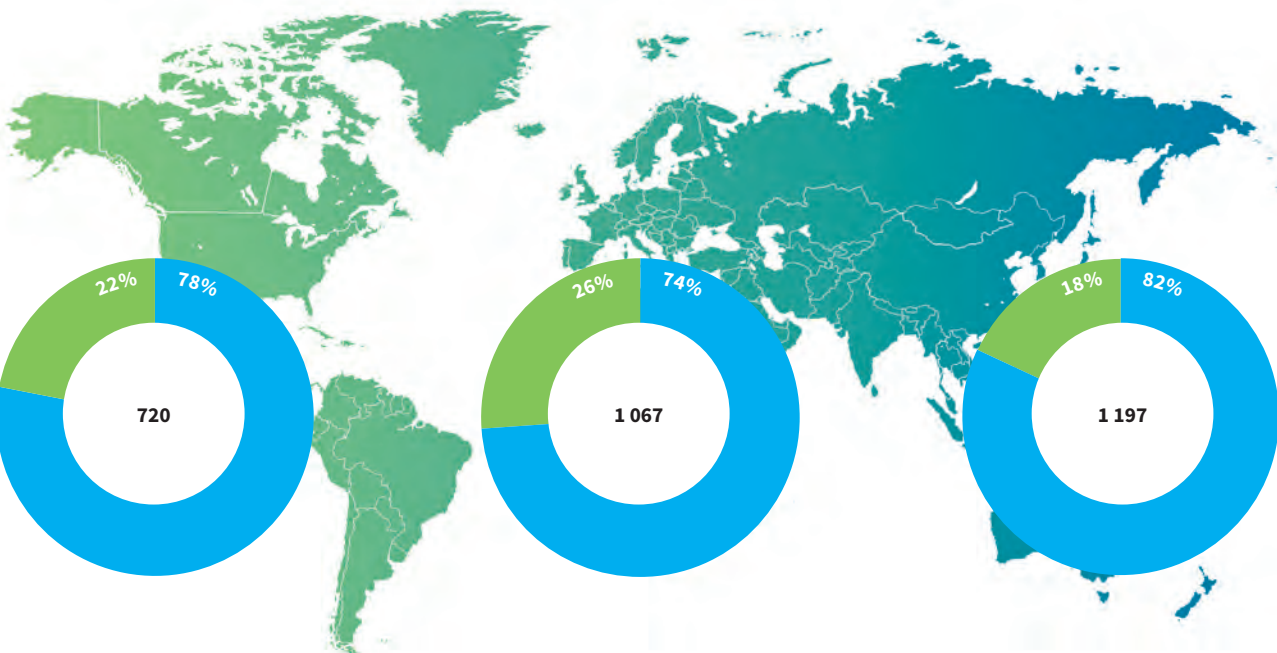
"SEE IT, OWN IT, DO IT."

DIVERSITY

Archroma recognizes the dignity, privacy and personal rights of all individuals, working together with various ethnic backgrounds, cultures, religions, ages, disabilities, races, sexual identity, worldview and gender. Archroma does not tolerate discrimination against anyone based on these characteristics or any other comparable offensive behavior.

Archroma valued diverse and talented colleagues and supports them so that they can contribute to their full potential. We enjoy diverse nationalities and cultures. There are 56 nationalities working in Archroma which is representative of our geographical reach.

We have 2 984 employees working across 3 geographical regions, actively engaged and driving our business forward. 22% off the workforce comprises of women and this number changes marginally from region to region. However this overall ratio has not changed in comparison to the previous reporting period.

We have a good representation of women at all levels of the workforce including the leadership team roles.

