



**OXITENO**

Evolution by chemistry



# SUSTAINABILITY REPORT **2018**



# Table of contents

## MESSAGE FROM LEADERSHIP 04

## OXITENO – 45 YEARS 06

- 08 | Timeline
- 09 | Map of operations

## ABOUT THIS REPORT 12

- 13 | Relevant themes

## HIGHLIGHTS OF THE YEAR 16

- 17 | Rewards and recognition

## CORPORATE GOVERNANCE 19

- 19 | Governance structure
- 23 | Strategy
- 23 | Ethics and compliance
- 26 | Management of risks

## BUSINESS PERFORMANCE 28

## PRODUCTS AND SERVICES 32

- 33 | Agrochemicals
- 36 | Home Care and I&I
- 37 | Personal Care
- 38 | Oil and Gas
- 39 | Coatings

## PEOPLE 40

- 41 | Staff
- 46 | Management of organizational culture and environment
- 46 | Development of leaders and talents
- 50 | Involvement support

## ENVIRONMENT 54

- 56 | Power
- 57 | Air emissions
- 60 | Water and liquid effluents
- 62 | Materials
- 64 | Waste

## SAFETY 68

- 69 | Occupational Safety
- 72 | Product Safety
- 73 | Process Safety

## VALUE CHAIN 74

- 75 | Suppliers
- 76 | Clients
- 77 | Distributors
- 77 | Communities

## GRI CONTENT INDEX 78

## CREDITS 86

# MESSAGE FROM LEADERSHIP

[102-14]

We have been leaders of the sector for forty-five years in Latin America, which demonstrates our capacity to answer to clients' needs and desires, as well as the increasing social, environmental, and market requirements. At the same time, this condition increases our responsibilities and means encouragement to continue the search for more efficiency, ethics, and portfolio solutions – aspects that allow us to contribute to the wellbeing of people through chemistry. The result is strategic and structural developments, strengthening of partnerships with our clients, constant modernization of equipment, and operational digitalization of our industrial units and improvement of our presence in relevant and promising markets. Today, we are able to join global megatrends in the business segments for which we provided solutions. [102-14]

The year 2018 will be a landmark in our history because of the implantation of projects that make us stronger and increase our expectations about the future. We opened our alkoxylation plant in Pasadena, USA, to produce tensoactives for the industries of agrochemicals, personal care, domestic and industrial cleaning, oil and gas, paints and varnishes. In five years, we invested US\$200 million in the alkoxylation plant. The new unit will have a nominal production capacity of 120 thousand tons and places us in one of the major global markets of hygiene, cosmetics, agricultural pesticides, oil and gas. The privileged location of the Pasadena unit, allied to the high technology and our diversified portfolio, guarantees our competitiveness. The regional office in the city of Houston, State of Texas (USA), and the Research and Development (R&D) center in Hattiesburg, Mississippi (USA), allowed an important position close to the clients, as well as experimentation and adjustment of products and services to local specificities.

Another reason for celebration is the maturity of our Project Evolution, consisting of a transformation of the organizational structure that started two years ago. The executive boards created based on our strategy – Management and Control; Technology and Operational Excellence; Marketing and Innovation; Human Resources at the global level, as well as regional boards in the USA, MAC (Mexico, Andes, and Caribbean region), and Mercosul (Brazil and Uruguay) allow us to comply with two fundamental objectives for growth simultaneously: on one side, to consolidate and unify processes and policies that result on scale gains, transparency, and reliability; on the other side, to give more autonomy and assign additional responsibilities to the regional boards, so they may develop customized solutions adjusted to market characteristics, providing the means to explore further and/or speed up our innovation processes, making our relationship with clients stronger.

The increasing number of co-creation projects result in an exchange of knowledge about the behaviors and demands, preparation of tailored solutions for our clients and final consumers. Therefore, in this scenario, everybody wins, and we are able to convert science into products and services. Our investment is constant to maintain our industrial units prepared to do more, better and with less consumption of resources, decreased level of residue and emission generation, reinforcing our commitment with the sustainable development. In 2018, we made important investments in our R&D center, located in Mauá (Brazil), including last-generation equipment that is fundamental for the development of new market solutions.

Any improvement and achievement make sense only if we act with integrity and safety as a company where the employees are proud to work. We want the employees to be strongly involved and committed to our principles and strategy. For this reason, throughout the year, we focused on the increase in our channels to communicate with the employees. We created a corporate social media – with the adhesion of up to 92% of our personnel – a live program where we show our directives and results, with a space (What's Next) to answer doubts, in addition to an increased number of face-to-face meetings between the leadership and teams of all units. Also, we performed a Maturity Diagnosis of our professionals about safety – one of our priorities – that in 2019 is resulting in action plans. Along the same lines, note that we obtained the certification OHSAS 18.001 for the Tremembé (Brazil) unit, representing the conclusion of the certification process for the Brazilian industrial units. |102-14|

We developed a comprehensive work to disclose the new versions of the Code of Ethics and Compliance of Ultrapar Participações S.A. (Ultra) and a series of meetings with our employees about their responsibilities and roles, based on our corporate reorganization, where the decisions are increasingly more decentralized and faster. We executed a series of initiatives resulting from the Climate Research. Another improvement is the planning of leaderships, at all levels, with the review of

processes and performance evaluation, career and succession, as well as the creation of a database with positions for internal recruiting, initially in Brazil, but which shall extend to all the regions where we act.

In the operational and financial performances, we successfully faced different challenges in several countries where we operate, whether directly or indirectly, which have been affected by economic and/or political uncertainty. In spite of the 3% retraction in the commercialized volume, our net income grew 20% , reaching R\$4.7 billion and an Ebitda of R\$625.4 million, 111% higher as compared with the previous year. The results are evidence of our maturity and the relevance of our competitive advantages to overcome less than favorable moments. The strategic presence combined with the industrial intelligence, innovation and diversified provides us flexibility and safety to act and proceed with responsibility and assertiveness.

This report details the actions and results for 2018. Therefore, we wish the document to reflect the amount of planning invested in our processes and projects, which we execute in alignment with our purposes in partnership with the stakeholders. We appreciate the confidence of all our stakeholders, and hope we continue deserving it.

**Have a good reading!**

**João Parolin**  
Oxitenó  
Superintendent Director







OXITENO –  
45 YEARS

After 45 years of existence, completed in 2018, Oxiteno is the leader in Latin America in the production of tensoactives and chemical specialties that are used in different products, such as detergents, humidifying agents, emulsifiers, formers or dispersants of cosmetic foam, agricultural pesticides or paint additives, contributing to increase society's

productivity, life quality, hygiene, wellbeing and health. The company develops solutions for the segments of Agrochemicals, Personal Care, Home Care and I&I, Oil and Gas, and Coatings, exporting for more than 50 countries. Our portfolio includes over 500 products, of which 18 were launched in 2018. [|102-1](#) | [|102-2](#) | [|102-6](#) | [|102-7](#)

## Oxiteno in people's lives

### What are tensoactives?

They are agents that influence the contact surface between two liquids, allowing the formation of emulsion between fluids (mixture of immiscible liquids). They are commonly used in the industries of Personal Care, Home Care and I&I, Coatings, Agrochemicals, among others.

### Wellbeing through chemistry



# Timeline

**Oxiteno was created** at the beginning of the decade of 1970 through mergers and partnerships with different chemical companies.

The company starts operating in 1973, after years of preparation, at the **Petrochemical Complex of Mauá** (Brazil).

In 1978, Ultra participated in the creation of the Petrochemical Complex of Camaçari (Brazil), currently designated **Industrial Complex of Camaçari**, with the inauguration of Oxiteno Nordeste.

1970

Oxiteno adds the “**chemical specialties**” to its portfolio

The center of Research and Development (**R&D**) in Mauá (Brazil) and the **plants of Tremembé** (Brazil) and **Triunfo** (Brazil) are opened.

1980

The company becomes the main producer in Latin America of **ethane oxide**, an important substance for many industrial production chains.

It also starts investing in **tensoactives** to fulfill the demand of **cosmetic and detergent** markets, with special attention to these products through a new plant in Tremembé (Brazil).

1990

In 2002, with the incorporation of shares, **Ultra** became the holder of **100% of Oxiteno**.

The **assets** in **Mexico** and **Venezuela** are bought in 2007, and next year the **oleochemical unit** – the first with this profile in Latin America – opens and starts producing chemical specialties from **renewable raw material**.

2000

Also, the international developments occur with commercial offices opened in **Argentina, Belgium**, and USA and, in 2012, also in the USA, a chemical specialty unit of **Pasadena Property, LP** is purchased; and **American Chemical** in Uruguay.

In 2018, Oxiteno opened its plant in **Pasadena, Texas, USA**.



## Map of operations



\* As of 2019, the operations in Venezuela were not part of Oxiteno anymore.

With registered offices in São Paulo, Brazil, the company maintains 12 industrial units and 3 Research and Development (R&D) centers, located in Brazil, Mexico, and United States. The units are organized into 3 regions, as follows. In 2018, these structures counted with 1,943 contracted employees and 799 outsourced workers. |102-3 | 102-4 | 102-8|



**12** Industrial units



**3** Research and Development (R&D) centers



**9** offices

## **United States**

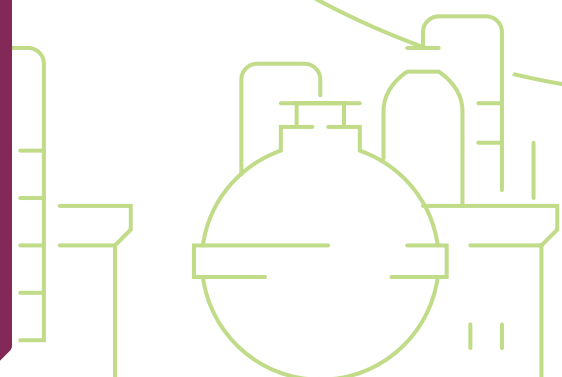
Industrial operations in Pasadena, TX, the R&D center in Hattiesburg (MI) and the commercial office in Houston, TX.

## **MAC**

Industrial operations in Mexico (3) and Venezuela (1), the R&D center in Guadalajara (Mexico) and commercial offices in the city of Mexico, Mexico, Bogotá, Colombia and in Caracas, Venezuela.

## **Mercosul**

Industrial units in Brazil (6) and Uruguay (1), the R&D center in Mauá, Brazil and the commercial offices in Buenos Aires, Argentina, Montevideo, Uruguay, and São Paulo, Brazil.





A Brazilian company  
making global  
**45 years** of a  
successful history!

Also, **Oxitenó**  
maintains other  
two commercial  
offices; one in  
**Brussels** (Belgium)  
and the other in  
**Shanghai**, China.

### Strategy

- To increase the relevance of specialties in the sale mix.
- To improve the performance of the commodities portfolio.
- To invest in organic growth initiatives to strengthen/improve the existing market position.
- To promote the organizational and people development.



## ABOUT THIS REPORT

For the fifth consecutive year (the last document was published in 2018), Oxiteno discloses its sustainability report as a way to disclose to the public its information about strategy, performance, and commitments in the economic, social, and environmental areas. These are references that reflect the contribution of company for the sustainable development, and that can influence the evaluations and decisions of their stakeholders. |102-51 | 102-52|

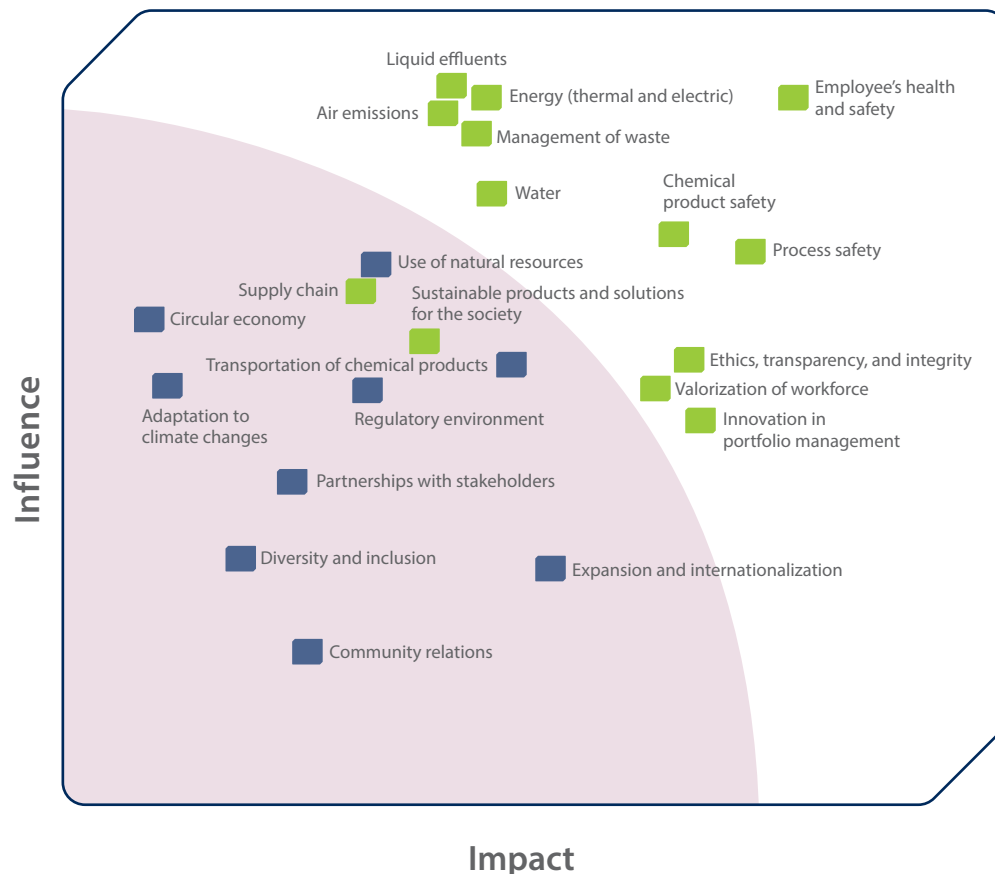
This document has information about the period from January 1 to December 31, 2018. This report was prepared according to the Core of the Global Reporting Initiative (GRI), Core option, replacing GRI G4, however, without significant changes as compared to previous reports. |102-48 | 102-49 | 102-50 | 102-54|

The selection of themes and data reported considers the result of the relevance process performed early in 2019, including the analysis by the specialized consulting company of internal and external materials to list the most relevant topics for the company in its activity sector. Based on the above, sustainability indexes were considered, interviews with seven executive officers of Oxiteno were made, and an online research with the employees took place. |102-40 | 102-42 | 102-43|

The process resulted in a priority order for the 23 themes considered to be essential. In comparison with the previous survey – dated 2015 – the new relevant themes were as follows: Process safety, Supply chain, Innovation of portfolio management, Energy (thermal and electric), Liquid effluents, Residue management, Air emissions, Water, Ethics, Transparency and integrity.

