



ACTIVITY AND SUSTAINABLE DEVELOPMENT REPORT 2016

P16 SOURCING SUSTAINABLY



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ACTING SUSTAINABLY



BIOREFINING SUSTAINABLY



REPORTING

EDITORIAL

IN 2016, ROQUETTE MADE INVESTMENTS DESIGNED TO DRIVE PROSPECTS, GROWTH AND MEANING!



Edouard Roquette Chairman of the Board of Directors



Jean-Marc Gilson Chief Executive Officer

What is your take on 2016?

ER I To address the numerous global challenges to come, population growth, changes in and diversity of eating habits, the emergence of new special diets, gluten-free, allergen-free or vegetarian, Roquette has taken a bold step and is working on a significant phase of future growth. For instance, the Group has decided to boost its range of nutritional solutions and to develop plant proteins. More than ever, our mission is to help improve the nutritional well-being and health of millions of consumers all over the world.

Is the family-owned dimension of the Group an asset?

ER Indeed, we engage in investment, research and development programs that are fully consistent with a longterm approach. This makes Roquette a unique partner. We dare to position ourselves on new markets, which others who are more focused on short-term performance wouldn't necessarily do. The best example is the decision we made in late 2016 to establish ourselves in Canada in order to build a new plant to process pea protein. This investment will lead to the establishment of the most significant pea protein production site in the world, serving the food, nutrition and health markets. It will have a profound impact on these markets.

Jean-Marc Gilson, what do you consider as the most significant events of 2016?

JMG I We positioned the Group as a top-performing player in its sector. It is not an end objective as such, but it provides the means to accomplish our vision. We set up our new Global Business Units (GBU) organization, which aligns our resources with our strategic ambitions in each sector. We also reinforced our innovation centers in Europe, the United States and more recently in Asia in order to develop specific products for the high-potential markets in South-East Asia.

I would also like to highlight a new customer service approach based on a highly-integrated organization that we are going to gradually roll-out across the Group. It not only entails addressing customer needs, but addressing them interactively, facilitating our relations and ensuring that our customer is fully satisfied. We want the customer experience with Roquette to be perfect from start to finish.

In order to support our growth as well as that of our customers on a long-term basis, the Group has set ambitious sustainable development goals for the years to come. We have always maintained an intimate bond with nature.

EXECUTIVE OFFICE



Jean-Marc GILSON **Chief Executive Officer**

Sustainable development is deeply set in the Group's DNA, particularly as regards recycling plant raw materials. In addition, every year we set up bolder procedures, such as in the fields of energy and water. To this effect, in India we recycle all of the water in our plants. It's a global first, which we wish to reproduce across the Group.

Driven by a growth dynamic and the commitment of its employees, the Roquette Group has asserted its position as a leading global producer of natural ingredients for the food, nutrition and health markets.

Edouard Roquette concludes: "Acting and investing sustainably now makes sense more than ever!"



Sophie ANCELIN Human Resources



Jeremy BURKS **Global Business** Units & Commercial



Emmanuel de GEUSER Finance



Nathalie JOANNES Group General Counsel



Thierry MARCEL Research & Development



Gianfranco PATRUCCO Global Operations

WIEKUTE



EMMANUEL DE GEUSER EXECUTIVE VICE PRESIDENT FINANCE

2016 PLACES US IN A POSITION FAVORABLE FOR SPEEDING UP OUR GROWTH DYNAMIC.

The business climate in 2016 was particularly beneficial to the Roquette Group, leading to a milestone performance that positions it as a global front-runner in its business sector. Firstly, the Group benefits from the committed efforts made by its entire teams to better address customer demands consistently. Its new organization for the Global Business Units endows the sales division with a decisional capacity, as well as a new approach that is less quantitative than in the past.

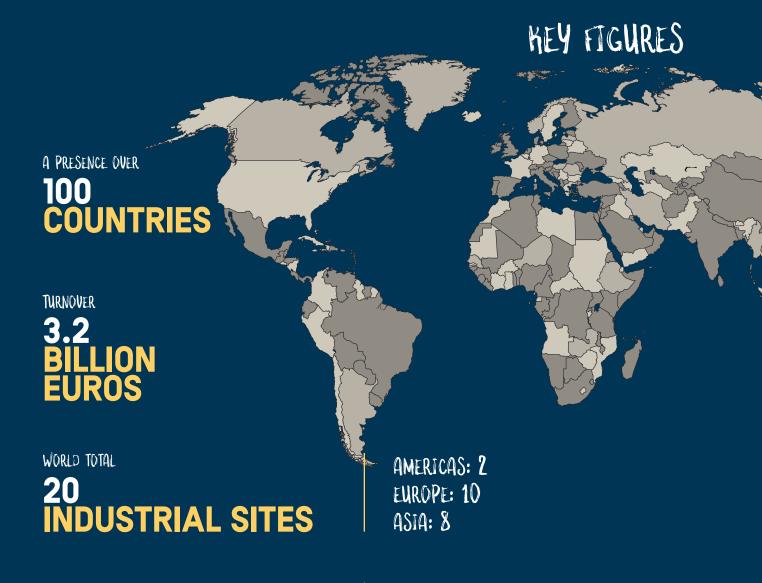
"What matters is not the volume but the value created by the business," highlights Emmanuel de Geuser, who notes a slight decline in turnover linked to trade-offs and concurrent speeding up of the specialties, super-specialties and ingredients with a high added value for the food, nutrition and health sectors.

Then, the macro-economic context of 2016 was beneficial to many fields.

Global growth held steady at 3.1% with more reliable growth recorded in Europe, but accelerating. The United States, a high added-value market, remained above 3%, and Asia slightly below 7%. Only India experienced some jolts due to demonetization.

The raw materials market experienced a fifth year of consecutive decline both in terms of wheat from Europe, or corn from the Americas or Asia. The only difficulty recorded was in India, whose poor monsoon resulted in a sharp price increase for local corn.

Energy, a key component of the Group's expenses, also experienced a relative decline in prices, as the fall in oil prices impacted gas prices. This coincides with a slight fall of the euro against the dollar (2%), after its strong depreciation in 2015, thus favoring Roquette's positions. "Mostly, our costs are in euros, while our export sales are in dollars," says Emmanuel de Geuser, to whom the outstanding performance in 2016 "places us in a good position to speed up our profitable and sustainable growth dynamic."



WORLD TOTAL

8,000 EMPLOYEES AMERICAS: 550 EUROPE: 4,950 ASIA: 2,500

TOP 5 STARCH PROCESSING INDUSTRY

INNOVATION

MORE THAN 300 EMPLOYEES DEDICATED TO RESEARCH 40 PATENTS PER YEAR

OUR MARKETS AND OUR PRODUCTS

Satisfying our customers and anticipating their needs is the Group's number one priority.

In order to provide them with the most appropriate solutions, we optimize all components of renewable raw materials (corn, wheat, potatoes, peas) by drawing on our botanical expertise.

To this effect, we harness the technological and nutritional properties of these natural resources with the aim of **offering a broad range of products and solutions** in the fields of food, nutrition and health, as well as other industry sectors. As such, we offer over 700 products worldwide.

Our industrial know-how, which is driven by a long-standing **tradition of engaging in research and innovation**, enables us to be at the cutting-edge of solutions. It guarantees the high quality of our products and services, appreciated by our customers around the world.



Some examples of applications developed with our customers:



FOOD & HUMAN NUTRITION

Our plant-based solutions with nutritional and health benefits enable us to:

- Offer solutions that are adapted to people with diabetes thanks to our ingredients with a low glycemic index: NUTRIOSE® soluble fiber, SWEETPEARL® maltitol,
- Help prevent sarcopenia (muscle weakening) which affects seniors: NUTRALYS® plant proteins,
- Reduce the sugar level in foods: SWEETPEARL® maltitol and NUTRIOSE® soluble fiber.