Diversity/Employee Profile by Region

22% 78% 720

26% 74% 1 067

18% 82% 1 197

Employee Profile

31% 9% 60%
22% 78%
2 984

Men
Woman
< 30 years
30 - 50 years
> 50 years
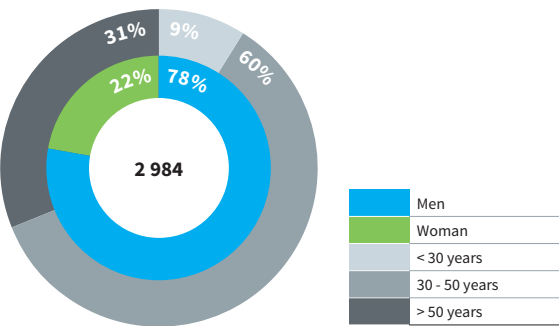
Women leaders also play a very critical role for us in the management of Archroma and represent 30% of the total management category. The ambitious target for FY2023 is to increase this to 40% of the total complement of management employees.

Employee Structure

848 1 519
564

Employee Structure
Senior Executive
Senior Management
Middle Management
Junior Management
Staff

Senior Executive (11)
Senior Management (42)
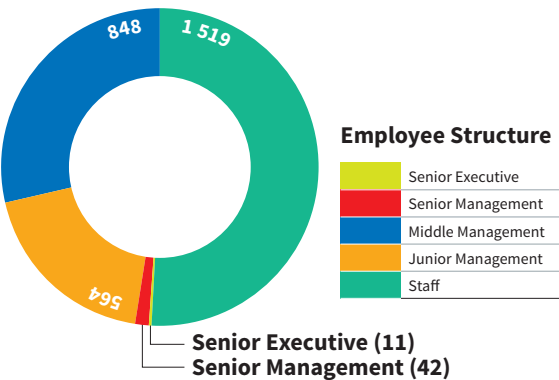
13% of governance bodies are comprised of women. 88% of governance bodies are over 50 years old.

Employee Tier Profile

74 1 445
1 519

Staff
Staff
Not Categorised

34% 5% 61%
30% 70%
1 465

Management
Men
Woman
< 30 years
30 - 50 years
> 50 years

27% 14%
14% 86% 59%
1 519

Staff
Men
Woman
< 30 years
30 - 50 years
> 50 years
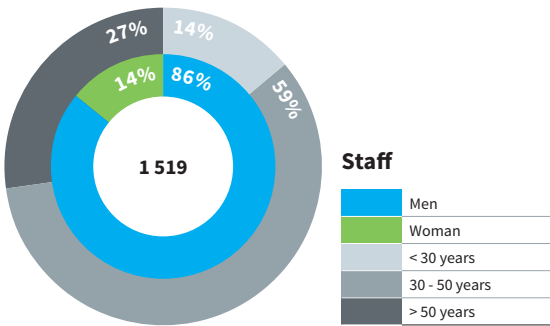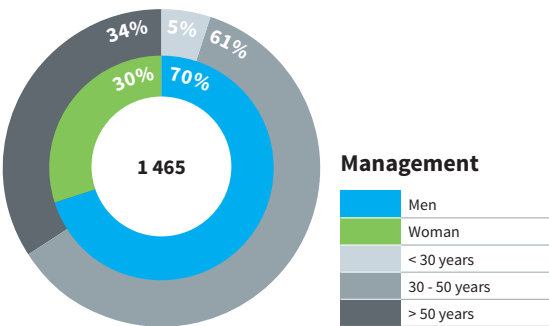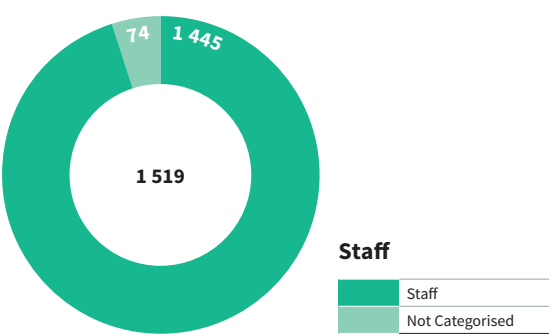
CULTURE

Archroma has implemented cultural pillars that guide the organization to foster trust and sustainable relationships with all our stakeholders. These pillars are:

ACCOUNTABILITY FOR PERFORMANCE
Working with clear, defined targets – aligned to the overall business strategy of Archroma but broken down to the area of responsibility of individual employees.