## Relevant themes |102-44 | 102-46 | 102-47 | 103-1|

### Relevance 2019





Note: Top management has declared Supply and Product chains and sustainable solutions for society to be material topics. This last theme, as

well as Innovation in portfolio management, has no relation with the GRI topics shown in the table below. [|102-46|](#)

Relevant themes related to GRI topics				
Relevant theme	GRI topic	GRI Standards	Impact within Oxiteno	Impact outside Oxiteno
Employee's health and safety	Health & safety	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9 and 403-10	Yes	No
Process safety	Health and safety/ Client's health and safety	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10 and 416-1	Yes	Yes
Chemical product safety	Health and safety/ Client's health and safety/Labeling of chemical products	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10, 416-1, 417-1 and 417-2	Yes	Yes
Energy (thermal and electric)	Power	302-1 and 302-3	Yes	Yes
Liquid effluents	Effluents and residues	306-2, 306-3 and 306-40	Yes	Yes
Management of waste	Effluents and residues	306-2, 306-3 and 306-40	Yes	Yes
Air emissions	Emissions	305-1, 305-2, 305-3, and 305-5	Yes	Yes
Ethics, transparency, and integrity	Anti-Corruption	205-1, 205-2, and 205-3	Yes	Yes
Water	Water	305-1, 305-2, 305-4 and 305-5	Yes	Yes
Supply chain	Purchase practices/ Environmental evaluation of suppliers/Social evaluation of suppliers	204-1, 308-1, 308-2, 414-1 and 414-2	Yes	Yes
Innovation in portfolio management	No topic related to this theme.	No topic related to this theme.	Yes	Yes
Sustainable products and solutions for the society	No topic related to this theme.	No topic related to this theme.	Yes	Yes
Valorization of workforce	Jobs/Training and education/Diversity and equal opportunities/ Non-discrimination	401-1, 401-2, 401-3, 404-1, 404-2, 404-3, 405-1, 405-2 and 406-1	Yes	No

The information contained in this report were not externally checked and include particularly the performance in Brazil, the most significant operation, although they extend to the international units as far as possible. The holding company Ultrapar discloses the financial

statements that contemplate all Oxiteno units. [|102-45|](#) [|102-56|](#)

For any doubt and questions about the document, please submit an e-mail to [oxiteno@oxiteno.com](mailto:oxiteno@oxiteno.com). [|102-53|](#)



# HIGHLIGHTS OF THE YEAR

**Increment of 20%** in net income (totaling **R\$4.7 billion**) as compared with 2017.

**Increase of 30.5%** of gross profit that reached **R\$990.7 million**.

**Evolution of 111%** of Ebitda, which was **R\$625.4 million**.

**Restructuring** of the strategic business plan.

**Creation of Oxiteno Compliance Management**, incorporated to the **Management** and Control Board. Up to that date, the Compliance area was included in the Ultrapar Participações S.A. (Ultra) structure.

**23%** of **raw material** of renewable origin and **35%** of products contain **renewables**.

**75%** of the electric energy consumed **comes from renewable source**.

Investments in plants with **modern design**.

**Decrease of 70 thousand** annual tons of greenhouse gas emissions.

**Diagnosis** of Maturity in Behavioral Safety to identify the level of adherence to the good practices **at the units in Brazil, Uruguay, and Mexico**.

**Decrease of 57%** of lost time accidents as compared to the previous year.

Development of social projects with the surrounding communities. **Highlight to Baú das Artes**, in Camaçari, which positively affected **1,740 children and their families** with the distribution of **educational kits for children**.

In partnership with neighbor companies, **Oxiteno** performs the industrial symbiosis and **decreases the consumption of fossil energy** by using the residual gas.

## Rewards and recognition

***Maiores e Melhores, Exame:*** Oxitenó Nordeste was indicated as best company in Chemical and Petrochemical sector by *Exame* magazine, which recognized the performance of the companies in 2017.

***Valor Inovação Brasil Award:*** for the fourth consecutive time, Oxitenó was recognized as one of the 150 most innovative companies in the country. It was the 31<sup>st</sup> company in the general ranking and is one of the five first companies in the category Chemical and Petrochemical, Packaging, Paper and Cellulose. The recognition was assigned by the newspaper *Valor Econômico*.

***ICIS Surfactants “Newcomer” Award 2018:*** the company received the award for the project of the new plant in the United States. The award is granted by the Independent Chemical Information Service (ICIS), one of the most important global providers of information about the chemical and petrochemical markets.

***Kurt Politzer Award of Technology and Innovation:*** Oxitenó was awarded for the sixth time in the category Company. The winning project is about “New sensory resources for skincare using multifunctional green emollients.”

***Brazilian Women in Chemistry and Related Sciences Award 2018:*** Cristiane Canto, Research and Development (R&D) Manager for Personal Care, Domestic Cleaning and Institutional received the award in the category Leadership in the Industry. The distinction is sponsored by Chemical Abstracts Service (CAS), a division of the American Chemistry Society (ACS) and Chemical & Engineering News (C&EN).

***Shell Top Performance EO Catalyst Award:*** Oxitenó received the award from Shell as the company with the best performance using catalysts.

***Polo de Segurança, Saúde e Meio Ambiente Award (Polo SSMA):*** created and developed by the Committee of Industrial Promotion of Camaçari (Cofic), the award recognizes and encourages practices that increasingly support the labor and environmental quality in the industries of the Industrial Complex of Camaçari. For the second time, Oxitenó won the award in the category Gold Excellence, the most important of the event.

***Magazine Paint & Pintura:*** in the event organized by one of the main publications of the paint sector, Oxitenó was considered the best supplier in the category Oxygenated Solvents for the seventh consecutive time. It was finalist still in the category Coalescents.

***Magazine Tintas & Vernizes:*** the company was recognized for the third consecutive time in the category Oxygenated Solvents.

***Abflexo Award:*** the Brazilian Technical Association of Flexography granted to Oxitenó the Award Qualidade Flexo Prof. Sérgio Vaya, the most important recognition of the Brazilian flexographic industry in the category Solvents.

***Caio Award:*** for the third consecutive year, the company received the Award Caio, which has the mission to recognize marketing effective tools, such as endomarketing actions, events, and product launchings.

***EcoVadis:*** category Gold in the evaluation.





# CORPORATE GOVERNANCE

[102-18]



As a privately-held corporation and part of the multi-business company Ultrapar Participações S.A. (Ultra), Oxitenó is integral part of the structure and processes that form its controlling company governance model. [102-18]

Ultra-adopts recognized practices of corporate governance – such as the maintenance of at least 20% of independent members in the Board of Directors, in Ultra, 75% of them have this profile – and integrates the New Market of B3 S.A. – Brasil, Bolsa, Balcão (B3), a segment having the highest market standards. Therefore, Oxitenó's activities are based on an ethic, transparent and responsible management, which allows the definition of adequate strategies to the long-term sustainability of businesses.

The company reports its performance quarterly to Ultra's board of directors. Oxitenó president is part of Ultra's Board of Executive Officers that are also formed by Ultrapar's CE, the financial and relations with investors director and the presidents of other businesses of Ultra (Extrafarma, Ipiranga, Ultracargo, and Ultragaz), as well as the management of Risks, Compliance, and Audit.

## Governance structure

As a wholly-owned subsidiary of Ultra, Oxitenó maintains its governance structure linked to group's structure. The increasing approximation of the Board of Directors and the Board of Executive Officers – which are responsible, respectively, for defining the directives to be adopted and conducting the necessary actions according to the plan – strengthens the conditions required to create, preserve, and/or maximize the value for the partner audiences.

By the end of 2018, Ultra's Board of Directors had eight members – the Bylaws provides for a maximum of nine – elected in a General Meeting, the ultimate decision-making body, for offices of two years, with reelection allowed. As part of the planned process and consistent with the company's good governance, in 2018, Paulo Guilherme Aguiar Cunha, after more than three decades of contributions to Ultra, was appointed emeritus president, an honor and lifetime position. The officer was succeeded in the position of President of the Board of Directors by Pedro Wongtschowski, who was CEO of Ultrapar from 2007 to 2012. Lucio de Castro Andrade Filho was elected Vice-President of the Board of Directors, who entered the company in 1977 and is a member of the Board of Directors since 1998.

To support the discussions and decision making of the Board of Directors and the Board of Executive Officers, Ultra maintains committees in addition to those that the Bylaws requires: Audit Committee and Committee of People and Organization. The first committee above is in charge of appointing the independent auditors to the Board of Directors, analyze the reports and financial statements and evaluate the efficacy and sufficiency of controls and internal verifications. On the other hand, the Committee of People and Organization is responsible for, among other tasks, guaranteeing that Oxitenó is properly prepared for the succession of their members of the board of directors, executive officers, and other key employees. Also, other non-statutory committees are maintained to support particularly the Board of Executive Officers.

## Innovation and technology

In 2018, a forum dedicated to discussing innovation was instituted, formed by leaders of the processes of new technology developments and digital transformation to exchange experiences and jointly creating solutions. With a

similar purpose, the SSMA Committee was created, to identify and discuss the best practices of safety, health, environment, replicating them in every Ultra's business. Also, highlight is due to the Committee of Human Capital, formed by the persons responsible for the theme at each business and who plan and discuss the necessary adjustments according to the specificities.

Also, there are the following supporting bodies: [102-18]

■ **Committee of Conduct:** linked to the Board of Directors, it ensures the quality and efficacy of the Code of Ethics and Corporate Policies.

■ **Insurance Committee:** regulates internally the relevant claims, defined as such in the Corporate Insurance Policy.

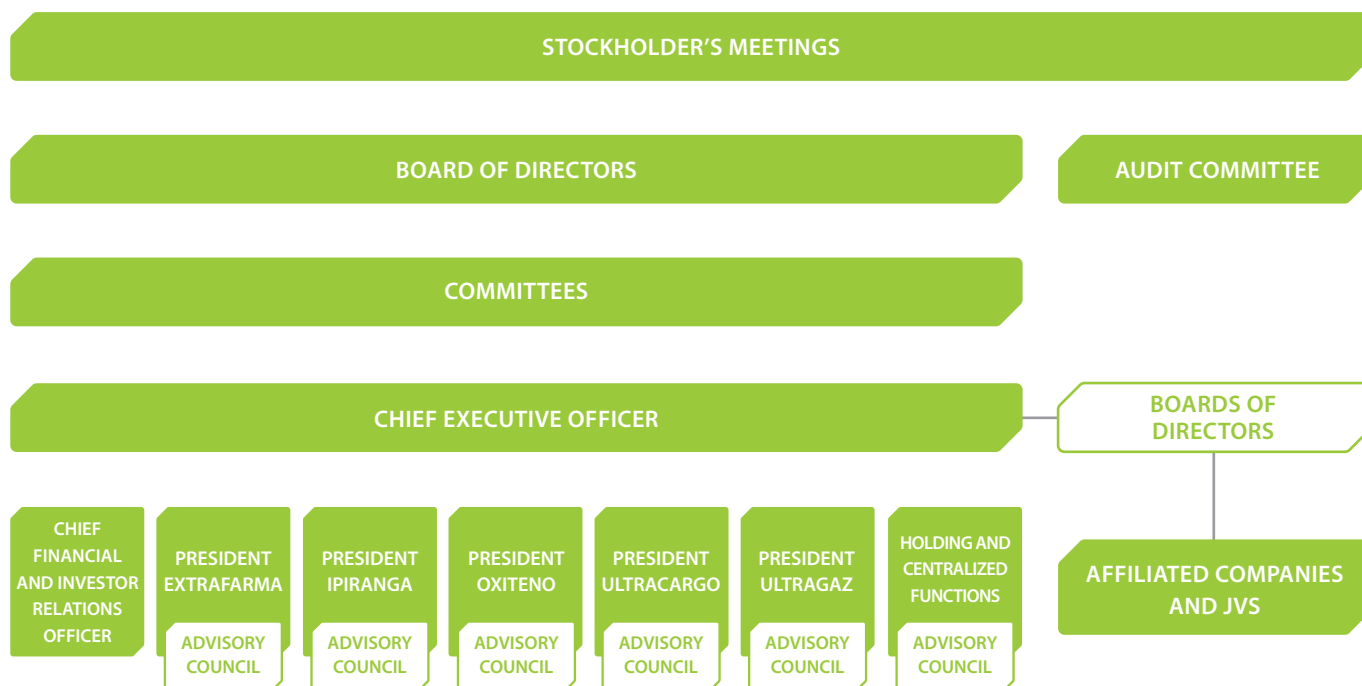
■ **Committee of Risks and Financial Applications:** follows the exposure and advice about relevant financial operations aligned with the Corporate Policy of Financial Risks.