PHARMA

Excipients, raw materials and active ingredients make up a wide range of products with multiple uses for the pharmaceutical and biopharmaceutical industry, which serve to:

- Save lives: LYCADEX® PF pyrogen-free dextrose, a vital molecule of the human body, used in solutions administered through infusion for first-line treatment in emergency situations,
- Facilitate medicine intake: dosage formulation, mannitol-starch combination, PEARLITOL® Flash for orodispersible tablets that do not require water and melt in the mouth.

ANIMAL NUTRITION

Thanks to our expertise and in-depth knowledge of the market, we offer a wide range of products for animal nutrition, farm animals and pets, which help:

- Provide nutritionally balanced and readily digestible solutions for cow feed: COREX® M200 corn gluten,
- Provide top-quality energy sources for domestic animals, dogs and cats: VITEN® CWS hydrolyzed wheat gluten.





INDUSTRY

Our solutions derived from renewable plant matter are both effective and competitive. They meet changing market demands and serve to:

- Offer an alternative to latex derived from petrochemicals for use in coating (technique used to obtain various paper weights) in stationery: STABILYS® thermally modified starch,
- Provide proven technological benefits to performance plastics and thermosetting resins: POLYSORB® isosorbide.

ROQUETTE GOVERNANCE



Didier de Menonville, Denis Delloye, Stéphane Baseden, Christophe Roquette, Carole Lajous, Edouard Roquette (Chairman), Jean-François Rambicur (Vice-Chairman), Sonia Artinian, Marc Roquette, Pierre-Emmanuel Lepers

Governance keen on implementing good operating practices and committed to ensuring the Group's sustainable performance.

With a capital entirely held by over 250 shareholders who are descendants of Dominique and Germain Roquette, the brothers who founded the company in 1933, the family continues to firmly pursue changes in its model of governance based on the best standards recommended by the Code of the AFEP-MEDEF professional bodies, while adapting them to the specificities of an unlisted family-owned group.

The Governance, which remains stable since the last appointments, has been successfully evolving to maintain family control through generations. It serves, for a rising number of shareholders and spouses, to better anticipate future challenges and to ensure the decision-making organs are aligned with each other.

The Board of Directors, a collegiate body mandated by all shareholders, mainly determines the strategic orientations of the Group, oversees its management and ensures the efficient running of the subsidiaries.

More specifically, in the course of 2016, given the digital changes and related aspects, the Board of Directors adapted its operating methods by establishing a secure platform for electronic exchanges and launched discussions to better anticipate the risks of using the new technologies and collaborative tools which will be gradually set up as part of the digital strategy of the Group.

In addition, the Board pays particular attention to the quality and clarity of the information submitted to shareholders, and to ensuring an accurate perception of the issues that are significant to the Group.

THE HIGHEST **STANDARDS OF GOVERNANCE**

MEMBERS IN THE BOARD OF DIRECTORS

EDOUARD ROQUETTE

Chairman

5 **Family Directors**



5

Independent **Directors**

4 COMMITTEES

In addition to the annual general meeting which is an ideal time for communication and discussions between the company, its management and shareholders and the two briefings, in 2016 the shareholders had the opportunity to participate in two training sessions through webinars.

These new tools offer easy access, enable better information sharing and have promoted commitment among the younger generations. Visits of various sites of the Group are also arranged; thus, in 2016, the shareholders met in Benifaió in Spain. The visits present an opportunity for the family members to discover the investments required to ensure the Group's competitive edge, as well as to share and exchange ideas with the local teams in a friendly atmosphere.

Based on this determination to foster corporate spirit, a Roquette family university (UFR) is held every two years in alternation with site visits. Its objective is to enable the shareholders and their spouses to "reflect together on what they wish to become together."

FAMILY SHAREHOLDERS, A CONSIDERABLE ASSET FOR THE GROUP AND ITS FUTURE DEVELOPMENT.

To this effect, and in view of the 2017 UFR, a vision project was launched in December 2016.

Besides figures and strategy, to better understand where the Group is headed, the shareholders must be able to reflect on the challenges that lie in the future and the choices that these upheavals will entail. To this end, this shared vision approach anchors the company in a long-term perspective and strengthens cohesion and sustainability of the family shareholders, which represents a considerable asset for the Group and its future development.



APPOINTMENTS AND SALARIES COMMITTEE

Christophe Roquette, Sonia Artinian, Jean-François Rambicur (Chairman), Edouard Roquette, Marc Roquette



STRATEGY COMMITTEE

Jean-François Rambicur, Stéphane Baseden (Chairman), Denis Delloye, Edouard Roquette



ETHICS AND SUSTAINABLE DEVELOPMENT COMMITTEE

Didier de Menonville, Carole Lajous, Marc Roquette (Chairman), Denis Delloye, Pierre-Emmanuel Lepers



AUDIT COMMITTEE

Didier de Menonville, Christophe Roquette (Chairman), Carole Lajous

MAJOR EVENTS OF 2016



BRAIN, ANALYTICON AND ROQUETTE SIGN A STRATEGIC PARTNERSHIP FOR THE **DEVELOPMENT OF NEXT GENERATION NATURAL SWEETENING SOLUTIONS**

In August 2016, the three partners formed the DOLCE consortium in order to meet challenges in terms of sugar and sugar alternatives for numerous markets and applications. This collaboration makes it possible to combine the R&D expertise of BRAIN and AnalytiCon with the know-how of the Roquette Group in terms of formulation and production.

ROQUETTE COMMITS TO SUPPORTING THE DEVELOPMENT OF THE PROTEIN **SECTOR**

In October 2016, Roquette signed a joint commitment with the French government along with other agribusiness stakeholders grouped together in a consortium named "Protéines France". Its goal is to develop the proteins sector particularly by supporting and promoting R&D and industrialization projects related to plant-based proteins.



THE VECQUEMONT SITE (FRANCE) **CELEBRATES 60 YEARS**

In October 2016, the only potato starch processing plant of Roquette that is located in Vecquemont (France), celebrated its 60th birthday. This served as an occasion for the site to open its doors to the public. Created in 1956, the Vecquemont plant is the main starch processing plant in France and employs over 250 staff.

ROQUETTE'S COMMITMENT TO THE BIOPHARMA MARKET

In 2016, Roquette decided to develop an offer to meet the demands of the biopharma sector (pharmacy branch involved with preparing biological products). This is a growing market which represents the future of the pharmaceutical industry. The new range of high-quality products broadens the offer and helps keep patients alive and ensure their well-being.





ROQUETTE INAUGURATES THE FIRST DEEP GEOTHERMAL POWER PLANT NEAR ITS BEINHEIM SITE (FRANCE)

Roquette inaugurated on June 7, 2016 in Ritterschoffen. near its Beinheim site (France), the operations of the first deep geothermal power plant for industrial activities. The inauguration took place in the presence of Ségolène Royal, the French Minister of Environment, and Edouard Roquette, Chairman of the Board of Directors. The only one of its kind in the world, the plant serves as a genuine model in terms of renewable energies.

THREE SITES OF THE ROQUETTE GROUP **REWARDED BY "STARCH EUROPE"** FOR THEIR SAFETY PERFORMANCE

In October 2016, Starch Europe presented safety awards to 3 Roquette sites: Beinheim (France), Vecquemont (France) and Amilina (Lithuania). They were rewarded for their commitment to safety and the absence of work accidents with stoppage for an entire year.





A VERY LARGE CAPACITY DRYING **UNIT IN GOKAK (INDIA)**

In December 2016, the site in Gokak (India) built a new drying unit in order to boost the starch production capacity while improving the hygiene, quality and comfort of the employees. Established with the support of other sites of the Group and through knowledge and expertise sharing, the facility is one of the largest drying units in the starch processing industry.

ROOUETTE RECEIVES THE SPECIAL JURY PRIZE AT THE RISK MANAGEMENT AWARDS

In March 2016, Roquette received the Special Jury Prize at the 4th edition of the Risk Management Awards organized by Crowe Risk Consulting and IFACI (French institute of auditing and internal control). Roquette distinguished itself through its structured and effective risk management approach, stemming from the impetus provided by the Chairmanship and the Executive Management, as well as its pragmatic approach to steering risks.