ACCOUNTABILITY FOR PERFORMANCE

CUSTOMER & MARKET FOCUS
Growing through customer and market focus – based on quality, cost, delivery, availability, service and innovation.

CUSTOMER & MARKET FOCUS

TEAMWORK & COLLABORATION
Engaging through collaboration – as one team, one company, one agenda, one focus.

TEAMWORK & COLLABORATION

SPEED & SIMPLICITY
Winning through speed and simplicity – with the right mindset, organizational design, decision processes and our work efficiency.

SPEED & SIMPLICITY

These pillars are collectively known within our organization as "ACTS". Archroma continually reinforces these work culture pillars within the organization. Each aspect of the culture pillars is integrated within each employees' job specification and form a part of the annual performance appraisal. The ACTS culture pillars are the foundation for Archroma's policies.

All employees are trained to the ACTS culture and Code of Conduct as part of the Archroma onboarding process for all new employees. Annual appraisals are providing a feedback on coherence and adherence to Archroma's cultural values.

A TASTE FOR OWNERSHIP

Ahmed Khairy is an avid traveler who does not hesitate to chart his own course.

In June of 2013, Ahmed Khairy, then working in the sales of emulsions in Egypt, faced the most serious challenge of his career. A revolution had toppled the government and he and his team had to figure out a way to weather the turmoil and continue hitting their ambitious goals. His ascension to Head of Archroma's Emulsions Sales (Egypt & Algeria) just a year later is a testament to his perseverance in this difficult moment as well as throughout his career.

Having embarked on his journey with the company back in 2004, Ahmed rose quickly as he balanced his professional responsibilities with his desire to continue learning and developing his skills. After starting classes in 2011, he was awarded an MBA from ESLSCA Business School in 2013.
Thrilled by the opportunity to chart a new course overseeing the Sales of the Coatings, Adhesives & Sealants (CAS) business in Egypt and Algeria,

Ahmed credits Archroma's innovative approach for his success, saying, "Archroma's new mindset, in which sales teams act as entrepreneurs and own the business, truly resonates with me because I feel responsible for my business area."

A passionate globetrotter who views traveling as a way of expanding his world view, Ahmed also finds diving into the pages of a good book as exciting as visiting new destinations. He cites Colin Powell as a role model, pointing to the former U.S. Secretary of State's words as a source of inspiration:

"There are no secrets to success. It is the result of preparation, hard work, and learning from failure."