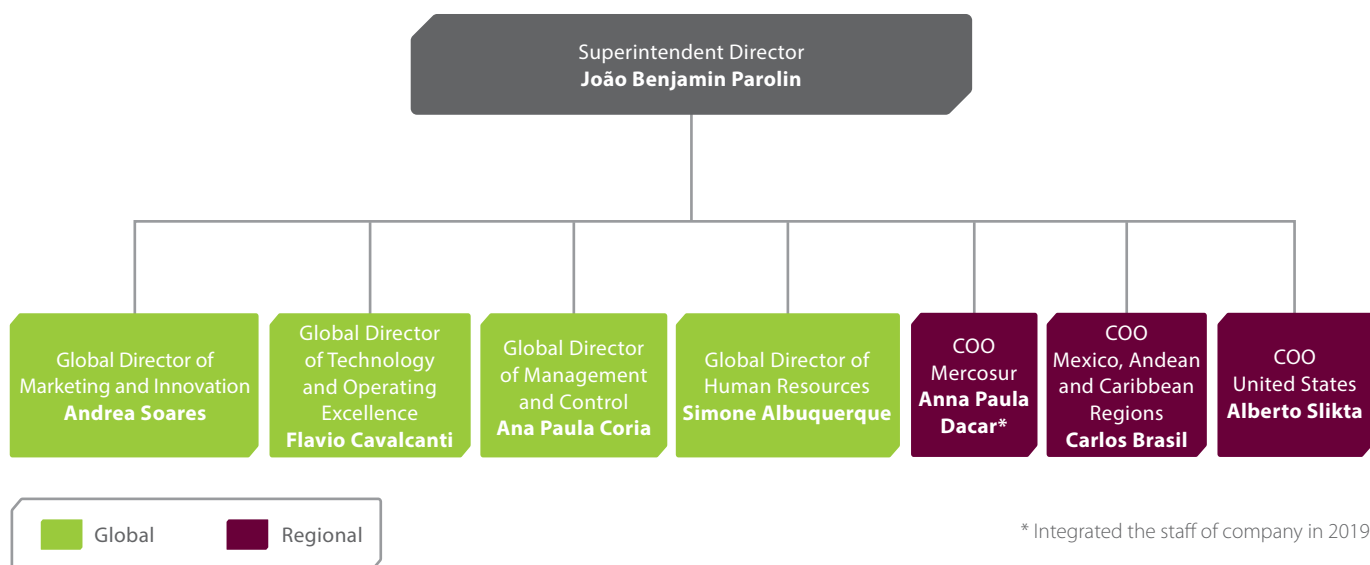
■ **Disclosure and Negotiation Committee:** assists the Director of Investor Relations

■ **Committee of Information Safety Management:** defines and monitors the company's safety standards.

The year also witnessed the constitution of a Committee of People, which discusses both the professional development and the succession plan for the most critical positions of the company.

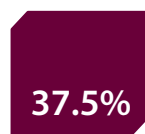
## Ultra





## Women in Oxiteno leadership positions in 2018

Women between 30 and 50 years of age:



Women over 50 years of age:



Men between 30 and 50 years of age:



Men over 50 years of age:



## Contribution and participation |102-13|

Oxiteno maintains affiliations and associations in its sector and with other national and international organizations to uphold the interests and contribute to the development of their operations. In 2018:

### Entities in Brazil

American Chamber of Commerce for Brazil, São Paulo (Amcham)

Brazilian Association of Personal Hygiene, Perfumery, and Cosmetics Industry (Abihpec)

Brazilian Association of Fine Chemical, Biotechnology and their Specialties (Abifina)

Brazilian Association of Industry and Commerce of Food Ingredients and Additives (Abiam)

Brazilian Association of Chemical Industry (Abiquim)

Brazilian Association of Textile and Clothing Industry (Abit)

Brazilian Association of Cleaning and Related Product Industries (Abipla)

Brazilian Association of Business Communication (Aberje)

Brazilian Association of Cosmetology (ABC)

Brazilian Association of Automotive Engineering (AEA)

Brazilian Association of Chemical Engineering (Abeq)

Brazilian National Standards Organization - ABNT

Brazilian Association of Generic Pesticides (Aenda)

Brazilian Association of Chemical and Petrochemical Product Distributors (Associquim)

Brazilian Association of Paint Manufacturers (Abrafati)

National Association of Research and Development of Innovative Companies (Anpei)

Brazilian Technical Association of Radiation Curing (RadTech)

Center of Industries of São Paulo State (Ciesp)

Committee for Industrial Promotion of Camaçari Complex (Cofic)

Committee for Industrial Promotion of ABC Metropolitan Area (Cofip ABC)

Committee for Industrial Promotion of Rio Grande do Sul (Cofip RS)

GS1 Brasil Brazilian Association of Automation (GS1)

Brazilian Institute of Oil, Gas, and Biofuels (IBP)

Brazilian Business Network of Lifecycle Evaluation (Rede ACV)

Union of Industries of Chemical Products with Industrial Purposes and Petrochemicals of São Paulo State (Sinproquim)

Union of the Industries of Chemical Products with Industrial Purposes, Petrochemicals and Synthetic Resins of Camaçari, Candeias, and Dias D'Ávila (Sinpeq)

Union of the Chemical Industries in the State of Rio Grande do Sul (Sindiquim)

Union of the Wholesale Commerce, Importer and Exporter of Chemical Products and Petrochemicals of the State of São Paulo (Sincoquim)

National Union of the Industry of Componentes for Automotive Vehicles (Sindipeças)

National Union of the Industry of Products for Vegetal Defense (Sindiveg)

### International entities

American Chemistry Council (ACC)

American Cleaning Institute (ACI)

*Asociación Argentina de Químicos Cosméticos (AAQC)*

*Asociación de Industriales del Estado de Veracruz AC (Aievac)*

*Asociación de Industrias Químicas del Uruguay (Asiqr)*

*Asociación Industrial del Salto AC (Aisac)*

*Asociación Mexicana en Dirección de Recursos Humanos AC (Amedirh)*

*Asociación Nacional de Fabricantes de Pinturas y Tintas AC (Anafapyt)*

*Asociación Nacional de la Industria Química AC (Aniq)*

*Asociación Petroquímica y Química Latinoamericana (Apla)*

*Association of Bayport Companies (INC)*

*Cámara de Industrias del Uruguay (CIU)*

*Cámara de la Industria Alimenticia de Jalisco (Ciaj)*

*Cámara de la Industria Química y Petroquímica (CIQyP)*

*Cámara Mexicano-Alemana de Comercio e Industria (Camexa)*

*Cámara México Brasil de Comercio (Camebra)*

*Cámara Nacional de Comercio y Servicios del Uruguay (CNCS)*

*Cámara Nacional de la Industria de la Transformación (Canacindra)*

*Cámara Nacional de la Industria de Productos Cosméticos*

*Cosméticos Asociación Nacional de la Industria de Productos de Cuidado Personal y del Hogar AC (Canipeq)*

*Cámara Nacional de la Industria Panificadora y Similares de Mexico (Canainpa)*

*Consejo Mexico-Brasil de America Latina AC (Camebra)*

*Council of Producers & Distributors of Agrotechnology (CPDA)*

*East Harris County Manufacturers Association (Ehcma)*

*National Association of Chemical Distributors (Nacd)*

*Personal Care Products Council (PCPC)*

*Roundtable on Sustainable Palm Oil (RSPO)*

*Sociedad de Químicos Cosmetólogos de Mexico AC (SQCM)*

*The European Petrochemical Association (EPCA)*

*Unión de Exportadores del Uruguay (UEU)*

*Unión Mexicana de Fabricantes y Formuladores de Agroquímicos AC (UMFFAAC)*

## Strategy

Focused on the growth and sustainability, in 2018, Oxitenó undertook the restructuring of its strategic business plan – aligned with all other companies of Ultra group – extending the planning horizon, harmonizing premises and parameters, closest and more frequent follow-up, consolidation of annual budgets, and investment plans, in addition to a system of portfolio analysis. The changes reflect the objective of Ultra to continue following a long-term path of growth and sustainability.

Revisiting the plans allowed a comprehensive analysis by Ultra leadership of aspirational (purpose, business principles and ambition), financial (cash generation, debt and company's value), risks (exposure level and sensitivity of company's value) and governance aspects. Along this process, each company discussed about their relevant activity markets, position and main competencies, and the conclusions provided a unique view of Ultra about the future evolution of demographic, macroeconomic, commodity and technical variables that most affected their undertakings. Therefore, in coordination with Ultra's budget processing, the strategic plan of Oxitenó started to be evaluated every year.

Another consequence of this approach was the resolution to accelerate the migration of Oxitenó to chemical specialties and the decrease of the commodities' market, which will aggregate even more value to the production of company. The agenda for 2019 provides for the beginning of Oxitenó's growth of return on capital.

Also, in 2018, Ultra decided to adopt another measure to contribute for a better business management, including Oxitenó. In 2019, each business will count on its own Advisory Committee, comprising members of the company and two external representatives. The purpose of the improvement above is to allow an even more critical and constructive evaluation of the measures and directions adopted to reach a sustainable development of the company.

## Evolution

In 2018, Oxitenó consolidated and improved the evolution of the operating model started in 2017, a process that was internally designated Project Evolution. After this, all the boards were reorganized to allow a more horizontal and autonomous management, better definition of roles and assignment of responsibilities combined to the decision-making autonomy.

## Ethics and compliance

[|102-16 | 103-2 | 103-3: Anti-Corruption|](#)

Oxitenó adopts Ultra's Ethics and Compliance Program as a way to disseminate and consolidate the culture about these themes among the employees and to encourage its interested audiences to adopt a similar attitude. The governance of the initiative above is the responsibility of a Conduct Committee, which is coordinated by an independent member under the Group's Board of Directors, which activities are conducted with the autonomy required to exercise their functions.

The program was reviewed through researches involving employees, who contributed to a qualitative evaluation of compliance activities. The initiative provided subsidies to reevaluate the actions and, consequently, to qualify tools and/or the establishment of improvement plans. Also, the Ethics and Compliance Program is constantly supported by executive events, control improvements, participation in specialized forums on corporate governance, live and electronic training.

In 2018, compliance management was created in Group's companies to improve Ultra's business practices. Today, this means that the company continues its activities according to the general Ultra precepts, however having autonomy to suggest and/or introduce solutions and measures aligned to their segment specificities. At Oxitenó, the new management was incorporated into the Management and Control Board.



## Code of Ethics and policies |102-16|

To ensure relevant and current practices, processes, and policies, Ultra reviews them regularly, and structures channels and means qualify employees, as well as to receive denouncing.

In 2018, Group's Code of Ethics has a new review, establishing the directives for the relationship with external audiences and within the work environment, as well as the functions of the Conduct Committee, Risk Management, Compliance and Audit, as well as the Compliance Management of businesses. Also, the Code of Ethics instructs the access to the Open Channel (see more details below).

In addition to the review of the Code of Ethics, Ultra improved its Policy of Corporate Anticorruption and Relationship with Public Agents, which defines the measures adopted in the relationships with the Public Administration, whether national or foreign, as well as private relationships, to preserve business' integrity and transparency; and its Competition Policy, which consolidates the directives of prevention and combat to violations of the economic order to be adopted by the companies and in corporate operations where they are involved.

Additionally, the contracting of commercial partners, external representatives, suppliers and service providers are preceded by reputation evaluations, performed through due diligence and formalized under contracts with an anticorruption clause. |205-1|

## Structure dedicated to strengthening business ethics and compliance

### Training

|103-2 | 103-3: Anti-Corruption|

In the first quarter of 2018, to guarantee the uniformity of activities and relationships, always based on ethical precepts, Oxiteno has communicated the changes made in the Code and policies to all employees, including the trainees. The employees were qualified on the main topics of such materials, with practical examples to explain the doubts.

Oxiteno considers that all workers must know their codes and policies and, therefore, it discloses the training offered in the DNA Portal (a portal of the Human Resources area – for more details, see page 46). At the same time, the Compliance area makes a monthly follow-up of the list of employees that attended the qualification courses. Therefore, the company can create and/or improve the Key Performance Indicators (KPIs), reported every month for Ultra's Compliance team.

In 2018, 100% of company's officers were informed and attended qualification about policies and anticorruption procedures. |205-2|



### Open channel |102-17|

To explain the policies, as well as receive reports of non-compliance with their clauses, the company provides the Open Channel, 24 hours a day, in three languages: Portuguese, English, and Spanish. Access the channel on the Website [www.canalabertoultra.com.br](http://www.canalabertoultra.com.br) or through telephone (toll-free). All contacts, including those related to claims or denouncements, information is collected by an external company, and the confidentiality of whistleblowers is guaranteed. The responsible areas receive the cases that are handled by Ultra employees certified to act as exempt investigators.