ZOOM E-LEARNING CODE OF CONDUCT

In 2015, the Roquette Group established a new code of conduct, the operational application of the ethics **charter.** It defines the conduct to adopt, attitudes to cultivate and those which must be avoided. The code is not a substitute for the various regulations, standards, directives and procedures.

In 2016, e-learning sessions (online training) were set up to allow each employee to understand the essential principles

of this code which they might deal with on a day-to-day basis while practicing their professional activity. The contents of the e-learning sessions are entirely based on practical situations.

Very easy to access and accessible at any time, many managers used this e-learning tool to raise awareness in their teams.

HUMAN RIGHTS

Businesses should:

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Support and respect the protection of internationally proclaimed human rights,

Make sure that they are not complicit in human rights abuses.

LABOUR

Businesses should:

Uphold the freedom of association and the effective recognition of the right to collective bargaining,

Contribute to the elimination of all forms of forced and compulsory labour,

Contribute to the effective abolition of child labour,

P14 - P40 TO P43

Contribute to the elimination of discrimination in respect of employment and occupation.

ENVIRONMENT

Businesses should:

Support a precautionary approach to environmental challenges,

Undertake initiatives to promote greater environmental responsibility,

P18 T0 P21 - P32 T0 P37

Encourage the development and diffusion of environmentally friendly technologies.

ANTI-CORRUPTION

Businesses should:

Work against corruption in all its forms, including extortion and bribery.



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OUR COMMITMENTS

SOURCE SUSTAINABLY

By encouraging local supply and optimizing means of transportation to combine economic profitability and low environmental footprint.

IMPROVE CONTINUOUSLY OUR RAW MATERIAL QUALITY

By clearly specifying our needs, strictly selecting our suppliers and reinforcing quality control chain from fields to biorefineries.

STRENGTHEN RELATIONSHIP WITH OUR RAW MATERIALS SUPPLIERS

By building partnerships with breeders and farmers to select and use more suitable agricultural resources.

PERFORMANCE INDICATORS



We fully optimize all of our raw materials. They are derived from agriculture and as such annually renewable.

we are committed to ensuring that

of our supplies be certified or rated as "sustainable and responsible".



INTERVIEW



MASSIMILIANO BENSO HEAD OF RAW MATERIAL & ENERGY PURCHASING AND MEMBER OF THE

SUSTAINABLE DEVELOPMENT COMMITTEE

Consumption capacities by plant-based raw material Corn (millions of tons) 5 Wheat **Potatoes** Peas 2016

WE WANT TO PROCURE SUPPLIES IN A SUSTAINABLE AND RESPONSIBLE MANNER.

Given the annual consumption of over eight million tons of raw materials, Roquette must manage its supplies based on a vision of sustainability, a commitment which the Group fosters around three pillars, year after year. First, "We want to procure supplies in a sustainable and responsible manner, and locally where our plants are located". This optimizes transportation means and helps combine profitability and reduced environmental impact,"states Massimiliano Benso, Head of Raw Material & Energy Purchasing. This approach promotes local ecosystems and employment by using proximity suppliers, under a well-controlled process. "Our ambitious goal is to have 20% of plant-based raw materials certified as sustainable by 2025," adds Massimiliano Benso.

Second pillar, quality of the products. This entails a strategic element for the plant raw materials mainly used in priority sectors such as food and pharma. "We not only want a raw material, but also quality assurance in order to respond to customer and consumer needs," says Massimiliano Benso.

To this end, specific specifications have been established, while the control chain has been strengthened and consistently adapted from source to plant, especially with regard to specialized sectors such as the potato, pea or special corn. In addition, the Group is renowned for its strict approach in terms of health conditions.

Third pillar of **continuous improvement**, long-term relationships with suppliers. especially those who supply agricultural products. This long-term consistency serves to enrich knowledge and techniques, including sharing them based on mutual trust, with the aim of obtaining raw materials of the best quality possible, while improving yields and optimizing the supply chain. "A winwin goal," highlights Massimiliano Benso.

MANAGEMENT OF SUSTAINABLE AND RESPONSIBLE SUPPLIES





Each year, Roquette transforms over eight million tons of plant raw materials. Corn, wheat, potatoes and peas supplies come from over one million hectares of farm land, and facilitates long-term relationships with suppliers.



POTATOES

Who doesn't know potatoes?

Grown in over 150 countries and the third most consumed crop by man in the world, potatoes were the first raw materials to be processed by Roquette.

What do we do with potatoes?

Roquette extracts starch (complex glucose chain) from potatoes. It stands out by its great level of purity, its neutral taste and its lack of smell, which makes it very useful in many food applications. Thanks to starch, the Roquette Group provides its customers around the world with highend solutions that possess known properties for the food, pharmaceutical and industrial sectors.

How is starch obtained?

First, the potatoes are grated, then they go through a separation phase, followed by a sieving phase, and

lastly, they are refined thus obtaining starch. Through this manufacturing process, other products are obtained such as fibers and solubles.

They are used in animal nutrition due to their very high nutritional balance.

What are the advantages of starch production?

Starch production entails many environmental benefits. First, it is a low-pollutant in terms of air or water emissions. Continuously recycled water is used in the extraction of starch and its purification, thus limiting the use of clear water from external sources. Secondly, vegetation water for potatoes, once concentrated, serves as an excellent fertilizer for local farmers' fields, thanks to its high nutrient

As such, potatoes are an interesting raw material that is continually used for an increasing and varied number of applications, especially in the field of nutrition and health.



ZOOM ON VECQUEMONT

industrial sites of Roquette in France, celebrated its 60th birthday. Built in 1956, it is the one and only potato starch processing plant of the Group

The plant is a benchmark site in terms of field to plant performance (storage optimization, cost cutting) and respect for the environment (water



DEVELOPING RELATIONS WITH CORN SUPPLIERS IN INDIA

Corn is the only plant raw material used in Roquette's plants in India. As a result, it is vital for the Group in India to ensure lasting relations with suppliers from the farming community. To this end, the company holds meetings in order to:

- Help them meet the required quality demands;
- Encourage the suppliers to develop fair and responsible commercial practices;
- Share knowledge on best agricultural practices, especially when visiting farms.

Subsequently, the Roquette Group wishes to support the socio-economic development of the corn-farming communities by making them aware of the importance of post-harvest good practices. Such practices help **obtain** better yields and encourage farmers to grow corn.

In October 2016, the Gokak plant (India) received local farmers. A French team attended the meeting and held discussions at length with the farmers and suppliers.

Various issues were discussed, e.g. best agricultural practices to optimize yields, the various policies and codes of the Roquette Group or the impact of poor quality corn on the end product.

"Strengthening links with our raw material suppliers" is one of the commitments of the Roquette Group which acquires real meaning in India.

AWARENESS CAMPAIGN ON FOOD SAFETY IN LITHUANIA

In order to meet recommendations concerning plant protection products, Roquette's Lithuanian site and its external partners organized a nation-wide awareness campaign on these products and their residue.

Good practice models were presented to the local farmers and retailers. First, they were informed about the possibilities in terms of rational use of plant protection products, then they were invited to participate in meetings with experts. The latter **helped them to understand the** risks arising from disinfection practices as well as to consider solutions without an impact on health.

Additionally, articles on safety linked to using various substitute products in agriculture were published in local newspapers. Lastly, brochures describing five key principles were distributed to the local communities. They described the importance of using responsible means against parasites by choosing high-quality harmless insecticides, without forgetting to respect the instructions.

The Roquette Group consistently seeks to build an informed and motivated community. Prevention applied to safety especially for members of the community is one of the priorities of Roquette in Lithuania.



REDUCING THE IMPACT OF LOGISTICS

A significant expense item for the Group, logistics procurement is mainly composed of maritime, rail and road transport, or a combination of these transportation modes, known as multimodal transportation.

CONTAINERS ANNUALLY IN VOLUME ON THE RISE

In 2016, a global approach for maritime transportation enabled the procurement and logistics teams to optimize transport. For the first time, a worldwide tender offer was initiated involving over 70 maritime companies.