According to Ahmed, Powell's vision reflects Archroma's values and serves as the company's roadmap to success.
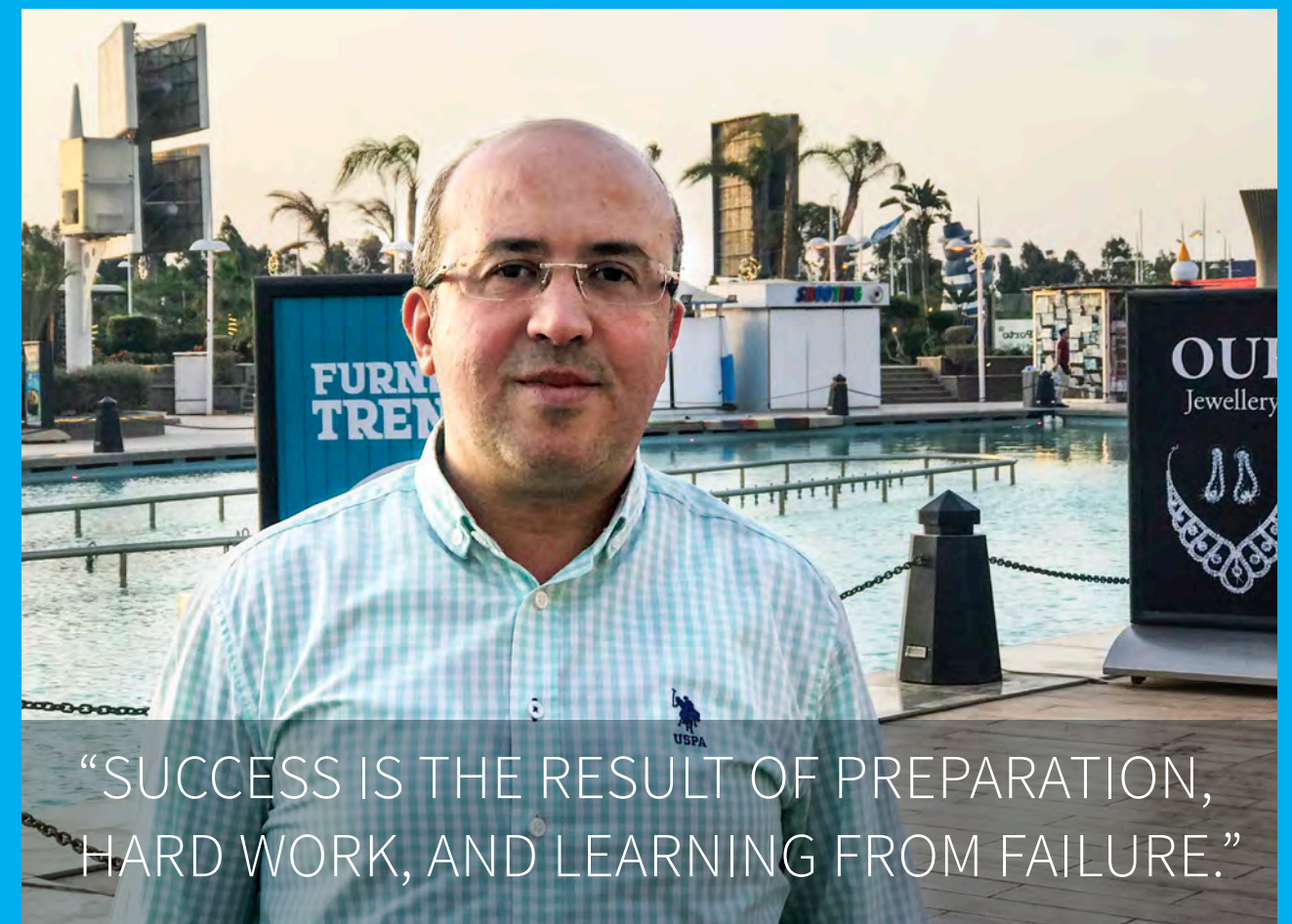
"SUCCESS IS THE RESULT OF PREPARATION, HARD WORK, AND LEARNING FROM FAILURE."

TALENT MANAGEMENT

The Archroma people management philosophy works on the guiding principle to attract, manage and develop talents, fit to Archroma's culture and capable of fulfilling the company's goals and objectives in the most effective and efficient manner

There are three aspects to talent management at Archroma: talent acquisition, performance monitoring and talent development.

Talent Acquisition

This tends to be generated throughput the organization based upon the current and future business needs. The total number of Archroma employees grew by 30 from 2 954 in FY2017 to 2 984 in FY2018, as a result of retirement, voluntary resignations and termination.

We hired a total of 205 employees in FY2018, 59% of which were under 35 years old, and 27% were female. Of these new employees 74 % were employed with permanent contracts. Overall 97% of all employees are employed with permanent contracts.

Performance Monitoring

This has two components; the tangible or "what" component, describing a specific desired result, and the behavioral component used to achieve the results, based on our ACTS culture pillars and leadership. Performance management is run on an annual cycle. Employees are initially rated by their managers and this is then followed by a company-wide calibration process. This is then reviewed both at a local level by local leadership and also at a global level by the global leadership team. A final presentation to the board of directors allows input regarding future direction and focus for Archroma management. This is then cascaded throughout the organization in order to ensure consistency throughout our organization.