In 2018, there were no reports of Oxiteno corruption in the Open Channel and 100% of the 16 denouncements considered valid or partially valid about other themes were solved. |205-3|

### Ultra Open Channel

Available to all audiences, the Ultra reporting channel can be accessed, through the Portal [www.canalabertoultra.com.br](http://www.canalabertoultra.com.br) or telephone, by the internal or external audiences of the company. The calls are free.

**Brazil** 0800-701-7172

**United States** 1-800-880-6491

**Mexico** 800-099-0646

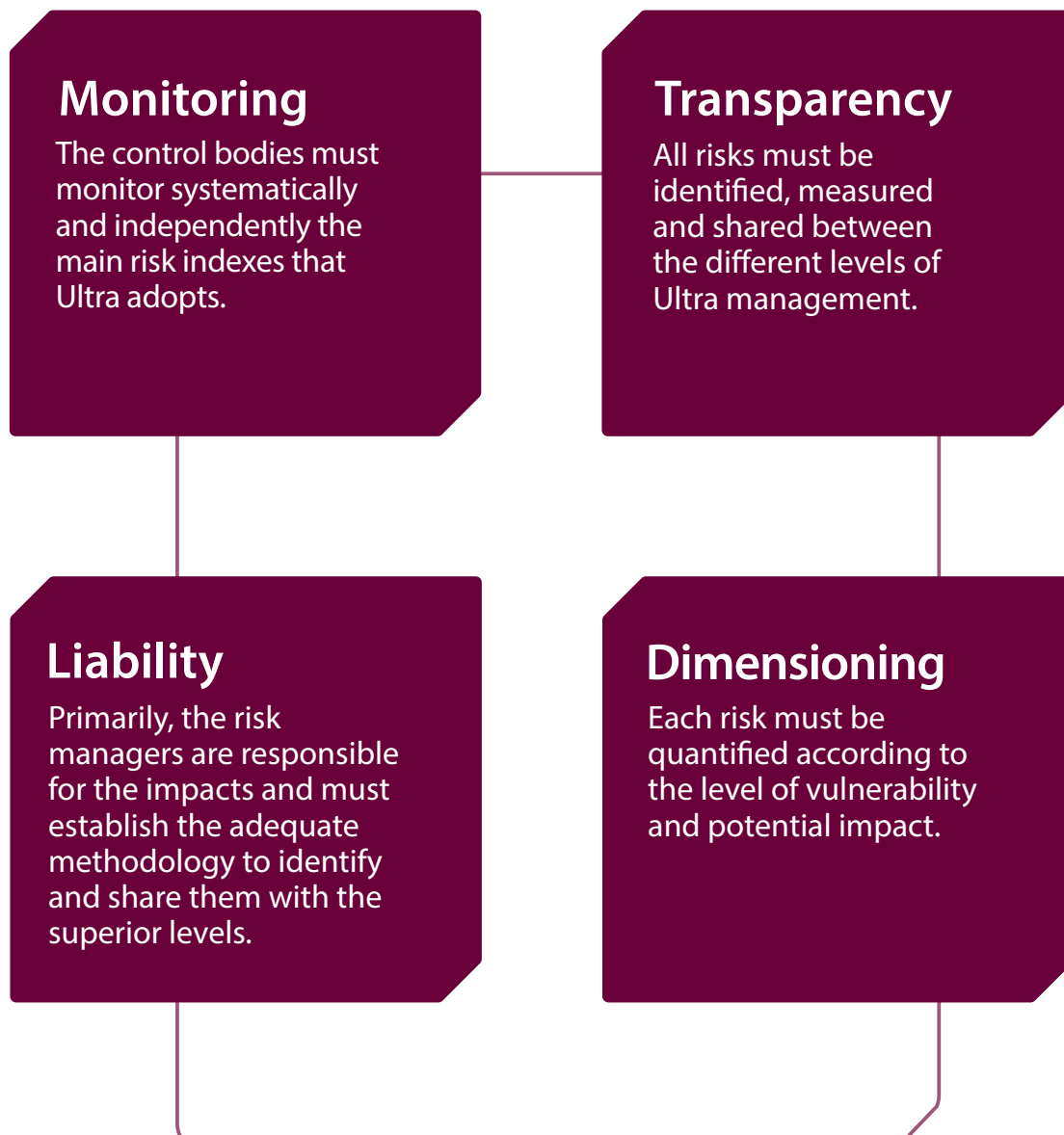
**Venezuela** 0-800-100-9112

**Uruguay** 000-416-205-2740

## Risk management |102-15|

As participant of Ultra group, Oxitenó adopts procedures that validate and mitigate the risks of their operations. The company analyzes behavioral aspects, processes, and controls based on the best practices identified in each sector and on references developed by authorities, agencies or the academy. Based on a Risk Integrated Matrix, approved by the controlling company Board of Directors, the discussion about the mitigation of potential threats is made in a systemic and standardized way, allowing an increase of their view and understanding.

In 2018, as part of the continuous plan to strengthen the governance structure of risk management at Ultrapar, a Corporate Policy of Risk Management was approved according to a consultation and discussion process with the leadership and the managers, which involved more than 800 interviews. The document above defines a new systemic matrix and classifies the risks to which Ultra is exposed in six families of threats: Strategic, Operating, Financial, and Capital Market, Compliance, Cybernetic and Human Capital. Also, the policy establishes the following principles that orient the risk management:

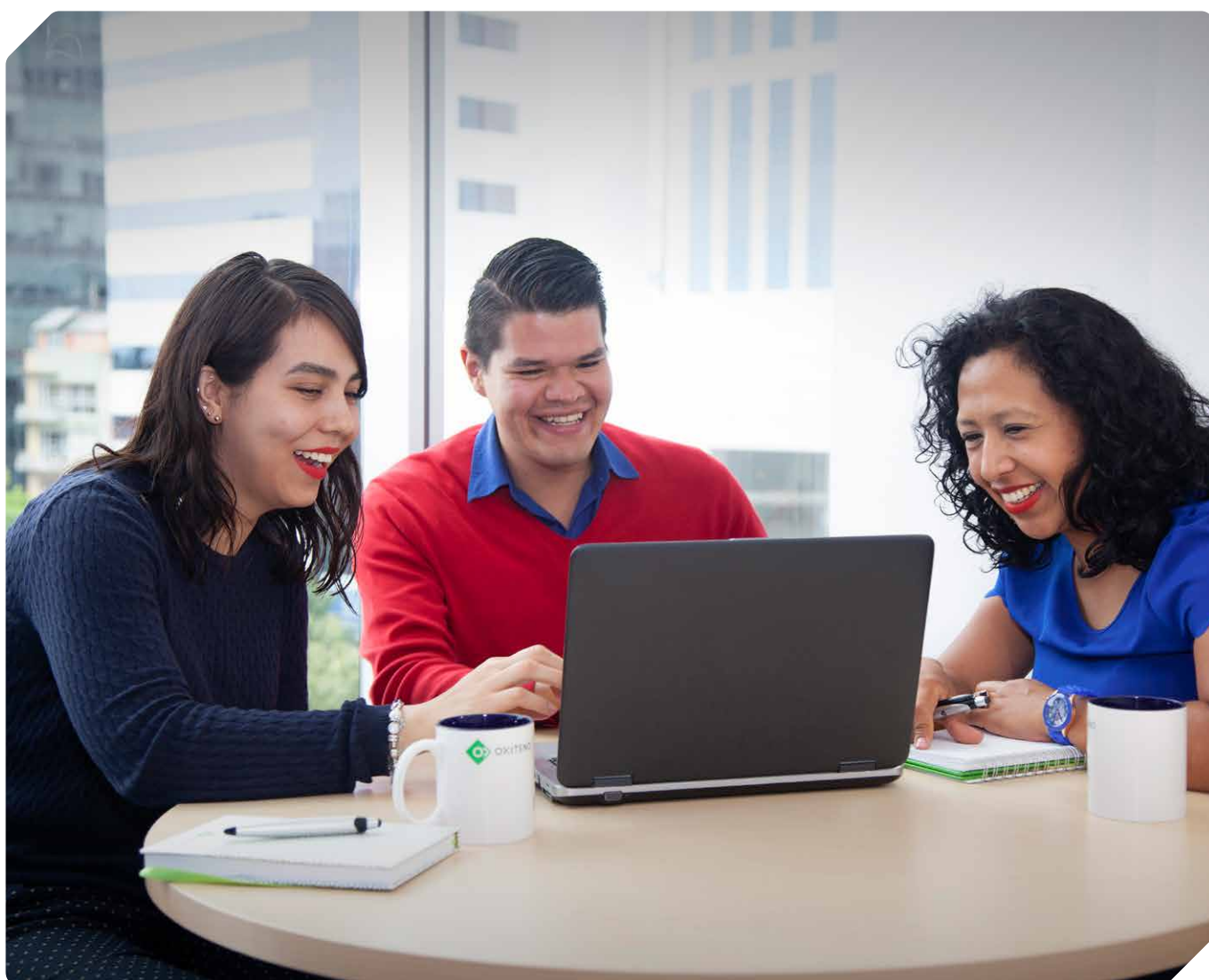


The culture of risk management is spread out and reinforced with the creation of business-specific committees, such as SSMA and Information Safety. Also, Ultra seeks to continue connected with the main global trends and technologies in risk management, developing methodologies and tools to prevent and mitigate events with potential to be harmful to life, environment and their businesses and stakeholders. For example, Ultra developed methodologies to evaluate the maturity of employees in terms of safe and ethical behavior, from which specific training and controls for target audiences were defined. |102-11 | 102-15|

Oxiteno respects the Ultra macro directives that cover the internal and external risks. Based on this mapping, the quantification of scenarios in terms of impact and vulnerability and action plans are made.

Therefore, based on the self-evaluation, Oxiteno measures the impacts and the level of potential vulnerability to negative events. Using the diagnosis, the risk is classified (low, medium, high or very high) and, if necessary, action plans are prepared to deal with such risks, indicating the persons responsible for its execution and the required period. The company can establish some limits of tolerable exposure and, on the other hand, it will demand the provision of monitoring tools and monitoring processes to prevent their extrapolation.

The risk themes are revisited as necessary – at least once a year – and the valuations are shared and discussed with the Risk, Compliance and Audit and Relations with Investors Boards. The idea is to align the understandings and discourses, as well as to foment the addition of the required tools for follow-up and training.







# BUSINESS PERFORMANCE

| 103-2 | 103-3: Economic performance |



In 2018, Oxiteno obtained impressive financial results, in spite of a slight decrease in the volume produced and commercialized in the year attributable to the slowdown in some consumer markets. With a 3% retraction in the commercialized volume, as compared with previous period, 769 thousand tons were sold as compared with the 790 thousand sold in 2017. The commercialization of chemical specialties decreased 5% to 613,000 tons, while the commodities grew 8% for a total of 156 thousand tons. The negative oscillation in the total volume must be attributable to factors such as stagnation or economic recession and/or political unrest in countries that concentrate company's clients, including Argentina, Brazil, and Venezuela – where Oxiteno maintains a production, which is affected by the local energetic crisis. [102-7]

The increase in the commodity volume commercialized was particularly due to the good performance of the agricultural sector in Brazil. The decrease of specialties, in turn, was mitigated by the increase in the North-American market as of the beginning of operations of Pasadena plant, in Texas, USA, an undertaking that demanded an investment of approximately US\$200 million in five years.

The new unit has the capacity to provide 120,000 tons per year in the North-American market. The undertaking was born with competitive differences, such as the localization in the Gulf of Mexico, allowing easy access to main raw material, logistic resources and specialized labor. The plant will serve the segments of Agrochemicals, Personal Care, Home Care and I&I, Oil and Gas, Coatings, among others.

Even before the opening, the company was already increasing the commercialization with clients in the USA in a pre-marketing action, and executed important agreements with clients. Since 2016, the region also maintains a center of Research and Development (R&D), located at the University of South Mississippi, to support the development of products and to react more quickly to the market requests.

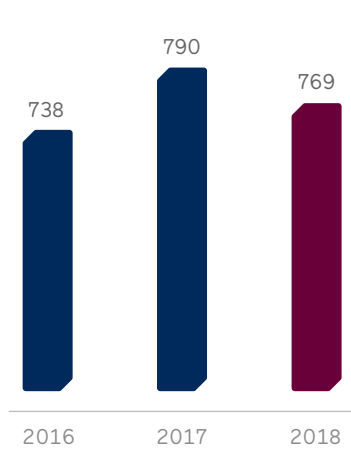
Another important event for the performance of business in 2018 was the truck driver's strike in Brazil in May. In spite of the good reactive capacity of the company to maintain the supply to their clients, the movement of transporters caused the temporary stop of four production units (Mauá, Suzano, Tremembé and Triunfo) since the flow of products was impossible. The estimated impact of the domestic volume was of 6 thousand tons, corresponding to a loss of R\$13 million.

In these national and international scenarios, Oxiteno recorded a 20% growth in the net income, as compared to previous year, reaching R\$4.7 billion. The gross profit, in turn, grew 30.5% and totaled R\$990.7 million. At the end of the year, the Ebitda was R\$625 million, an increase of 111% in reference to 2017, although the sold volume was lower. The increase is primarily the result of the constitution of tax credits, with a net effect of R\$186 million on the Ebitda, and the depreciation of R\$0.46/US\$ in the average quotation of Brazilian real in 2018. The Ebitda in 2018, ignoring tax credits, which are non-recurring, was R\$439 million, an increase of 48% as compared to 2017 because of the superior unit margin in North-American dollars and the depreciated exchange.