Maritime transportation is an essential link in terms of guaranteeing service to customers. Thanks to the establishment of framework agreements and periodic performance reviews with suppliers, the company is now in a position to better monitor the overall service levels offered and therefore focus on the improvement areas.

KEY AND MAIN FIGURES CHARACTERISTIC OF MARITIME TRANSPORTATION AT ROQUETTE:

- A volume of over 45,000 containers annually,
- Great diversity of origin (with departures from countries in Europe, Asia and the Americas) and destinations,
- Different container types and sizes used.





ZOOM DUAL-ENERGY TRUCKS

The dual-fuel engine functions like a conventional diesel engine. The gas supplies 70-80% of the

This budding but very promising technology, impact. The green transportation revolution is underway!

OUR COMMITMENTS

UNDERSTAND CUSTOMERS' NEEDS AND ANTICIPATE **CONSUMERS EXPECTATIONS**

By developing pharma, nutrition, food and industrial innovative solutions that help improve our consumers' health and well-being.

DEVELOP A SUSTAINABLE DEVELOPMENT JOURNEY INSPIRED BY CUSTOMERS' **EXPECTATIONS**

By offering them environment-friendly, innovating, sustainable and competitive solutions.

STRENGTHEN SUSTAINABILITY IN OUR INNOVATION **PROCESSES**

By including sustainable development criteria as a key element in our innovation projects.





INTERVIEW



JEAN-MARC CORPART HEAD OF CHEMISTRY RESEARCH & DEVELOPMENT AND MEMBER OF THE SUSTAINABLE DEVELOPMENT COMMITTEE



ROMAIN JOLY HEAD OF CUSTOMER INNOVATION EXCELLENCE

THE ENTRY POINT IS ALWAYS THE CUSTOMER NEED.

Innovation is in Roquette's genes as it consistently produces new plantbased products and solutions. The Group now integrates sustainable development right from the initial stages of innovation. "We do start off with natural resources, but we transform them to better respond to the needs of our customers and consumers. We are therefore keen on ensuring that our processes align as much as possible with the principles of sustainable development," states Jean-Marc Corpart, Head of Chemistry Research & Development. "Approximately a third of the carbon footprint of the end products is in our hands," emphasizes Romain Joly, Head of Customer Innovation Excellence.

This commitment, embodied by concrete indicators, also serves to raise the awareness of and challenge all teams. "In our projects, we not only apply research and development but also marketing, sales, production, supply chain, regulatory services ... and other key functions of the company," adds Jean-Marc Corpart.

The commitments of Roquette also involve the willingness to make customers themselves benefit from sustainability, which is embodied by a new indicator. "It's an issue that we had not been working on until now. Yet, sustainability is a global issue that is part and parcel of their needs. One of our indicators is based on three of the 17 Sustainable Development Goals of the United Nations signed in September 2015: improvement of well-being and health, access and improvement of water treatment as well as more responsible consumption and production," states Romain Joly.

"There is currently a major trend in terms of demand for healthy products of natural origin," adds Jean-Marc Corpart, who highlights the example of the demand for complementary plantbased offers as an alternative to animal protein. "The entry point is always the needs of the customer and of the consumer, for whom sustainable development becomes essential."

THE EXPERTISE OF ROQUETTE'S SCIENTIFIC COMMUNITY IN SUPPORT OF THE GROUP'S GROWTH

Roquette's development is based on a long history of technology and industrial expertise, and equally on its long-term partnerships with customers.

Roquette's research and development priorities are determined by the market needs, which are increasingly focused on nutrition, health and the selected industrial applications.

Always attentive to customers, Roquette constantly develops more innovative and competitive food and nutritional solutions, bioactive ingredients and solutions for effective materials. These innovative offers are designed to meet the key challenges related to health, changes in food consumption and the environment. They aim to **respond to** the increasingly characterized consumer expectations in terms of sustainable development.

Roquette's R&D adopts a continuous innovation approach, particularly involving exploring new needs and trends.

This is demonstrated by the launch of new R&D centers

worldwide, as close as ever to customers and the markets, as well as through internal events to promote knowledge and expertise sharing.





ZOOM

ON THE GLOBAL R&D

In order to meet specific customer needs in every region around the world, Roquette has deployed R&D centers in Europe, and more recently in the United States and in Asia. The latter centers build on the historical center based in Lestrem (France) and are at the heart of new markets that bear high potential for the Group. They have been entrusted with the mission of assisting with the development of products and solutions, building networks with local partners and institutes and exploring new opportunities linked to the emerging trends in these regional markets.

SCIENCE AND TECHNOLOGY FORUM IN LESTREM (FRANCE)

An internal forum bringing together all teams involved with innovation projects took place at 2016. This participatory event encouraged the sharing of experiences between the researchers, the Customer Technical Service teams and the project managers.

It helps the Group to bolster its capacity to work in a network setting, consolidate its expertise and align its global ambitions to customer

INNOVATIVE SOLUTIONS FOR THE FOOD. NUTRITION AND HEALTH MARKETS

CREATILICIOUS™ BAR, TOWARDS HEALTHIER LIFESTYLES

The CREATILICIOUS™ BAR, a tasting stand at trade fairs, is an attractive and efficient means of proving the benefits of the plant-based ingredients of the Roquette Group based on creative and delicious food concepts. By experimenting with the CREATILICIOUS™ BAR, visitors can evaluate and taste the innovative solutions applied to Roquette products.

IT ALSO SERVED AS THE OPPORTUNITY TO DEMONSTRATE ROQUETTE GROUP'S COMMITMENT TO CUSTOMERS, NOT ONLY AS A SUPPLIER OF INGREDIENTS BUT ALSO OF SOLUTIONS.

Among the 9 concepts developed with the application experts of the customer technical service:

- The delicious pancake made for sportsmen/women and elderly people. Easy to prepare, the mixture combines several sources of proteins, including the NUTRALYS® pea protein.
- The Virgin Mojito, a refreshing drink without sugar which facilitates intake of the daily recommended fiber amount thanks to the NUTRIOSE® soluble fiber.

The CREATILICIOUS™ BAR drew considerable interest among visitors during the past event of Health Ingredients Europe (Frankfurt, November 2016). Following this event, an online survey was conducted; the feedback was very positive:

- 100% of the visitors rated Roquette's solutions as "convincing" or "very convincing" after testing the food concepts.
- •87% would recommend Roquette to friends and colleagues.
- The most preferred concepts were #1 the protein-filled pancake and #2 the Virgin Mojito.



(REATILICIOUS BAR

For healthier lifestyles

More Protein



MULTIPLE SOURCES OF PROTEIN MUSCLE MASS MAINTENANCE > EASY TO PREPARE!



FIBRE INTAKE BOOSTER SUGAR-FREE REFRESHING DRINK

INNOVATIVE SOLUTIONS FOR THE FOOD, NUTRITION AND HEALTH MARKETS



BIOPHARMA: A KEY GROWTH MARKET

Biopharmaceutical products are becoming the heart of the **pharmaceutical industry.** These drugs from the biopharma sector (pharmacy branch linked to the preparation of biological products) have proven their revolutionary capacity by enabling the remission of rheumatoid arthritis and by facilitating the treatment of many cancers.

Biopharmaceutical products are experiencing the highest growth in the pharmaceutical industry.

THE TURNOVER

is estimated as

1278 billion dollars I

by 2020, i.e., over 24% of the current pharmaceutical market or double traditional pharmaceutical products (Persistence Market Research 2015, Evaluate Pharma 2016).

This growth is due to the remarkable efficiency of these products and to the few associated side effects when used in a clinical context.

The Roquette Group is a leading company in the pharmaceutical excipients and ingredients market. The new range of high-quality BioPharma products broadens the offer and helps keep patients alive, ensure their wellbeing and as such meets the priorities of the Roquette Group.

To meet the expectations of the biopharmaceutical market, significant developments were made in 2016 by the Roquette Group. Recently, several new products were launched in the European, American and Japanese markets, with the Quality documentation and packaging specific to BioPharma.