Performance Reviews Data

2018	Female			Male			
	With Review	W/out Review	% with Review	With Review	W/out Review	% with Review	Total Review
Senior Executive*		2	0%	4	8	33%	29%
Senior Management	6		100%	28	12	70%	74%
Middle Management	96	24	80%	373	93	80%	80%
Junior Management	249	84	75%	439	115	79%	78%
No Management	115	81	59%	832	375	69%	67%
Total	**466**	**191**		**1 676**	**603**		**73%**
Total %	**71%**	**29%**		**74%**	**26%**		

* All senior executives employed for the complete financial year have had performance reviews.

Within our cultural pillars we believe that feedback is essential to drive alignment within our organization. Goal setting at all levels of the organization is driven by the annual operating plan, and this is a combination of what needs to be achieved and the behavior in how we achieve the results as guided by the ACTS cultural pillars.

Talent Development

Our development process addresses four aspects:

1. Skills
2. Capability
3. Leadership
4. Mindset

Skills requirements are assessed at the country level, where the performance management process identifies skills gaps for individuals. Specific local programs are initiated to provide the training require to bridge the skills gap, these can be for individual employees or groups. These training initiatives tend to be sources locally and managed by the local leadership..

Capability covers to be those organizational skills that are required in order to fulfil the organization future objectives. They are much broader in scope and address such aspects as periodic Code of Conduct training or those programs run under the Archroma Academy, focused on improving functional efficiency, for example for procurement, operational or commercial excellence, such as negotiation skills or value-based selling skills.

Both of these requirements tend to be linked. If we identify that a large number of individuals requires the same or similar skills improvements, then we address it under organizational capability, rather than individual skills, and organize the training scope accordingly. An example of this in FY2018 was the global program on English language training, which was escalated to the whole organization from a local training initiative.

Leadership is considered as a key capability for the organization. Assessment of the organization's current leadership skills level and delivery of improvement training is done by the Human Resources (HR) teams. In FY 2018, the HR team designed the leadership model and its detailed associated behavior with the global leadership team. In addition, a 360° tool was developed to provide insight to our leaders and help participants move forward with their development action plans.

We promote an outward **Mindset** in our organization. In the reported year, we focused specifically on the C of the ACTS: Customer & Market Focus, as we introduced a new commercial strategy based on customer intimacy and system selling, and it was crucial to help the whole organization understand how all employees are instrumental in delivering the commercial strategy and how the ACTS culture helps us towards this goal, with Accountability for Performance and Customer & Market Focus. We therefore dedicate a substantial amount of time in the introduction of the commercial strategy and its objectives to the entire organization and resultant monitoring and reporting on progress.

The Archroma Leadership Team is deeply involved in all four aspects with input from the Board of Directors.

Archroma has a published training policy, signed by the Chief Executive Officer. Archroma recognizes that employee development and training is an integral part of the organization's strategic intent so that all employees are performing their individual jobs effectively and prepare for future challenges to ensure that the organization meets its purpose sustainably.

The policy is designed to support and help Archroma employees and their line managers develop themselves and their teams. It is a joint responsibility in development and training by individual employees, supervisors/management and Archroma, and is integrated within each employees' job specification and forms a part of the annual performance appraisal. Archroma provides company-wide training programs for nominated employees in line with their job, function and needs.

The company invests in these programs at all four levels including by partnering with specialist training and technology companies for design support. As our business in the manufacture, sales and marketing of specialty chemicals tends to be a capital, rather than labor, intensive business, specific training for the organization on human rights is not foreseen. However, due to the nature of our business and the markets in which we operate, training based on the Archroma Code of Conduct is done on an annual basis for all employees.