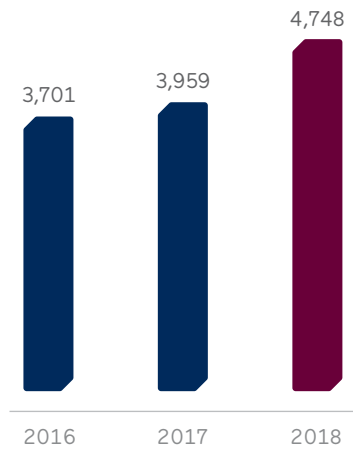
The new unit in Pasadena, USA, has competitive differences, including the location and logistics

Opening of the biotechnology laboratory and a research center in Europe is the next step of the plans

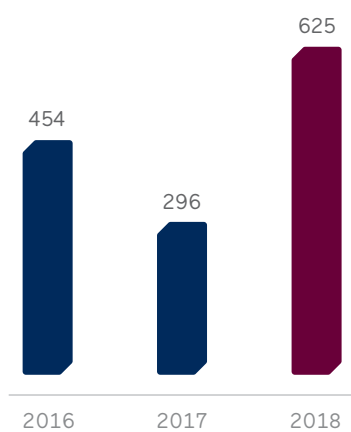
**Sale volumes (thousands of tons)**



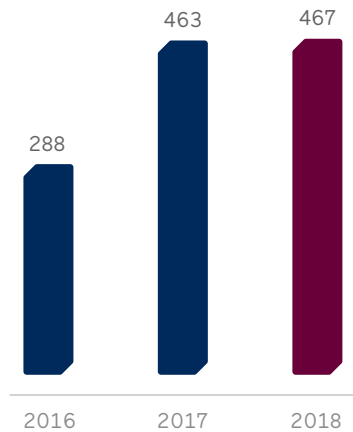
**Net income (R\$ million)**



**Ebitda (R\$ million)**



**Investments (R\$ million)**



The cost of products sold totaled R\$3.8 billion, an increase of 17% in reference to 2017. During the period, the index was affected by the increase in input costs, the depreciation of Brazilian currency, the stop and preoperational costs of the new unit in the USA, as well as higher expenses with personnel. On the other hand, the general, administrative, and sales expenses totaled R\$736 million a year, a growth of 10% as compared to the previous year. This resulted from higher expenses with personnel, the increase of expenditures in the United States related to the pre-marketing action, the beginning of operations at the production unit and the negative variation of BRL on the expenses of international operations.

On the other hand, the investments in the year were directed particularly to complete the works and the beginning of operations at Pasadena plant. The amount exceeded the R\$343 million estimated at the end of 2017 by Ultra for the business and was directed

particularly to complete the Pasadena facility and the modernization and maintenance of industrial units: the company is increasingly investing in automation, revitalization and creation of laboratories, equipment renewal and development of safety programs.

In 2019, Oxitenó intends to intensify its focus on the specialty segment and expand its presence, particularly in the North-American market. Also, the company plans to explore even more the gains – already received – with the consolidation of Project Evolution.

In December 2018, Oxitenó recognizes the tax credits of the judicial action that discussed the exclusion of the Tax on the Circulation of Goods and the Rendering of Services (ICMS) from the calculation basis of the Contribution for the Social Integration Program (PIS)/Contribution for Social Security Financing (Cofins) in the amount of R\$360 million, of which R\$186 million went directly to the Ebitda.

#### Direct economic value generated and distributed |201-1|

Income statement for the year (thousands of R\$)	2017	2018
Net revenue	3,959,416	4,748,428
Cost of sold products	(3,200,250)	(3,757,722)
Variable	(2,696,411)	(3,144,925)
Fixed	(368,002)	(463,630)
Depreciation and amortization	(135,837)	(149,166)
Gross profit	759,166	990,706
Operating expenses	(668,001)	(735,529)
Sales and commercial	(313,023)	(333,096)
General and administrative	(354,978)	(402,433)
Other operating income	52,426	213,789
Result from the sale of assets	(2,241)	(11,838)
Operational profits (loss)	141,350	457,128
Equity accounting	1,417	880
Ebitda	295,908	625,366



PRODUCTS  
AND SERVICES



The constant search for innovation is one of Oxiten's strategic directives to guarantee their business sustainability. It permeates all company areas and opens paths to qualify the economic, environmental, and social results, whether through the introduction of philosophies or methodologies – including the creation of the first work commodities to adopt the Agile approach –, whether through the gain of efficiency in the production processes or the incorporation of different characteristics in the solutions that integrate the portfolio of main segments of activities: Agrochemicals, Personal Care, Home Care and I&I, Oil and Gas and Coatings.

Combining innovation, expertise technique, operating excellence, and close relationship with the clients, Oxiten gathers the best conditions to create, develop, and deliver the products and services that fulfill different needs, decreasing the social and environmental impacts aligned with the macro trends.

The year 2018 was important for innovation with the beginning of a process intended to take the company to a new level in terms of research and development. Two large technological roadmaps were created to constitute a transversal strategy about the theme. This new front contemplates research platforms that will generate more radical innovations, providing strength in current markets and expansion for new markets. At the same time, management models have been prepared to expand the innovation. The company destined approximately R\$65 million in the year to incorporate and/or create technologies to be adopted at their units and in the development or qualification of research centers.

Oxiten associates quality and product performance to caring for the environment, health and well-being. It seeks to drive, as much as possible, the use of raw material of renewable sources to replace the non-renewable source materials that efficiently uses energy, water, packages, developing concentrated, biodegradable, and safe products.

Also, this concept includes the promotion of the Lifecycle Evaluation (ACV) of some products, to quantify the environmental

performance of products since the development until the end of useful life. The diagnosis is used to identify opportunities for changes, both in processes and in the raw material mix. In 2018, three new lifecycle studies started, two of them in the segment of Personal Care and one in the segment of Oil and Gas. Sixteen other studies and 60 analyzed compounds add to them.

In 2018, Oxiten launched 18 products and, therefore, increasing its portfolio to 537 products. Also, the capacity to innovate took the company to deposit in the year 11 patents totaling 256.

## Agrochemicals

Particularly in Brazil, the agricultural sector continued tight due to the high demand for commodities. In 2018, the company focused on the execution of a strategy On Time, and In Full of agrochemicals with the purpose of promoting the launching of products, in addition to adding test capacities in its Research and Development (R&D) center in Mauá (Brazil) and, therefore, it guaranteed the conditions to develop solutions aligned to the new technological trends and market solutions mapped.

About the first objective, Oxiten launched the tank mix adjuvants, including the SURFOM® MIX 8251, to prevent problems that affect the productivity and increase the costs of crop. Its use does not affect the individual performance of products, prevents nozzle clogging, requiring a lower number of applications.

One highlight of the period in the Agrochemicals sector was the creation of a new laboratory in Brazil, at the R&D center of Oxiten in Mauá. The facility has equipment and infrastructure to simulate accurately the use and efficacy of the products developed. The laboratory has a chamber of growth chamber of plants that simulates the application in field, through which it is possible to make in-house tests of biological efficacy with herbicides and general studies applicable to any broth, as well as a pulverization chamber (known as spray chamber) and a high-resolution size analyzer of drops – operating with the spray chamber to measure the



profile of distribution and speed of pulverized drops, which allows calculating the potential deviation of the application. The combination turns Oxiteno the only company in Brazil with these capacities among all the surfactant manufacturers, allowing the company to take more advanced and quick measures to develop and deliver innovations. The new laboratory opened in April and currently acts with full capacity.

In 2019, the expectation for the Agrochemicals is five launchings of products, the introduction of new capacities, tests and protocols in R&D, as well as investments in fast methodologies to evaluate the penetration of assets and analyze general biological formulations. Therefore, the company intends to reach even higher levels of quality.



The strategy adopted last year guaranteed the development of solutions aligned with the new technology and market trends





## Home Care and I&I

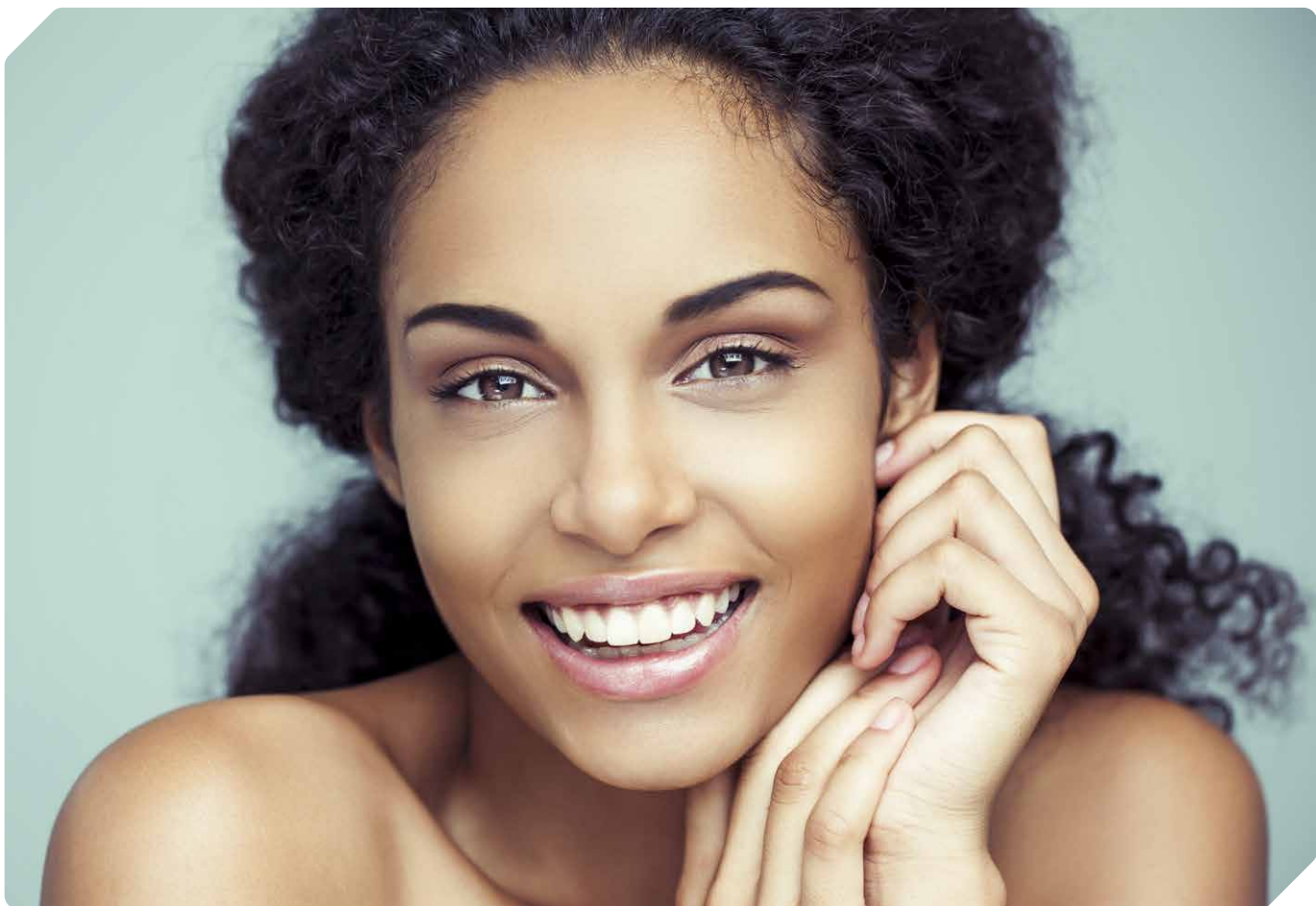
In 2018, the main objective of Oxiteno for the segment was to reinforce its positioning as provider of solutions through the development of new technologies; promotion of market innovations, such as OXISENSE®, OXIFLOW®, and OXIZYMES®; and the establishment of partnership with clients to adopt the co-creation model. The significant advances in the preparation of products, the approvals of solutions in clients and the increment in the relationship with them confirm the scope of purpose.

For example, with Novozymes – a global leader in biological solutions – the OXIZYMES®, an exclusive and unique combination of surfactants and enzymes that guarantees high performance of cleaning and superior results when removing stains in textiles. The new product was patented and stands out for its efficiency and decrease of costs to the production

chain, because it allows the use of less active ingredients in the formulation. Also, OXIZYMES® is produced as of raw material of renewable origin. The solution strengthens the commitment of the company to develop solutions that add value for clients and final consumers.

The company invested in a device that simulates, in a small scale, front load washing machines to evaluate the performance of detergents. Resources were directed to the introduction of a system of salt dosage in the washing machines to test the conditions of water in different regions of the country, which allows Oxiteno to develop solutions that comply with the specificities of different countries or regions. The remaining 30% of the amount invested in the year were directed to increase the capacities and improve the productivity of product and solution development.





## Personal Care

Also in the segment of Personal Care OXISMOOTH®, a line formed by three emollient esters applicable to products for skin care and hair and as solar protection. The innovation complies with important directives of the market, such as dry touch, pleasant sense. Also, it is biodegradable, non-phototoxic and produced from renewable sources. The line is certified under COSMetic Organic Standard (Cosmos) of Ecocert, which attests natural and organic cosmetics.