- LYCADEX® BioPharma dextrose
- PEARLITOL® BioPharma mannitol
- NEOSORB® BioPharma sorbitol



In order to satisfy all of its customers, the Group ensures procurement safety thanks to vertical integration, tests during production, optimal management of raw materials, reduction of any variability and ensuring a secure, reliable and traceable logistics chain.

NATURAL SOLUTIONS FOR MANY TECHNOLOGICAL APPLICATIONS

For industrial markets, Roquette offers innovative, sustainable and biosourced solutions.

BIOSOURCED PERFORMANCE FOR CARS

Roquette products are used in many application to assist you on a daily basis, e.g. in your toothpaste or the paper for your magazines. Did you know it is possible to find a Roquette product in your car?

Indeed, the Roquette Group manufactures components of the materials used in the dashboards of new cars with innovative designs, presented during the 2016 Paris Auto Show. Created by a Japanese company, the material used is partially biosourced as it is derived from POLYSORB® isosorbide. It resists bumps and scratches while offering a shiny finish without paint.

Produced in Lestrem (France), POLYSORB® isosorbide is a polyol obtained from sorbitol, a derivative of starch. Roquette is the leading global isosorbide producer, thanks to a patented process that ensures a high purity level of the product created. POLYSORB® isosorbide and its derivatives are used in a wide variety of materials to improve their technical properties.

They offer technological solutions both in terms of thermoplastics (polyesters, polycarbonates and TPU Thermoplastic Polyurethanes) and resins (such as polyurethanes, etc.)

In addition to its natural source and many technological assets, it has been demonstrated that POLYSORB® isosorbide is not harmful to health.



NEW BIOSOURCED SOLUTIONS FOR WATER TREATMENT

Used daily, water is a vital natural resource. In order to conserve it, Roquette proposes **efficient and sustainable biosourced** solutions, in many fields including water treatment and particularly for its clarification. Roquette develops many solutions through its NAIACLEAR® brand.



ZOOM CUSTOM-MADE SOLUTIONS IN TURKEY

In Turkey, Roquette recently began working with a local firm which had been researching

The initial research helped validate a promising added value.

This application is called Emulsion Breaking with NAIACLEAR® 200FA. It is a unique solution for the textile industry and serves to avoid heavy metals or chemical products during water

Roquette, through the NAIACLEAR® series, customers' needs.



OUR COMMITMENTS

OPTIMIZE OUR ENERGY CONSUMPTION

By installing energy-efficient solutions and using relevant renewable energies.

PRESERVE WATER

By optimizing our processes to minimize consumptions and installing efficient treatment technologies.

FURTHER REDUCE OTHER ENVIRONMENTAL **IMPACTS**

By implementing the most relevant solutions based on local specificities.

PERFORMANCE INDICATORS



Our industrial performance is at the heart of our concerns.

IN 2025

we are committed to ensuring that, compared to 2015, our energy efficiency improves by

and our water consumption per product ton reduces by

20%

At the same time, we are committed to implementing technical installations that produce less CO, thereby preventing

tons of CO, emissions by 2025.



INTERVIEW



JEAN-LUC GRIBOT HEAD OF GLOBAL HEALTH. SAFETY & ENVIRONMENT AND MEMBER OF THE SUSTAINABLE DEVELOPMENT COMMITTEE.



JEAN-PIERRE DUDA HEAD OF EXPERTISE & SUPPORT AND MEMBER OF THE SUSTAINABLE DEVELOPMENT COMMITTEE

SMALL STREAMS MAKE BIG RIVERS, EVEN IN INDUSTRY.

Just because Roquette creates value for all components of plantbased materials does not mean it cannot do better! It is due to this belief that for nine years the Group has been publishing its actions and its impact in its activity and sustainable development report.

"At the Group, we have decided to endow our actions and projects with more vision and coherence. We defined commitments which were published in 2015, and completed in 2016 by key indicators, to be met by 2025," describes lean-Luc Gribot.

The method is hinged on consistent transparency and progress. It is backed by cross-functional, multicultural and operational task forces. Specific indicators have been set up based on each of the Group's commitments: Sourcing, Acting, Biorefining and Innovating.

Roquette's ambition is to reduce its energy intensity by 10% by 2025, while encouraging the use of renewable energy, i.e. an expected overall economy of one million CO₂ tons. The Group also intends to reduce its consumption of water drawn from a natural environment by 20%.

How to proceed? "It is a continuous improvement process which incorporates progress. Roquette designs its plants itself to ensure that the new tools meet consumption goals. This also involves continuously improving our efficiency through better monitoring, better maintenance and equipment upgrades," says Jean-Pierre Duda, Head of Expertise & Support.

Sustainable development also involves initiatives in support of the communities near our various sites around the world. "We are always striving for a balance between the three pillars: the planet, people and **profit.** Let us reduce our CO₂ emissions, let us reduce our environmental impact; that will contribute to improving our productivity. Small streams make big rivers, even in industry," concludes lean-Luc Gribot.

COMMITTING TO THE ENVIRONMENT

Every day, the Roquette Group commits to minimizing the impact of its activities on the environment. For each one of the Group's industrial sites, the environmental approach is based on ISO 14001 and four plants are certified. Lianyungang (China), Benifaió (Spain), Panevezys (Lithuania) and Pantnagar (India). An approach on improving the energy performance (ISO 50001) was initiated in Europe in 2015, and Benifaió (Spain) was the first site to obtain certification. In 2016, the four sites in France were certified.

AIR: IMPROVING ITS QUALITY

Roquette strives to limit major impacts on the atmosphere by its plants.

Dust emissions are closely monitored by the Roquette Group and many installations are equipped with highperformance dust control systems.

New investments were made in India at the Gokak site which take into account technical best practices to limit dust. The same goes for the Wuhan site (China). The replacement of coal boilers with gas boilers has helped reduce dust and CO₂ emissions.

Concerning NOx emissions, all gas boilers in the French plants have been equipped with new state-of-the-art low NOx burners, thus allowing Roquette to stay at the cutting edge of technology and to reduce atmospheric emissions.

In addition, the Lestrem site (France) has equipped its pilot plant with isosorbide with a biofilter that allows treatment of residual VOCs (Volatile Organic Compounds) on a peat



WASTE: MINIMIZING AND RECYCLING THEM

The activities of the industrial sites of the Roquette Group generate little waste. Indeed, as plant raw materials are the very engine of the Group's production, **maximization** of material efficiency is fundamental and they are fully recycled.

Besides reducing other waste at the source, Roquette sites are grounded in a territory and an ecosystem which counts numerous recycling cycles, thereby applying the concept of a circular economy.

Many practices illustrate this principle such as effluent methanization which generates energy or use of effluents rich in fertilizer materials to improve farm land.

This perfectly illustrates this cycle towards upstream **local agriculture** and thus serves to reduce use of chemical fertilizers and to improve the economic gains of the entire **sector**. In 2016, to further improve application management, a filter-press was installed in the Lestrem site (France) thereby reducing the amount of water in the product and limiting the use of lime.

As regards the remaining waste, the sites regularly improve the quality of source recycling and are consistently seeking recycling means that are more effective and environment friendly (composting, recycling, energy recovery).

WATER: A RESOURCE TO CONSERVE

Water is a precious resource and the Roquette Group is committed to conserving this vital resource in terms of extracting the various components of the raw materials used.

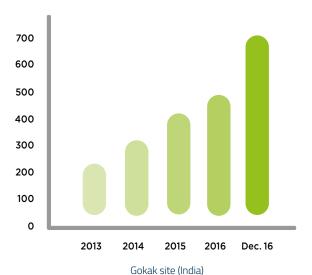
Investments have been made, especially in Italy and in Lithuania, in order to secure the supply of drilled water at these sites. The optimization of water consumption and respectful use of this resource is a constant commitment of a responsible industrial firm. For instance, at the Lianyungang site (China), condensed water from the air conditioning circuits is reused in the cooling towers circuit.