At this moment we do not comprehensively capture the total amount of training time per employee, gender or employee category. However in FY2018 a total of 1 440 hours training was organized for a total of 240 employees for "Commercial Excellence" (640 hours for 40 employees) and "MakeExpert" (total 800 hours for 200 employees) training modules of the Archroma Academy.

Plans are underway to capture this information with the introduction of a systematic training module within our "myHR" online platform however this is not envisaged until FY2020. The effectiveness of the program is measured by the direct effect on the business performance. This is done at both functional and individual level for the specific programs and the areas of business impacted. The long term target will be to ensure that 90% of all employees undergo an Archroma Academy module in FY2023.

The talent management process is managed by the global HR management team supporting the Archroma Leadership Team members in their respective area of responsibility.

Archroma runs a number of outreach education programs with textile universities and institutions, such as the University of Karachi and Textile Institutes like SMA Rizwi in Pakistan (we train an average of 100 students annually), the Fashion Institute of Technology in New York and the House of Denim in Amsterdam. We also support the annual International Design Competition of the Society of Dyers and Colorists. We support these programs by, for example, donating financial contributions and/or tools or access to our facilities for on-site training.

Archroma also offer slots in several countries to universities for students' looking for practical experience and training as part of their curriculum.

The company also implemented an internal job posting program to allow internal mobility and career development, as well as community support via internal and external referrals.

SOLVING PROBLEMS IS AT THE HEART

Since first encountering the company as a student, Assumpta Tristan has been approaching challenges at Archroma with her positive attitude and fondness for teamwork.

"Every day you can learn something," says Assumpta Tristan, even though she is no longer the student she was five years ago. Assumpta first worked with Archroma for her final degree project in 2014, in the Product & Process Application lab in Prat. When that project came to an end, she was invited to apply for the role of Paper Application Lab Manager for Iberia. She has been working for Archroma ever since and was promoted to Sales Representative in February 2018.

Assumpta is never deterred by the problems she has to face in her work. "Paper machines are like people," she comments, "all are similar, but each one is unique." That has a very particular meaning for her: the same chemical product can affect each paper machine in a totally different way. Some might find that infuriating, but not Assumpta.

"This is awesome," she says. "It is absolutely the reason that you never feel bored."

Solving problems is at the heart of what she enjoys about her role, especially the way that it makes people work together. "You work as a team with the paper mill workers," she says, "and they trust in you." Equally, she trusts that her colleagues always have her back.

"A good team always needs different kinds of members to be powerful," she says – something that's as true at work as it is on the volleyball court. Assumpta has been playing since she was eight, and believes that the sport has helped her understand teamwork. One of the things she always brings to her team is a positive outlook. Her personal mantra is simple but inspiring: "Everything has a positive side."

"EVERYTHING HAS A POSITIVE SIDE."

LOCAL COMMUNITIES

As a good corporate citizen, Archroma is proud to be creating jobs, protecting the environment and developing local communities. We get involved with our local communities to support and foster education, health and in the creation of general social upliftment programs.

All organizations are actively engaging and assessing the needs of the communities at a local level. Based on the needs that the local management teams are aware of and engaging with the stakeholders. Community representatives are consulted and programs that would benefit the communities run as needed.

All organizations are actively engaging and assessing the needs of the communities at a local level. At this time we don't see any operations that could have significant actual and potential negative impacts on our surrounding communities.

These are just a few examples of some of the initiatives that we have been involved In.

Archroma's team in Shanghai, China, planted a tree in the garden of their new office location.

Archroma joins hands with Lahore University of Engineering & Technology to foster textile research.

"Gender Day" in Reinach, Switzerland.

Archroma's team in Roha, India celebrated 10 years without a single accident.

Beach clean-up in Lima, Peru by the Archroma team.

Archroma's team in Bangpoo Thailand, engaged in community clean-up.

"Earth Day" in Reinach, Switzerland, with community clean-up.