About the investments in the segments of Home Care and I&I, and Personal Care, 70% were assigned to improve the development of solutions in a quick way, and to evidence the benefits of the solutions in final formulations. Two pieces of equipment were acquired to quantify the hydration and permeation of emollients in skin to evaluate the products under real use conditions.

In 2019, company plans to search more participation of portfolio in specialties and to capture more value, as well as the development of innovative solutions and the continuity of the process to be closer to the clients.

The approximation  
with **client** and  
**solutions** for the  
market demand





## Oil and Gas

In this segment, the main objectives for 2018 consisted of consolidating the product ULTROIL® WM 1001 as a casing cleaner in the Brazilian market, to resume the pipeline of drilling projects and asset integrity (hydrogen sulphide sequestering agents - H<sub>2</sub>S) and to increase the sale of tensoactives in the United States, focusing primarily the application of flowback aids used in hydraulic fracturing, as well as completing the development of viscoelastic surfactant for the Stimulation platform. This last product was created in partnership with the Texas A&M University (USA) and allows extracting oil in wells under extreme conditions. The product has high performance considering the classic surfactant technology and as compared to international competing products, in addition to being a unprecedented, patent-protected article of Oxiteno portfolio.

The sale of tensoactives for fracking in the United States increased more than 300% and the development of viscoelastic resulted in a presentation at an international conference (ATCE – SPE 190606, 2018). In 2018, Oxiteno obtained the approval and sale of ULTROIL® WM 1001 to Schlumberger and started different projects in partnership with the client,

including the immediate provision of a market hydrogen sulphide sequestering agent and a lubricant for drilling, as well as an study of advanced chemistry for application of hydrogen sulphide sequestering agent.

ULTROIL® WM 1001 is the only high-performance casing cleaner made in Brazil, which allows the clients to decrease the costs with importations. The product is used in the drilling step, provides easy cleaning along the operation since it dissolves and disperse oil-based fluid o synthetic material, leaving the well, tubes and the metallic structures free from deposits at a low application dosage, and in high salinity conditions, in addition to being biodegradable, non-flammable and free of aromatic substances.

Another highlight of the period was the participation of Oxiteno in the event Rio O&G, held in the city of Rio de Janeiro, Brazil, where it disclosed its technological platforms and the position as partners in the joint creation and developments. In that event, Oxiteno also received an honorable mention for the presentation of the technical work "IBP1650\_18 – Study of formation of normal and reverse micelle, using molecular thermodynamics",



held in partnership with the Universidade Federal do Rio de Janeiro (UFRJ), through a support instrument Brazilian Company for Research and Industrial Innovation (EMBRAPII). The work provides for the use of computer simulation to guide the development of new molecules and is a candidate to the Award Plínio Cantanhede in the next edition of the event in 2020.

Among the investments made in the segment during the year, it is worth mentioning the acquisition of a rheometer – that can perform viscoelastic tensioactive test under extreme conditions of temperature and pressure, installed at the R&D center, located in

the city of Hattiesburg, State of Mississippi (USA) – and an exclusive tensiometer to support the flowback aids studies.

The plans for 2019 are to maintain the North-American market growth (above 20%), to support the sales of specialties to apply fracking and advance to the rheologic studies of the viscoelastic. Guarantee in the Brazilian market volumes and margins that may be healthy glycols, similarly to the launching of asset integrity and drilling Contribution for the Social Integration Program; as well as to increase the understanding about the Argentinian market and create a strategy to act stronger in the neighboring country.

## Coatings

In 2018, the company sought to open a market for the products launched by the end of 2017, such as the ULTRASOLVE® H line, the new generation of molecules derived from propanol with the Health, Safety and Environment (HSE) friendly concept. The product allows the formulator to obtain paints and coatings with low toxicity and impact in classification and labeling, according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as well as high performance and competitiveness. Another promoted solution was the line OXITIVE® 7000 (APE-free wetting agents), formed by multifunctional tensioactives that are free of non-ylphenol ethoxylate (APE-free), with a high value of application in water-based outdoor paints and pigment concentrate. Also, priority was given to OXIMULSION®, a line of emulsifiers that convert the technology of solvent base into water base – for which a premarketing work was performed, obtaining improvements of clients' approval.

At the same time, the company invested in two reactors to test its portfolio of emulsion polymerization, allowing an acceleration of the developments of OXIMULSION® line in different markets. New equipment was acquired to perform studies of pigment dispersion, in support to the development of OXITIVE® line. These investments are aligned with Oxiteno proposal to provide solutions based on local needs; for example, with the optimization of their formulations through adequate doses, with better evaluation of the interaction of components and the impact on clients' final product.

In 2019, the company intends to consolidate the market of line ULTRASOLVE® H in Mercosul region and move forward in new applications with OXITIVE®, and OXIMULSION® lines, in addition to increasing its presence in countries such as Argentina and Chile. In MAC and United States regions, the focus is the development of markets and clients prospection.





# PEOPLE

|103-2 | 103-3: Employment|

One of the main assets of Oxiteo is their staff and, therefore, the company is constantly investing in the identification and attraction of talents, as well as actions and programs to develop and retain the best employees.

The Human Resources Board acts globally and is structured around three Excellence centers (Organizational development, training and development, culture and change; Compensation and benefits; and Internal communication), which create or improve the practices and processes, in addition of business partners in the regions that ensure the application of the plans created and their monitoring.

In 2018, the actions had focus on four strategic pillars: Management of organizational culture and environment Development of leaders and talents Involvement support; and Efficiency and excellence of processes.

## Staff

By the end of 2018, the staff was formed by 1,943 employees, 2% more than in 2017. The global turnover in the period was 24%, both voluntary and involuntary. Check complete data of following employees. |102-8 | 401-1|

In Brazil, from the total number of employees, 98% were included in collective bargaining agreements, except for the executive managers, who are under the terms of the Corporate Policy of Ultrapar Participações S.A. (Ultra). |102-41|

### Total number of employees per labor agreement, type of job (full or part-time job) and gender<sup>1,2</sup> |102-8|

#### Mercosur

Brazil	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
Consolidation of Labor Laws (CLT)/ permanent – full	882	344	886	337	870	376
Temporary staff – full <sup>2</sup>	16	14	27	21	521	104
Total per gender	898	358	913	358	1,391	480
<b>Total</b>		<b>1,256</b>		<b>1,271</b>		<b>1,871</b>
Trainees	45	38	54	62	35	62
Young apprentices	58	50	70	75	51	79
<b>Total</b>		<b>1,364</b>		<b>1,416</b>		<b>2,001</b>

## Total number of employees per labor agreement, type of job (full or part-time job) and gender<sup>1,2</sup> | 102-8|

### Mercosur

Uruguay	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
CLT/permanent – full	104	23	102	23	98	24
Temporary staff – full <sup>3</sup>	N.D.	N.D.	N.D.	N.D.	20	6
<b>Total</b>	<b>104</b>	<b>23</b>	<b>102</b>	<b>23</b>	<b>118</b>	<b>30</b>

### MAC

Mexico	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
CLT/permanent – full	293	72	280	81	277	91
Temporary staff – full <sup>3</sup>	N.D.	N.D.	N.D.	N.D.	121	23
<b>Total</b>	<b>293</b>	<b>72</b>	<b>280</b>	<b>81</b>	<b>398</b>	<b>114</b>

Venezuela	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
CLT/permanent – full	52	17	40	16	39	18
Temporary staff – full <sup>3</sup>	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
<b>Total</b>	<b>52</b>	<b>17</b>	<b>40</b>	<b>16</b>	<b>39</b>	<b>18</b>

United States	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
CLT/permanent – full	98		118		131	
Temporary staff – full <sup>3</sup>	N.D.		N.D.		4	
<b>Total</b>	<b>98</b>		<b>118</b>		<b>135</b>	

1. All employees – CLT, permanent and temporary – working in full time.

2. Oxiteno in USA has no control/registration of gender and age of employees.

3. Outsourced workers are accounted for in the temporary category.



## Total number of employees per gender – offices\* |102-8|

	2016		2017		2018	
	Male	Female	Male	Female	Male	Female
Argentina	3	4	3	3	3	3
Belgium	2	2	3	1	3	1
China	3	1	3	2	3	2
Colombia	2	2	2	1	3	1

\* All in offices are own employees and work full time (no third parties).



The staff seeks to  
balance the diversity



## New contracting and turnover per region |401-1|

	Number of hired employees		Rate of new employees (%)	
	Male	Female	Male	Female
Brazil	61	53	7	14
Uruguay	2	2	2	8
Mercosur	63	55	7	14
	Number of dismissed employees		Rate of dismissal (%)	
	Male	Female	Male	Female
Brazil	83	38	10	10
Uruguay	6	1	6	4
Mercosur	89	39	9	10
	Number of hired employees		Rate of new employees (%)	
	Male	Female	Male	Female
Mexico	32	25	12	27
Venezuela	15	10	38	56
MAC	47	35	15	32
	Number of dismissed employees		Rate of dismissal (%)	
	Male	Female	Male	Female
Mexico	42	18	15	20
Venezuela	16	8	41	44
MAC	58	26	18	24
	Number of hired employees		Rate of new employees (%)	
	Male	Female	Male	Female
USA		29		22
	Number of dismissed employees		Rate of dismissal (%)	
	Male	Female	Male	Female
USA		16		12
	Number of hired employees		Rate of new employees (%)	
	Male	Female	Male	Female
Argentina	0	1	0	33
Belgium	1	0	33	0
China	1	0	33	0
Colombia	2	0	67	0
	Number of hired employees		Rate of new employees (%)	
	Male	Female	Male	Female
Argentina	0	0	0	0
Belgium	1	0	33	0
China	1	0	33	0
Colombia	1	0	33	0

## Diversity of groups responsible for governance and among employees\* (%) |405-1|

Mercosur	Below 30 years of age		Between 30 and 50 years of age		Over 50 years of age	
	Male	Female	Male	Female	Male	Female
Board	0	0	0	40	40	20
Management	0	2	44	31	18	5
Coordination/Supervision/Consulting	2	2	60	12	23	1
Administrative	18	22	17	32	5	6
Operational	17	6	51	11	14	1
<b>Total</b>	<b>15</b>	<b>9</b>	<b>43</b>	<b>18</b>	<b>13</b>	<b>2</b>
Trainees/Apprentices	15	13	18	20	13	21

Brazil	Below 30 years of age		Between 30 and 50 years of age		Over 50 years of age	
	Male	Female	Male	Female	Male	Female
Board	0	0	0	37.5	50	12.5
Management	0	2	46	29	17	6
Coordination/Supervision/Consulting	3	3	53	15	26	0
Administrative	19	23	16	31	5	6
Operational	19	6	50	11	13	1
<b>Total</b>	<b>16</b>	<b>10</b>	<b>41</b>	<b>18</b>	<b>12</b>	<b>3</b>
Trainees	35	63	1	1	0	0
Young apprentices	38	52	0	0	0	0

Uruguay	Below 30 years of age		Between 30 and 50 years of age		Over 50 years of age	
	Male	Female	Male	Female	Male	Female
Board	0	0	0	0	0	0
Management	0	0	17	50	33	0
Coordination/Supervision/Consulting	0	0	60	7	27	6
Administrative	6	0	27	60	0	7
Operational	6	2	62	8	22	0
<b>Total</b>	<b>5</b>	<b>2</b>	<b>55</b>	<b>16</b>	<b>20</b>	<b>2</b>
Trainees	0	0	0	0	0	0

MAC	Below 30 years of age		Between 30 and 50 years of age		Over 50 years of age	
	Male	Female	Male	Female	Male	Female
Board	0	0	100	0	0	0
Management	5	0	55	18	22	0
Coordination/Supervision/Consulting	4	3	66	13	11	3
Administrative	21	28	22	26	3	0
Operational	36	12	34	10	8	0
<b>Total</b>	<b>26</b>	<b>12</b>	<b>39</b>	<b>13</b>	<b>9</b>	<b>1</b>
Trainees/Apprentices	0	0	0	0	0	0

Mexico	Below 30 years of age		Between 30 and 50 years of age		Over 50 years of age	
	Male	Female	Male	Female	Male	Female
Board	0	0	100	0	0	0
Management	5	0	53	21	21	0
Coordination/Supervision/Consulting	5	4	73	11	7	0
Administrative	26	21	23	26	4	0
Operational	35	13	34	10	8	0
<b>Total</b>	<b>28</b>	<b>12</b>	<b>40</b>	<b>12</b>	<b>8</b>	<b>0</b>
Trainees/Apprentices	0	0	0	0	0	0

Venezuela	Below 30 years of age		Between 30 and 50 years of age		Over 50 years of age	
	Male	Female	Male	Female	Male	Female
Board	0	0	0	0	0	0
Management	0	0	67	0	33	0
Coordination/Supervision/Consulting	0	0	40	20	27	13
Administrative	0	55	18	27	0	0
Operational	43	7	32	7	11	0
<b>Total</b>	<b>21</b>	<b>14</b>	<b>33</b>	<b>14</b>	<b>14</b>	<b>4</b>
Trainees/Apprentices	0	0	0	0	0	0

\* Oxiteno in USA has no control/registration of gender and age of employees.