At the same time, Roquette continues to implement actions to reduce the environmental impact of its emissions. For example, at the Lestrem site (France), two major investments with a reach well beyond regulatory values, have been established in order to reduce the amount of phosphorous and nickel in water. To this effect, the site was assisted by the Artois Picardie water agency.



INCREASING RECYCLING

Recycled water: m³/day





Z00M A CHALLENGE FACING WATER IN INDIA

established the following principle: "reduce, recycle, reuse".

effluents of 10,000 m³ and the installation order to recover clean water and re-channel it



COMMITTING TO RENEWABLE ENERGY

Keenly aware of the impact of its business operations on the environment, the Roquette Group contributes to limiting global warming by using new and renewable energy.

WHAT ARE THE TYPES OF RENEWABLE ENERGIES?

Drawn directly from natural resources, renewable energy is primary, non-degraded energy, which is inexhaustible in the long run. It comes in many forms: living strength of water, wind energy, solar radiation, but also geothermal energy, heat from firewood, etc. These energies help reduce greenhouse gas emissions and use of fossil energy.

To this effect, the Group, through its commitment to a sustainable development approach, has been using various types of renewable energies such as biogas and biomass. From this year, Roquette has also been using **geothermal energy**, a process that serves to produce thermal or electric energy through the heat within the layers beneath the earth's surface, for the site in Beinheim (France) (see zoom).

As such, these renewable energies are recovered through the production of electricity, heat or both, thanks to cogeneration systems and/or traditional boilers.

THESE ENERGIES HELP REDUCE GREENHOUSE GAS EMISSIONS.

HOW DOES THE GROUP USE THESE ENERGIES?

Biogas (methane) is used as a substitute for natural gas, either directly in the boilers or in co-generation gas turbines. It is produced from equipment for treating aqueous effluents from the plants. **About ten methane** digesters are installed on the Group's industrial sites.

As regards biomass, it supplies many boilers: that is particularly the case in India, China, France and Lithuania. The boilers use wood or rice husk. **Supplying production** sites with biomass boilers can meet up to 100% of the required amount of steam and therefore contributes to limiting global warming.

For example, the Beinheim site (France) uses a biomass boiler besides geothermal energy. Use of firewood from a radius of approximately 100 km allows the plant to produce over 50% of the steam required for its industrial

This equates to avoiding the emission of 75,000 tons of fossil CO₂ into the atmosphere each year.

ZOOM



geothermal power plant for industrial activities.

This power plant, created in conjunction des Dépôts, is unparalleled in the world and serves as a genuine model of renewable energy for the industry.



... AND FOR INDUSTRIAL EXCELLENCE

A new momentum was initiated in 2016 to accelerate the improvement of the Roquette Group's results in terms of customer satisfaction, costs and quality.

TWO MAJOR KINDS **OF STRUCTURAL PROJECTS:**

"Reduction of foregone output"

A production line always experiences stoppage or slowdowns: preventive maintenance, product change, cleaning, breakdown, variability of raw materials, etc. This corresponds to energy and production losses. Roquette is therefore committed to reducing them in order to improve customer satisfaction: securing product delivery and competitiveness.

Managing process variability

The complexity of steering business lines as well as the variability of organic matter work entails a certain measure of variability in production. It generates additional costs in order to always guarantee impeccable quality for customers.

Roquette, through a reinforced central team, is setting up new tools and working methods to achieve even more in terms of these improvements.

LAUNCH OF AN INTERNAL ACADEMY

In order to speed up and ground these changes, an academy was launched to train most of the operational resources on the use of these new management tools and associated methodologies, designed to contribute to reaching the expected performance level.

Roquette holds central and local sessions to adapt the training to a culture and to ensure better efficiency.





ZOOM ENERGY PERFORMANCE IN GURNEE (USA)

thanks to ventilation units which have been

performance of the site while cutting costs. An economy of 12% of the overall energy use was achieved, which served to promote the continuous improvement and environmental commitment of the Roquette Group. The Gurnee plant also won an award in the "performance improvement" category for this project during the 2016 World Manufacturing Days, an event internal to the Roquette Group.



OUR COMMITMENTS

PUT HEALTH, SAFETY AND WELL-BEING AT THE HEART OF OUR CONCERNS

By continuing the implementation of world-class HSE (Health, Safety, Environment) management system and developing a culture in which people safety is a core value.

EMPOWER EMPLOYEES

By promoting dialogue, fostering engagement and developing skills.

BUILD ON OUR DIVERSITY

By valuing our differences and promoting the sharing of best practices in a multi-cultural network.

DEVELOP OUR ACTIVITIES WITH THE LOCAL COMMUNITIES

By partnering with our local communities and contributing to their development through sustainable relationship.

PERFORMANCE INDICATORS



Safety is one of our priorities.

we are committed to achieving a Frequency Rate 1(*) of

and a Frequency Rate 2 (**) of

Every year, we implement our commitment to local populations and communities by supporting a minimum of

projects or activities.

stoppage per million hours worked

(**)number of accidents notified



INTERVIEW



LYNN KRATTIGER

HEAD OF HR - GLOBAL SUPPLY CHAIN. SWITZERLAND AND FOUNDATION AND MEMBER OF THE SUSTAINABLE DEVELOPMENT COMMITTEE.

HUMAN RESOURCES ARE A KEY LEVER FOR DRIVING THE POSITIVE DEVELOPMENT OF THE ROQUETTE GROUP.

Lynn Krattiger joined Roquette in June 2016 as the new Head of Human Resources of the global supply chain function, in Switzerland as well as of a Global Business Unit. Prior to this. Lynn had been working at a firm that globally markets natural and organic cosmetic and well-being products, a brand that is well-known for its sustainable commitments. This is a commitment she now firmly sustains under the Roquette banner.

In an international Group strengthened by new talents and endowed with a renewed organization, the challenge at hand is considerable: "The Group is undergoing an extremely dynamic growth phase. Many employees have been present for a long time and have exceptional skills. Others like myself, who arrived recently from very different backgrounds, have other skills. They should all be combined and used to drive this very positive development!" says Lynn Krattiger. This is one of the goals of the new collaborative platform, "ONE", through which employees can find a lot of information linked to the Group's activities, discuss among themselves and ask questions. Another example: the Sustainable **Development Committee convenes** the representatives of the main global functions every two to three months,

with real participation in the decisionmaking process.

Roquette also intends to boost its interactions with local communities.

"We work increasingly harmoniously with the communities near our industrial sites," states Lynn Krattiger, who cites the example of the involvement of the Group's staff in Keokuk (USA) on Earth Day in cleaning the city.

Another crucial issue for Roquette: **safety of people**. In 2016, the number of accidents without stoppage declined and the seriousness of the accidents with stoppage significantly declined. These two indicators are at the best level ever in the Group's history.

"The frequency rate of accidents with stoppage per million hours worked is 2.2. That is three times less than the average in the American food industry," indicates Jean-Luc Gribot, Head of Global Health, Safety & Environment. "Our ambition is for this indicator to be less than 1 by 2020, then quickly to the level of the best companies worldwide!"

ENCOURAGING LISTENING SKILLS AND DIALOGUE

THE COLLABORATIVE MODE: FACILITATING EXCHANGES AND DRIVING PROJECTS

The Group continues its development while revolutionizing its working methods.

Changes in working methods and cooperation is at the heart of the Group's development.

To support the transition of the business towards a global business, where all functions share their information, streamline their practices, where collaboration is easier, voicing opinions is encouraged and where every individual feels responsible, the business needed to endow itself with a collaborative platform to match its ambitions.

Launched in June 2016, the ONE digital platform provides all staff members with immediate and seamless access to information about the Group and to shared tools, with the aim of simplifying communication and collaboration, ensuring data reliability and securing document sharing.



Developed in cloud mode, the portal is accessible from anywhere and from any device, enabling each person to be autonomous in order to contribute to the life and success of the husiness.

Three pillars: communication, collaboration and personal efficiency.