Archroma and WWF Pakistan pledge to work for sustainable water conservation solutions.

Archroma's team in Maipu, Chile, engaged in community clean-up.

Archroma's team in Salvatierra, Mexico, celebrated 3 years without a single accident.

INDIRECT IMPACTS

In addition to "Safe" and "Efficient", Archroma's third area of focus for innovation is on "Enhanced" performance, "It's in our nature to add another level of value". Our innovative products become innovative products for our customers, and then again for their customers. The water repellent jacket purchased by a consumer is made of water repellent fabric marketed by a mill and that includes a water repellent finish made by Archroma. In addition to resource savings, or innovations have the important indirect impact of increasing the value of products throughout the supply chain. This enables our customers and then their customers to realize greater revenues, profits, and consumer loyalty. In many cases, these higher value products are more durable and more appreciated by their owners so have a longer lifecycle than less expensive options. The longer lifecycle means that these enhanced products are also more sustainable than commodity products, and so innovation for increased performance is also a significant contributor to reducing overall lifecycle impacts.

An Archroma system which deliver enhanced value to our customers are communicated as the "Enhanced Collection".

THE ARCHROMA WAY / Safe + Enhanced = The Enhanced Collection

THE ENHANCED COLLECTION BY ARCHROMA

SAFE – IT'S OUR NATURE TO PROTECT
A solid core: Our deeply rooted goal to protect people and our planet. Safe to use, safe to release and also safe to wear.

ENHANCED – IT'S OUR NATURE TO ADD ANOTHER LEVEL OF VALUE
Your innovation is critical. Additional effects, functionalities and aesthetics give additional value, helping consumers to achieve their goals, for a life enhanced.

CASE STUDY: CLASSIC INDIGO FLOW

As mentioned earlier, Archroma has aligned its business model with its purpose and core values in order to make its industry sustainable. This we termed the "The Archroma Way". It is defined into three elements: safety, efficiency and enhanced value.

We examine and highlight how we positively affect these three elements both in the systems we create and in the solutions we provide to our markets.

We design our systems in line with this approach. All of these incorporate the "Safe" pillar, plus the additional pillars of "Efficient" and "Enhanced" wherever applicable.

A good illustration of this would be the CLASSIC INDIGO FLOW system.

Almost everyone has a pair of jeans in their closet, and because of their popularity, an enormous number are produced annually. This system focuses on the reduction of chemicals required to color denim fabric, and the resulting benefits in cleaner wastewater.

CLASSIC INDIGO FLOW
THE ARCHROMA WAY

An indigo system that produces authentic denim without compromising our planet

CLASSIC INDIGO FLOW / Main benefits in a nutshell

- Safe products from a reliable global partner who applies international safety standards
- Less sulfites and sulfates in the wastewater (approx. 50% less compared to grain indigo dyeing process)
- More automated process, less operational resource
- Enhances consistency of the dyeing process:
  - Shade reproducibility (a must for export)
  - Levelness (more 1st quality production)
- Darker tone achievable
- Switching from grain indigo to Archroma system the customer has increased the quality of his product
- The cost impact of the Archroma system is very small compared to the high profit that the customer could generate – value add

'SAFE' WITH:
Archroma CLASSIC INDIGO FLOW

GOTS APPROVED | ZDHC COMPLIANT | bluesign® APPROVED | C2C CERTIFIED | RESOURCE SAVING | IMPACT ON WASTEWATER

SAFE

'ENHANCED' WITH:
Archroma CLASSIC INDIGO FLOW

FASHION EFFECTS | PREMIUM QUALITY

ENHANCED

CLASSIC INDIGO FLOW / An indigo system that produces authentic denim without compromising our planet

Denisol® Indigo 30 liq
Pre-reduced indigo
- Same performance as regular indigo

Dekol® SN liq
Chelating agent
- Reduces water hardness and staining of the dyeing machine

Setamol® WS p
Dispersing agent
- Maintains the indigo dye dispersion

Primasol® NF liq
Wetting/penetrating agent
- Improved dye penetration
- Promotes uniform dyeing

APPENDIX

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* As Archroma is a privately owned company these disclosures are omitted for confidentiality reasons
** Archroma has not sought for external assurance of this report. This will be reassessed in future as the report evolves and as more disclosures become available. We are confident that our internal processes and documentation will provide sufficient oversight regarding the accuracy of the enclosed information in the report.