## Management of organizational culture and environment <sup>[102-43]</sup>

In 2018, based on a Climate Research performed in the previous year and internal discussions, company's professionals prepared 290 action plans – of which 87% have already been performed by the end of the year – to reinforce Oxitenó and Ultra cultures. The actions were prepared to support the behaviors that proved to be functional and to gradually eliminate those that were not relevant for the business. Most plans are somehow associated to Project Evolution (page 23), to make it clearer both the restructuring process and the roles and responsibilities of each area and professional of Oxitenó – beginning with the dissemination of strategic objectives of the company, support to team work and improvement of their communication.

## Development of leaders and talents

<sup>[103-2 | 103-3: Training and education | 404-2]</sup>

The efforts resulted in a work that initially included the presidency, executive officers, and senior managers of the company, with the consequent and gradual cascading effects on other employees. One of the highlights of this work was resuming the performance, career, and succession at these higher levels to strengthen and develop the leadership skills concerning Oxitenó's current and future needs. The officers were evaluated not only against the objectives and goals, but also about their behaviors and capacity by a specialized external consulting company, which prepared individual development plans for the participants. In the next year, the middle managers will also take part in this evaluation process. As a result from this project, since 2017, the company does not perform this survey for 100% of employees, as occurred until 2016. The company estimates that as of 2020 it will resume the performance evaluation and feedback at all levels (in all regions).

Independently of this work, in 2018, the company invested in training and opportunities for the development of competencies of their employees. The total training delivered included more than 44.8 thousand hours, in other words, an approximate average of 10.50 hours per employee in Brazil, being that 63% of the employees attended some type of qualification training. Most activities was provided and performed through Portal DNA, an Oxitenó proprietary e-learning platform that is also used to around 50% of the actions connected to the development plans prepared for each employee.

Another highlight was the structuring of an Internal Recruiting Program at Oxitenó. As of 2019, the professionals working in Brazil can apply to all non-confidential positions opened at the company – from assistant to coordinating functions. Also, the new feature was the beginning of an awareness work developed with the managers to inform them about the change and the importance of their employees being comfortable and free to request, for example, changes in the area, even without the consent of their superiors. Initially, the program is implemented in Brazil, but it will extend to all the countries where Oxitenó is present, with the creation of a global job database.

The Intern and Trainee Programs, the main access for new talents, had new editions in 2018. The programs recruited 106 interns and seven trainees.

On the other hand, to help the employees about to retire, the company offers support through a substitution and retirement transition plan. The specific needs of each individual are evaluated and followed by the HR Internal Consulting teams.

The Workplace provides a more communicative and friendly work environment, where everybody is heard

## Percentage of employees who regularly receive performance and career development analysis\* |404-3|

### Mercosur

Functional category	2018 – Brazil	
	Male	Female
Board	100	100
Management	100	98
Coordination/Supervision	0	17
Administrative	0	0
Operational	0	0
Total per gender	8	12
<b>Total</b>	<b>9</b>	

Functional category	2018 – Uruguay	
	Male	Female
Board	0	0
Management	100	100
Coordination/Supervision	0	0
Administrative	0	0
Operational	0	0
Total per gender	3	13
<b>Total</b>	<b>5</b>	

### MAC

Functional category	2018 – Mexico	
	Male	Female
Board	100	0
Management	93	75
Coordination/Supervision	0	13
Administrative	0	0
Operational	0	0
Total per gender	5	4
<b>Total</b>	<b>5</b>	

## Percentage of employees who regularly receive performance and career development analysis\* |404-3|

### MAC

Functional category	2018 – Venezuela	
	Male	Female
Board	0	0
Management	100	0
Coordination/Supervision	0	0
Administrative	0	0
Operational	0	0
Total per gender	8	0
<b>Total</b>	<b>5</b>	

Functional category	2018 – United States	
	Male	Female
Board	100	
Management	73	
Coordination/Supervision	70	
Administrative	0	
Operational	0	
<b>Total</b>	<b>21</b>	

\* Oxiteno in USA has no control/registration of gender and age of employees.

More than  
**44 thousand**  
training hours  
with Brazilian  
employees





## Average number of hours per employee/year/country\* |404-1|

### Mercosur

Functional category	2018 – Brazil	
	Male	Female
Board	0	0
Management	10.33	10.28
Coordination/Supervision	9.25	11.93
Administrative	15.41	13.12
Operational	8.23	11.00
Total per gender	10.02	12.08
<b>Total</b>	<b>10.50</b>	

Functional category	2018 – Uruguay	
	Male	Female
Board	0	0
Management	14.67	16.42
Coordination/Supervision	1.34	13.88
Administrative	92.45	59.3
Operational	37.09	0
Total per gender	3,380	670
<b>Total</b>	<b>33.0</b>	

### MAC

Functional category	2018 – Mexico	
	Male	Female
Board	9.00	0
Management	2.76	6.44
Coordination/Supervision	1.55	2.87
Administrative	1.95	1.56
Operational	1.59	1.52
Total per gender	1.59	1.64
<b>Total</b>	<b>1.60</b>	

\* 2016 and 2017 data not available. Information about United States and Venezuela not available.

## Involvement support

The activities of this pillar involved the Internal Communication area, with the opening of channels that favors the dialogue and the exchange of experiences between the professionals and areas of the company. The innovation explores the use of new technologies, to complement the existing face-to-face interactions.

One of them is the Workplace, a corporate social network through Facebook. This new communication channel supports the cultural transformation journey that the company has been through in the last years. The major benefits of a corporate network are the integration of all employees all around the globe, the speed of information and the guiding role of employees, who are the spokespersons of company's topics and projects. In addition to enhancing the sense of belonging and pride of all the employees, this scenario contributes significantly to a better management of knowledge, exchange of best practices and problem solving.

By the end of the year, 96% of employees had already adhered to the internal digital social network, a market benchmark index and more than 200 interest communities had been created. The average number of monthly interactions totals 10 thousand, with 53% of company's employees actively using the channel.

In the period the What's Next forum was launched, a live streaming event hosted by Oxiten Board of Executive Officers each quarter. The show has a journalistic language and informs about the main achievements, business results, objectives and next steps. A real time questions and answers occurs at the end of each presentation. What's Next is transmitted in Portuguese, with simultaneous translation into English and Spanish. The pilot edition was disclosed in August 2018 and followed by approximately 1,200 professionals, a number that increased in the two next editions of the year with the approval by 98% of the participants. The contents of What's Next is available to the employees through digital platforms, so the ones who could not see it live have the opportunity of watching it later.

The face to face events have been remodeled, such as Exchange and XLead. The first one consists of meetings in person with company's management and professionals from different hierarchies, at several plant units and offices, for more informal chats about business, career, diverse subjects of participants' interest. During the year, 17 meetings with 255 employees were held and 85% of them evaluated the initiative as very good or good. The XLead is intended to Oxiten leaderships all over the world. It is an executive meeting to align the main strategic themes of the company, which in 2018 occurred in São Paulo. A total of 80 persons

from different countries attended the event, which will become annual.

Another way that Oxiten found to motivate and engage its professionals is the granting of a series of benefits, with small differences in each country. Following are the benefits offered in Brazil: [401-2](#)

- Attendance bonus (payment of a compensation bonus during vacations).
- Ten-year gratification (payment of a full salary in the year when the employee completes ten, 20 or 30 years of work).
- Consigned loan for employees with a minimum of six months working for the company.
- Participation in profits and results.
- Private pension with defined contribution, part paid by the employee and part by Oxiten that contributes with the same value paid by the worker.
- Emergency Funef: the emergency fund for employees going through a critical financial situation.
- Group life insurance.
- Medical assistance through an accredited network and free choice.
- Dental assistance with 40% co-participation of use.
- Pharmacy assistance.
- Day care unit aid.
- Maternity/paternity leave (at Camaçari unit, the maternity leave was increased from 120 to 180 days).
- The Funef Escolar is a benefit granted as a loan to help the employee to pay the education expenses:
  - Students enrolled with a public or private school, attending the fundamental, secondary (including supplementary education) or superior courses.
  - With children enrolled with a public or private school, attending fundamental and secondary courses.
- Meal/food vouchers.
- Supplement to the sick/accident pay, as provided for in the collective bargaining convention.
- Granting of incentives for language, post-graduation and/or superior extension courses in Brazil or abroad.

During the year, 17 women benefited from maternity leave, with a return rate of 100% and retention of 91% 12 months after the return to work. Following is the complete table. [103-2](#) | [103-3: Diversity and equal opportunities](#) | [103-2](#) | [103-3: Non-discrimination](#) | [406-1](#)

## Maternity/paternity leave\* |401-3|

### Mercosur

<b>Brazil</b>	<b>Male</b>	<b>Female</b>
Employees with right to use the maternity/paternity leave	870	376
Employees who used the maternity/paternity leave	0	17
Employees who returned to work after the maternity/paternity leave	0	17
Employees who returned to work after a paternity/maternity leave and continued working 12 months after their return	0	40
Rate of return to work (%)	100	100
Retention rate (%)	100	91

<b>Uruguay</b>	<b>Male</b>	<b>Female</b>
Employees with right to use the maternity/paternity leave	98	24
Employees who used the maternity/paternity leave	0	1
Employees who returned to work after the maternity/paternity leave	0	1
Employees who returned to work after a paternity/maternity leave and continued working 12 months after their return	0	0
Rate of return to work (%)	100	100
Retention rate (%)	0	100

### MAC

<b>Mexico</b>	<b>Male</b>	<b>Female</b>
Employees with right to use the maternity/paternity leave	277	91
Employees who used the maternity/paternity leave	0	2
Employees who returned to work after the maternity/paternity leave	0	2
Employees who returned to work after a paternity/maternity leave and continued working 12 months after their return	0	0
Rate of return to work (%)	100	100
Retention rate (%)	0	100

<b>Venezuela</b>	<b>Male</b>	<b>Female</b>
Employees with right to use the maternity/paternity leave	39	18
Employees who used the maternity/paternity leave	0	2
Employees who returned to work after the maternity/paternity leave	0	2
Employees who returned to work after a paternity/maternity leave and continued working 12 months after their return	0	0
Rate of return to work (%)	100	100
Retention rate (%)	0	0

\* Data from United States not available.

## Mathematic ratio of base salary and compensation between women and men<sup>1</sup> |405-2|

### Mercosur

Functional category	2018 – Brazil
Management	0.90
Coordination/Supervision/Consulting	1.03
Administrative	0.91
Operational	0.88

Functional category	2018 – Uruguay
Management	1.00
Coordination/Supervision/Consulting	0.00 <sup>2</sup>
Administrative	0.98
Operational	0.00 <sup>2</sup>

### MAC

Functional category	2018 – Mexico
Management	0.68
Coordination/Supervision/Consulting	0.90
Administrative	0.77
Operational	1.21 <sup>3</sup>

Functional category	2018 – Venezuela
Management	0.00
Coordination/Supervision/Consulting	1.15
Administrative	0.96
Operational	0.99

1. Data not available for the United States.

2. There are no women in the position.

3. The curve results from the fact that we have women in technical functions.



The mathematic ratio of salary between women and men depends on factors such as time with the company, education, performance, and others. Since the employees, independently of gender, have distinct times with the company, education, and performance, some differences are expected between compensations, which do not relate to gender. Therefore, the mathematic ration of salaries between women and men shows a difference of 1.00.

As to the fourth pillar, the Efficiency and excellence of processes, the opportunities of the period have been analyzed for creation and/or improvement of actions. One of the main estimated projects refers to the consolidation of an integrated system of human resources, which will allow the digitalization and qualification of different tasks conducted by the area, with gains both in time and reliability.

At the end of the period, **96% of the employees** have adhered to the internal social network, one of the market benchmarks





ENVIRONMENT

The environmental management is in Oxiteno's DNA, principles and Code of Ethics since the optimization of resource use and the consequent decrease of losses directly contribute to business success. It is certified based on international standards, established by rule ISO 14001. All units in Brazil and industrial plants in Mexico are certified for version 2015 of the rule, and the company continues the work to certify all the units.

The monitoring includes water, energy, air emissions, solid residues and liquid effluents and measures are adopted to prevent, control and minimize the operation impacts. As a result, most of indexes show an improvement in the general performance.

Oxiteno is committed with the environment and expresses this in different ways. The company is signatory of the Program Responsible Activity, audited by third parties to verify the compliance of their commitment with the continuous improvement. Also, it participates in the *Guia Exame de Sustentabilidade*, Carbon Disclosure Project (CDP), *Água e Mudanças Climáticas* and clients' evaluations through EcoVadis platform, where it has a position in the highest ranked category (Ouro). For the second consecutive year, the Camaçari units (Brazil) received in 2018, the *Prêmio Polo* of Camaçari in Health, Safety, and Environment (SSMA), in the modality of Excellence, having as highlight the environmental management. [102-12]

Commitments for 2020 <sup>1</sup>		2018 status	Context
Greenhouse Gases (GEE)	Decrease of 25% in air emissions, based on data from 2008	13%	The projects that contributed to decrease emissions include: sale of CO <sub>2</sub> from the process of oxide production at the units in Mauá and Camaçari (Brazil), changes in the energy matrix of boilers, among others.
	Decrease of the global absolute emissions in 70,000 mil tCO <sub>2</sub> e/year	Goal achieved	Decrease of emissions from the use of residual gas to generate energy.
Water	Increase of 25% of water reuse, base: 2008	15% of global index	Oxiteno continues studying and investing in opportunities o water reuse.
Waste	Zero landfill for industrial residues (Brazil and MAC)	Goal achieved	98% of recycled materials and only 2% of industrial residues cannot be reused and are burnt. No remittance of industrial residues to landfills.