The communications teams along with the IT and HR teams have defined and set up a communication, training and support program on how to use this new tool. It consists of driving the development of collaborative applications at Group level and enabling employees to enhance their digital skills. The company thus set up help sessions open to all. All of this has created a dynamic around these new digital tools and grounded the good practices of "collaborative life."

The digital turn had been adopted in 2012 with the roll-out of Office 365. The ONE portal has boosted individual and collective performance by instilling coherence between the

THE DIGITALIZATION OF ROQUETTE BOOSTED BY THE EXPERIENCE AND SATISFACTION OF ITS EMPLOYEES!

Laurent SZCZEPANIAK, Global Project Leader



TRAINING AND TRANSFERRING KNOWLEDGE



Training – human investment in knowledge and skills – forms a key aspect of the professional and personal development of employees. It constitutes a real investment for the company with instant positive returns in terms of work organization and performance. At the crossroads between what the company needs and the people who form it, it makes it possible to respond to the requirements of internal and external change (technological, organizational, professional, etc.) and to support the company's development, while optimizing and developing employee skills.

The Roquette Group implements training actions that correspond to its immediate or future needs for skills.

These are divided into major categories: professions and techniques, managerial development, foreign languages,

desktop skills, personal development (speaking, time management, etc.).

These can be mandatory, such as in the framework of certification or authorizations, in areas such as safety and

ZOOM SENIOR-JUNIOR **COLLABORATION**

Developing knowledge based on experience and facilitating its transfer, entails acting on the training process, work organization and collective dynamics of a company.

When an employee retires after spending their entire career at Roquette, it usually entails the loss of knowledge and experience concerning operations or procedures. Therefore, the Group has set up actions to enable seniors, nearing retirement, to share their knowledge with juniors.

This is namely the case in Vecquemont (France), where a senior manager of a purification plant shared his knowledge with a junior. This exchange led to a **book**, describing all of the information necessary for the proper functioning of the purification plant in general. **The document was then shared** with all of the other production sites of the Group.

This methodology was reproduced for other procedures, such as for wheat starch processing.



Manufacturing Awards video clip on knowledge transfer

KEY FIGURE: AVERAGE HOURS OF TRAINING PER EMPLOYEE

PROMOTING DIVERSITY



The Roquette Group, driven by its 8000 employees across the world, embraces diversity as a major strength. Indeed, it is a genuine source of wealth for all. Diversity is also a real performance lever to promote: each profile is an asset for the Group. To this effect, regardless of origin, age, capacity, etc. the employees of Roquette are united by a common passion: a passion for the job.

"VIEWING DISABILITY DIFFERENTLY" **CAMPAIGN**

For almost nine years, in France, about fifteen employees have been part of a group known as SACHa (knowing how to assist each disability), based on the theme of disability in the workplace.

In 2016, SACHa established a quarterly newsletter in order to:

- Raise awareness about Roquette's ambitions in terms of disability;
- Testify about the concrete actions implemented with regard to disability;
- Raise awareness among all employees.

Another activity during the year was the "viewing disability differently" conference, which was facilitated by some of the members of SACHa and enabled employees to be introduced and informed about this issue.

> KEY FIGURE: PERCENTAGE OF WORKERS WITH A DISABILITY IN FRANCE

WE WOULD LIKE TO MOBILIZE THE MEANS NECESSARY FOR DEMYSTIFYING DISABILITY AND TO CREATE A TRUST-BASED ATMOSPHERE BY ENCOURAGING EMPLOYEES TO EXPRESS THEIR OPINIONS ON THE SUBJECT.

Angélique CAPELLE, member of SACHa



SUPPORTING LOCAL COMMUNITIES





EARTH DAY: A KEY ENVIRONMENTAL EVENT

On April 23, 2016, the city of Keokuk came together for the ninth edition of its annual event: cleaning the city.

Aimed at protecting the environment, this event brings together volunteers to collect garbage and recyclable materials in the city on the occasion of Earth Day. The Roquette Group co-sponsors the event annually and employees of Roquette's Keokuk plant have been participating in the event annually since its creation. **This** action demonstrates the Group's general commitment i.e. to work in harmony with local communities.

To this effect, approximately 250 volunteers including 30 Roquette Group employees and their families met at a local park to sign up and receive safety instructions and equipment, then went on to clean the affected areas in the city's center for a period of two hours.

The volunteers collected a large container full of garbage, a load of recyclable elements and another one with tires.

This event around sustainable development brought together volunteers for a day filled with sharing and good cheer!

SHARING & SMILING

In Spain, in hospitals in Valencia, Roquette volunteers, accompanied by professional clowns, **visited sick children** to bring a smile to their faces. The clowns are part of a non-profit association called Payasospital: they mainly visit hospitals with children with cancer and other illnesses that require long hospital stays.

This social measure conducted by Roquette employees every year-end helps distract about a hundred children in three different hospitals in Valencia. The bright colors, puppets, red noses and laughter help transport these children to another realm for a brief time.

Every year in Spain, employees of the Roquette Group share a special emotional moment, which thrills the children.



INAUGURAL OPEN DAYS IN CHINA

From September to November 2016, the Roquette production site in Lianyungang (China) held open days for the public.

They were designed for representatives of local residences, university students and professors, as well as pre-school children. The local media and official authorities also participated in the events.

About 250 people visited the central laboratory, the different manufacturing plans and the offices on the Roquette site in Lianyungang. These people discovered the cutting-edge technologies used in the production lines, standardized quality and safety control at the site. They also had a chance to discover the range of products and their applications, as well as the high-level quality control practiced at the site.

After this visit, the feedback was very positive. The visitors now have a better understanding of the history and culture of the Group. They learned about the broad range of their everyday products that contain Roquette ingredients.

As such, in China, the Roquette Group is establishing trust-based relations with the local community.







AN INITIATIVE SHARED WITH CHILDREN WITH HEARING **IMPAIRMENTS**

In Ahmedabad (India), Roquette partnered with local NGO "Umang Education and Research," a center for people with hearing impairments.

The school's ambition is to offer the best possible education to children with hearing impairments. It helps them become active members of society and to lead an independent and fulfilled life. The school receives hearingimpaired children aged between 15-18, regardless of their religion, social status or gender, from Ahmedabad and surrounding areas. Employees of the Roquette Group help the school on a volunteer basis, in addition to the financial support offered by the Group.

On August 26, 2016, Sophie Ancelin, Senior Vice-President Human Resources, Amitabh Tiriar, Head of IMEA Area Coordinator, and Marc Dilly, Head of Integration & Strategy for IMEA, visited the premises of the school. A team made up of employees from different departments of the Roquette Group also held a talent competition. The hearing-impaired children were thrilled to participate and it served as an opportunity for all to share a cheerful moment together.

In India, in line with the Corporate Social Responsibility (CSR), Roquette implements many actions along with the local communities.

SAFETY

Each member of the Roquette community contributes to the zero accident goal! In 2016, Roquette was keen on demonstrating on a daily basis that health and safety are essential for each employee and contribute positively to the sustainability of the Group's overall ambitions.

2016 results:

2016 was consistent with 2015. Indeed, the Group confirmed the significant improvement in terms of the frequency rate of accidents with or without stoppage (TF2): 4.99 in 2016 vs. 5.24 in 2015. However, the battle has not been won. A slight deterioration was noted in the number of accidents with stoppage in 2016 compared to 2015. Although the seriousness of these accidents significantly declined, **31 accidents** with stoppage among the 8,000 employees of the Group were recorded.

The Group is convinced that each employee plays an essential role in terms of their own safety and that of their colleagues.

Some examples of prevention measures to progress towards Zero **Accidents:**

- Progress training on the impact of each person's conduct. This initiative concerns over 1,400 managers and staff in the 4 regions. The latter were encouraged to be actively involved in the day-to-day safety at their sites.
- An overall measure led every site in Europe to stop working for two hours. The time spared as a result was used for discussions between managers and operational staff

- in the field, which helped define various prevention and risk mitigation measures.
- The managerial teams increased visits on safety conduct. They were also conducted by the Management teams (Gemba Walk) thus enabling a stronger management presence in the field.
- In early 2016, Roquette developed a new approach for all its employees to help identify hazards: the STOP 5. This tool was the object of a workshop for the main managers of the Group during the Roquette Management Forum.
- "Safety" board games were developed and presented during the Manufacturing Days (internal event). "One Lock-One Life" aims to make people familiarize themselves with the best consignment practices (leading cause of our most serious accidents). "Risk Control" is a game whose goal is to classify incidents and accidents based on their real consequences and especially to establish their potential seriousness.