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GRI 418:	201-1 Direct economic value generated and distributed	* See note below
Customer Privacy	201-2 Finanacial implications and other risks and opportunities due to climate change	* See note below
2016	201-3 Defined benefit plan obligations and other retirement plans	* See note below
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2016		included in future reporting
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Biodiversity	high biodiversity value outside protected areas	
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	by operations	

TABLES

Resource Efficiency – page 56

ARCHROMA TOTAL	FV2015	FV2016	FV2017	FY2018
Site Production (t)	414 164	457 251	447 842	**478 612**
C0$_2$e Emissions (t)	99 833	93 356	94 804	**99 576**
Energy (GJ)	1 166 108	1 230 455	1 225 293	**1 344 960**
Water (m³)	8 154 981	7 522 151	8 075 005	**8 828 644**
Water Consumption (m³)				**2 088 995**
Solid Waste (t)	12 598	14 516	12 844	**17 475**

RESOURCE USED PER METRIC TON PRODUCED					TARGET FY2023	
C0$_2$e	0.241	0.204	0.212	0.208	**Carbon Neutral**	
Energy	2.82	2.69	2.74	2.81	**2.39**	**-15%**
Water	19.69	16.45	18.03	18.45	**16.60**	**-10%**
Water Consumed				4.36	**4.36**	
Solid Waste	0.030	0.032	0.029	0.037	**0.027**	**-25%**

1 Terajoules (TJ) = 1 000 Gigajoules (GJ)

Gender profile – page 72, 73

2018

Gender Profile FY2018	Female	Male	Total
Senior Executive	1	10	11
Senior Management	6	36	42
Middle Management	115	449	564
Junior Management	314	534	848
No Management	204	1 241	1 445
Without Category	10	64	74
Total	**650**	**2 334**	**2 984**

2018

Gender Profile FY2018	Female	Male	less than 30	30-50	over 50	Total
Senior Executive	0.2%	0.4%	0.0%	0.2%	0.9%	0.4%
Senior Management	0.9%	1.5%	0.0%	1.2%	2.2%	1.4%
Middle Management	17.7%	19.2%	0.4%	18.7%	25.1%	18.9%
Junior Management	48.3 %	22.9%	24.0%	30.1%	26.4%	28.4%
No Management	31.4%	53.2%	73.1%	48.1%	41.6%	48.4%
Without Category	1.5%	2.7%	2.5%	1.8%	3.9%	2.5%

Diversity – page 72, 73

2018

	Americas		Total	Asia		Total	EMEA		Total	Grand Total
	Female	Male		Female	Male		Female	Male		
30-50	89	314	403	169	649	818	168	407	575	1796
less than 30	34	59	93	32	68	100	29	57	86	279
over 50	35	189	224	17	262	279	77	329	406	909
Grand Total	**158**	**562**	**720**	**218**	**979**	**1 197**	**274**	**793**	**1 067**	**2 984**

Employees	Gender		Age Group		
	Female	Male	less than 30	30-50	over 50
Archroma Leadership Team	13%	88%	0%	13%	88%

Age Profile by Employee Tier – page 72, 73

Age Profile FY2018

Gender Profile FY2018	less than 31	30-50	over 50	Grand Total
Senior Executive		3	8	11
Senior Management		22	20	42
Middle Management	1	335	228	564
Junior Management	67	541	240	848
No Management	204	863	378	1 445
Without Category	7	32	35	74
Total	**279**	**1 796**	**909**	**2 984**

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