• The Manufacturing Awards (competition launched in 2016 at the company) was quite a success: 32 entries were submitted in the HSE (Health, Safety and Environment) category. The "Gemba Walk" project of Cassano received the HSE Award, and a very ingenious project from Beinheim was rewarded by a Special Jury Prize.

All of these progress measures, included in the Group's HSE strategic plan, contribute and will contribute to raising Roquette to the level of the best companies in the world in terms of health & safety.

KEY FIGURE:

ACCIDENTS WITH STOPPAGE PER MILLION HOURS WORKED IN 2016







HOW DOES IT WORK?

I SEE **AN INCIDENT**

I TAKE A PHOTO OF IT

> **I COMMENT** MY PHOTO

I SEND IT USING THE APPLICATION



ZOOM IN LITHUANIA: AN INNOVATIVE AND INGENIOUS TOOL FOR SMARTPHONE

In 2016, the Panevesys site in Lithuania obtained efficient results in terms of safety: no accidents with stoppage were recorded during the entire year. To this effect, it was rewarded by the European association of the starch industry, Starch Europe.

This result is the fruit of many measures established at the Lithuanian site. For example, a useful application for smartphones called "Workplace Safety" was launched in late 2015 and can be used by every employee. It is used to anonymously report a risky situation that could potentially lead to an accident in the future.

The location is recorded as well as a photo depicting the anomaly. It is then immediately submitted to the team leader who analyzes it immediately and seeks the necessary competent resources.

The use of this tool motivates all Lithuanian employees to be responsible for each other and to act fast in case of a risky situation.

This ingenious and innovative application was shared as a good practice within Roquette's global network of plants.



ENVIRONMENTAL

		2016	2015	GRI
Fossil energy used				
Electricity	GWh	2,401	2,357	G4-EN3
Natural gas	GWh	7,629	8,073	G4-EN3
Domestic heating oil	m³	121	163	G4-EN3
Coal + Petcoke	kt	366	352	G4-EN3
Renewable energy used				
Wood	kt (100%DM)	109	114	G4-EN3
Rice husk	kt	195	94	G4-EN3
Energy produced				
Electricity	GWh	1,529	1,503	G4-EN3
Biogas	GWh	79	86	G4-EN3
Pumped water				
Process water (rivers, aquifers, urban network)	10 ⁶ m ³	59.20	61.60	G4-EN8
Water returned	10^6m^3	40.00	46.50	G4-EN22
Ratio water returned/pumped water	%	68%	75%	
COD discharged	t/kt of starch	1.45	1.47	G4-EN22
Air				
CO ₂ emissions				G4-EN16
Scope 1 & scope 2	teq CO ₂ /kt of starch	795	753	
SO ₂ emissions	t/kt of starch	0.30	0.50	G4-EN21
NOx emissions	t/kt of starch	1.00	0.66	G4-EN21
Dust	t/kt of starch	0.26	0.24	G4-EN21
Waste				
Hazardous	t/kt of starch	0.27*	0.13	G4-EN23
Non-hazardous	t/kt of starch	11	12	G4-EN23
Recycled (except spreading)	t/kt of starch	32	38	G4-EN23
Spreading	teq 100%DM/kt of starch	39	41	G4-EN23

^{*}increase due to regulatory changes for certain types of waste in China

PERFORMANCE INDICATORS

		2016	2015	2025 Goal
Biorefining Indicators				
Energy efficiency	Ratio	0.98	1.00	0.90
Specific water consumption	Ratio	1.24	1.24	1.00
CO₂ tons avoided annually	teq CO ₂ avoided	706,035	702,274	1,000,000
Sourcing Indicator				
% of "sustainable" raw materials	%	6%	Not calculated	20%
Innovating Indicators				
% of projects meeting "sustainable chemistry" criteria	%	53%	Not calculated	70%
% of solutions offered to our customers meeting the Sustainable Development Goals of the UN	%	62%	Not calculated	80%



SOCIAL DATA

	2016	2015	GRI	Comments		
Workforce (Entire Group – total permanent staff+fixed-term contract staff as of Dec. 31)						
Per geographic region						
Europe	4,955	5,012	G4-10			
America	532	494	G4-10			
Asia	2,522	2,464	G4-10			
Group	8,009	7,970	G4-11			
Professional equality (Entire Group – total permanent staff+fixed-term contract staff as of Dec. 31)						
Male Employees	6,314	6,364	G4-LA12			
Including % of managers	15.9%	12.0%	G4-LA12	Figures excluding India in 2015		
Female Employees	1,695	1,606	G4-LA12			
Including % of managers	12.4%	12.3%	G4-LA12	Figures excluding India in 2015		
Ratio of Women/Men	26.8%	25.2%	G4-LA12			
Hires/retirements*(Entire Gro	лb)					
Hires	650	246	G4-LA1	Figures excluding India in 2015		
Resignations	247	162	G4-LA1	Figures excluding India in 2015		
Layoffs	127	178	G4-LA1	Figures excluding India in 2015		
Death	13	9	G4-LA1	Figures excluding India in 2015		
Retirement	38	139	G4-LA1	Figures excluding India in 2015		
Other departures (common agreement, transfers to other sites, etc.)	87	22	G4-LA1	Figures excluding India in 2015		
Training (Limited scope)						
Hours/employees	22.5	20.5	G4-LA9			
Integration of workers with disabilities (France scope)						
Workers with disabilities	181	187	G4-LA12	Figure approved in 2016		
Safety (Entire Group)						
Days lost	1,108	1,992	G4-LA6			
Severity rate	0.08	0.14	G4-LA6			

PERFORMANCE INDICATORS

146101410160	2016	2015	2025 Goal
Acting Indicators			
Frequency rate of work accidents with stoppage (TF1)	2.24	1.80	0.5
Frequency rate of work accidents with and without stoppage (TF2)	4.99	5.24	1.5

REPORTIVG

Since 2008, the Roquette Group has been publishing a Sustainable Development & Activity Report.

REPORTING METHOD

To ensure the reliability of our information, the Roquette Group applies several methods prepared by the Group Human Resources and Industrial Divisions.

These documents define the perimeters and provide, in a manner that is precise and easy to understand, the definitions of the indicators chosen in this report and in the management reports.

Under the application of the French law known as Grenelle II (article 225), extra-financial reporting became a requirement for the company in 2013.

To this effect, the indicators and the information published in the management report are reviewed by one of our independent external auditors, KPMG. Much of the information is also listed in this report.

Lastly, Roquette was inspired by the "G4 Guidelines" of the Global Reporting Initiative (GRI), and our indicators are listed according to the GRI classification (workforce indicators G4-10 and G4-11, for example).

THE PERIMETERS

Several perimeters have been defined, based on the indicators. Social indicators: the Group perimeter includes the legal entity ROQUETTE FRÈRES and all its sites controlled directly or indirectly with a stake of more than 50% at December 31 of the year of reference.

The restricted perimeter includes the legal entity Roquette Frères and all its industrial sites integrated into the Roquette Group for at least two years at January 1 of the year of reference, controlled directly or indirectly with a stake of more than 50%, and employing a workforce of more than 50 employees.

Environmental indicators: the perimeter defined concerns all industrial sites integrated into the Roquette Group for at least 3 years at January 1 of the year of reference, controlled directly or indirectly with a stake of more than 50%, and for which the energy consumption is above 1,000 tons equivalent petroleum (TEP) per year (and above 5,000 TEP/year for the two last years that preceded the fiscal year for the three performance indicators).

THANKS TO ALL OUR CONTRIBUTORS

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