# Power

|103-2 | 103-3: Energy|

Aiming the continuous energetic optimization, most of the investments performed by Oxiteno has as objective the improvement of process performance, with highlight to vapor, boilers, furnaces and turbine net, in addition to seeking, as much as possible, to transition from the energetic matrix to cleaner sources.

In the 2017 comparison, the consumption of energy in the industrial and administrative processes showed a decrease of 9.7%. In a monthly evaluation during the year, the index decreased as a result from the projects that focus on the improvement of the energetic performance – with the optimization of the vapor network and the monitoring of boilers, furnaces, and turbines. The highlight is the project to optimize the vapor network at the Camaçari unit and Oleoquímica (Brazil). Following are the consumptions. |302-1|

## Consumption of energy and intensity |302-1 | 302-3|

### Mercosur

Brazil	2016	2017	2018
Total consumption of energy (GJ)	7,674,809.94	8,776,879.52	7,871,508.73
Total energy of processes/ production (GJ/t product)	6.71	6.94	6.65

### Uruguay

	2016	2017	2018
Total consumption of energy (GJ)	92,091.71	98,944.44	93,290.26
Total energy of processes/ production (GJ/t product)	2.02	2.01	2.11

### Total Mercosur

	2016	2017	2018
Total consumption of energy (GJ)	7,766,460.21	8,875,823.96	7,964,798.99
Total energy of processes/ production (GJ/t product)	6.53	6.76	6.49

### MAC

#### Mexico

	2016	2017	2018
Total consumption of energy (GJ)	304,031.14	273,823.60	296,971.20
Total energy of processes/ production (GJ/t product)	4.80	4.31	4.55

#### Venezuela

	2016	2017	2018
Total consumption of energy (GJ)	17,945.16	21,327.22	17,736.51
Total energy of processes/ production (GJ/t product)	2.68	4.86	11.08

### Total MAC

	2016	2017	2018
Total consumption of energy (GJ)	321,976.64	295,150.83	314,707.71
Total energy of processes/ production (GJ/t product)	4.59	4.34	4.71

### Total global

	2016	2017	2018
Total consumption of energy (GJ)	8,088,436.85	9,170,974.79	8,281,076.50
Total energy of processes/ production (GJ/t product)	6.42	6.64	6.40

The company also follows its index of energetic intensity, measured by the total energy consumed divided by the production in tons. In 2018, the global index was 6.40 GJ/t of product, below the results for 2017 and 2016, which were, respectively, 6.64 GJ/t product and 6.42 GJ/t product. The result indicates a percentage decrease of 3.61% in the energy consumed for each ton of product. [302-3]

Oxiteno's energetic matrix is represented by vapor (10%), natural gas (46%), tail gas (25%), electric energy from concessionaires (12%) and others (7%). Oxiteno's renewable energy comes from purchased electric energy, representing 6% of the energetic matrix. Half of the 12% of energy coming from the concessionaire is renewable energy (hydroelectric plants).

In 2018, the Tremembé unit (Brazil) started a project to replace the use of fuel oil using natural gas boilers – the implantation and operation is estimated to begin in 2019. Oxiteno consumes energy from the use of residual gases from other production processes, in addition to hydrogen and alcohols as sources of vapor generation.

In 2018, the unit of San Juan del Rio (Mexico) replaced the energetic matrix with boiler for generation of vapor and fuel oil with natural gas.

The Camaçari unit (Brazil) completed the construction of a new substation of electric energy, which will result in gains (particularly financial gains) since the unit is able to act in the free market of energy, which will represent annual savings of approximately R\$12 million. The substation will start operations in 2019.

## Air emissions

[103-2 | 102-3: Emissions]

Through its Program for Monitoring and Decrease of Greenhouse Gases (GEE), established in 2009, Oxiteno has a monthly monitoring of its emissions, which results are annually checked by an external independent verification. The basis of the calculation methodology is data from the activities and their respective emission factors, which definitions use data from main entities of the sector (Ministry of Science, Technology, and Innovation and Intergovernmental Panel about Climate Change), vendors or the company itself, through mass balance and/or stoichiometry. In addition, the presentation of the levels of emissions of several gases (GWP in English), gathering all of them in the same comparison basis (CO<sub>2</sub>e).

The data feed an inventory prepared according to the standard ISO 14064-1. Based on the critical analysis of indexes, Oxiteno develops action plans to decrease the environmental impacts. The Program of Monitoring and Decrease of Greenhouse Gases (GEE) identified opportunities for performance improvement, of which 22 became priority. Ten of those twenty-two priority opportunities have been already introduced and one is in the implantation stage.

The main sources of emission of the company come from vapor generation, production of ethane oxide and consumption of electric energy. Concerning the need to generate vapor as an energetic source for processes, Oxiteno continues investing in the adoption of cleaner fuels and the optimization and energetic use of residual gases from close companies.

To reduce the emissions resulting from ethane oxide manufacturing, the gases produced are commercialized and used as raw material in other production processes. The emissions prevented by the use of residual gases represent a decrease/offset of 13% of total emissions of Oxiteno – the goal established for 2020 is to decrease 25% of emissions. Since the beginning of operations, in 2019, 594,074 tons of CO<sub>2</sub>e were avoided. [305-4]

**75% of the electric energy consumed comes from a renewable source**





Aligned to the industry 4.0, the Camaçari unit installed an APC (Advanced Process Control) Multivariable Conductor at the units of Oxide I and II, respectively, in 2017 and 2018. The new system improves the process control, corresponding to gains in vapor savings, significantly decreasing the CO<sub>2</sub> emissions.

As to the emissions of scope 1, which are direct, in other words, they come from sources belonging to or controlled by the company, in 2018, there was a decrease of 73,900 tons of CO<sub>2</sub> in Brazil, resulting from a series of projects, including the commercialization of

carbon gas as a product. In 2018, an increase of 0.6% was seen in the indirect emissions of scope 2 resulting from the emissions caused by the generation of electricity, heat or vapor imported for own consumption. [\[305-1 | 305-5\]](#)

In 2018, the global intensity of GEE emissions by Oxiteno, considering the scopes 1 and 2, reached 0.41 tCO<sub>2</sub>e/t produced - the index was of 0,4 tCO<sub>2</sub>e/t produced in the last two years, representing a decrease of emissions per ton/production.

The following table has more information:

## Direct GEE emissions – scopes 1 and 2 (tCO<sub>2</sub>e) | 305-1 | 305-2|

<b>Mercosur</b>			
<b>Brazil</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Direct emissions	419,697.12	476,159.54	402,259.41
<b>Scope 2</b>			
Indirect emissions	169,705.46	175,092.67	176,173.71
<b>Total (scopes 1 and 2)</b>	<b>589,402.58</b>	<b>651,252.21</b>	<b>578,433.11</b>
<b>Uruguay</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Direct emissions	4,949.06	5,719.11	5,365.23
<b>Scope 2</b>			
Indirect emissions	1,027.24	1,094.54	1,026.30
<b>Total (scopes 1 and 2)</b>	<b>5,976.30</b>	<b>6,813.65</b>	<b>6,391.52</b>
<b>Total Mercosur</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Fossil emissions	424,646.18	481,878.65	407,624.63
<b>Scope 2</b>			
Indirect emissions	170,732.70	176,187.21	177,200.00
<b>Total (scopes 1 and 2)</b>	<b>595,378.88</b>	<b>658,065.86</b>	<b>584,824.64</b>
<b>MAC</b>			
<b>Mexico</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Direct emissions	17,064.85	15,822.47	17,709.65
<b>Scope 2</b>			
Indirect emissions	6,561.13	6,018.53	6,337.72
<b>Total (scopes 1 and 2)</b>	<b>23,625.98</b>	<b>21,841.00</b>	<b>24,047.37</b>
<b>Venezuela</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Direct emissions	140.93	358.22	530.19
<b>Scope 2</b>			
Indirect emissions	1,121.91	1,158.36	859.75
<b>Total (scopes 1 and 2)</b>	<b>1,262.84</b>	<b>1,516.58</b>	<b>1,389.94</b>
<b>Total MAC</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Direct emissions	17,205.78	16,180.69	18,239.84
<b>Scope 2</b>			
Indirect emissions	7,683.04	7,176.89	7,197.47
<b>Total (scopes 1 and 2)</b>	<b>24,888.82</b>	<b>23,357.58</b>	<b>25,437.31</b>
<b>Total global</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Scope 1</b>			
Fossil emissions	441,851.96	498,059.34	425,864.47
<b>Scope 2</b>			
Indirect emissions	178,415.74	183,364.10	184,397.48
<b>Total (scopes 1 and 2)</b>	<b>620,267.70</b>	<b>681,423.44</b>	<b>610,261.95</b>

## Intensity of relative emissions (tCO<sub>2</sub>e/t produced)\* |305-4|

	2016	2017	2018
Brazil	0.52	0.52	0.49
Uruguay	0.13	0.14	0.14
Mercosur	0.50	0.50	0.48
Mexico	0.37	0.34	0.37
Venezuela	0.19	0.35	0.87
MAC	0.36	0.34	0.38
Global	0.49	0.49	0.47
Global (accounting for the avoided emissions)	0.44	0.44	0.41

\* Data from United States not available.

## Water and liquid effluents

|103-2 | 103-3: Water|

Oxiteno follows the collection and consumption of water of all its industrial units, evaluating the risks and opportunities for actions to decrease the use of the resource and increase the possibilities of reuse.

One project related to the use of residual water was executed in 2018, together with the implantation of rainwater collection at the Coatzacoalcos unit (Mexico), with a collected volume in 2017 of 173 m<sup>3</sup> and 573 m<sup>3</sup> in 2018. The project had three steps, the first one implanted in 2017, the second in 2018, and the third step estimated for 2019.

In 2018, the company was responsible for collecting a water volume 2.8% lower than in previous period, as a result from the gradual progress of such projects. Oxiteno intends to increase the use of residual water from effluents and water collection. In 2018, water reuse represented 15% of the total consumption (807,896 m<sup>3</sup>). Considering the complete removal of water, 98% returns to the environment through evaporation or treated effluents. The remaining 2% are consumed, which includes the incorporation to the products. |303-3|

The complete tables follow.



## Total removal of water per source (m³) |303-1|

<b>Mercosur</b>			
<b>Brazil<sup>1</sup></b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	0	13,333	55,271
Rainwater <sup>2</sup>	29,131	22,011	12,957
Effluents from other organization <sup>3</sup>	814,139	818,079	794,366
City or third-party company supply	4,273,356	4,384,112	4,242,695
<b>Uruguay</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	54,761	57,739	48,207
Rainwater <sup>2</sup>	0	0	0
Effluents from other organization <sup>3</sup>	0	0	0
City or third-party company supply	26,641	26,849	25,233
<b>Total Mercosur</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	54,761	71,072	103,478
Rainwater <sup>2</sup>	29,131	22,011	12,957
Effluents from other organization <sup>3</sup>	814,139	818,079	794,366
City or third-party company supply	4,299,997	4,410,961	4,267,928
<b>MAC</b>			
<b>Mexico</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	69,314	54,981	52,776
Rainwater <sup>2</sup>	0	173	573
Effluents from other organization <sup>3</sup>	0	0	0
City or third-party company supply	91,599	100,424	108,172
<b>Venezuela</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	0	0	0
Rainwater <sup>2</sup>	0	0	0
Effluents from other organization <sup>3</sup>	0	0	0
City or third-party company supply	35,068	23,414	11,020
<b>Total MAC</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	69,314	54,981	52,776
Rainwater <sup>2</sup>	0	173	573
Effluents from other organization <sup>3</sup>	0	0	0
City or third-party company supply	126,667	123,838	119,192
<b>Total global</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Underground waters	124,075	126,053	156,254
Rainwater <sup>2</sup>	29,131	22,183	13,530
Effluents from other organization <sup>3</sup>	814,139	818,079	794,366
City or third-party company supply	4,426,664	4,534,799	4,387,120
<b>Total of removed water</b>	<b>5,394,009</b>	<b>5,501,114</b>	<b>5,351,270</b>

1. In 2017, the Tremembé unit (Brazil) resumed the use of underground water in processes that do not have microbiological issues, as in the cooling tower.
2. Only Oleoquímica (Camaçari – Bahia – Brazil) and Coatzacoalcas (Mexico – after 2017).
3. Only Aquapolo (Mauá – São Paulo – Brazil).



## Total water consumption (m<sup>3</sup>/t of product)

<b>Mercosur</b>	
Brazil	4.31
Uruguay	1.66
<b>Total Mercosur</b>	4.22
<b>MAC</b>	
Mexico	2.48
Venezuela	6.89
<b>Total MAC</b>	2.58
<b>Global</b>	
Total global	4.13

During 2018, the company invested to elevate the effluent network at Camaçari units (Bahia), Tremembé (São Paulo), and Mauá (São Paulo);

the new configuration of the apparent network allows routine and preventive maintenance inspections to improve the operating control.

## Materials

[103-2 | 103-3: Materials]

Oxiten uses products from renewable and non-renewable sources. The renewable sources correspond to 23% of the volume (in tons) used in the company. The renewable raw materials include the Palm Kernel Oil – PKO, the vegetable oil most consumed in the world. Malaysia and Indonesia concentrate more than 90% of the production of such renewable material. With its Oleoquímica unit, located in the Industrial Complex of Camaçari (Bahia), Oxiten is the only company in Brazil to manufacture fat acids, fat alcohols, and glycerin from PKO. The production chain of palm oil, including the palm-kernel oil, still faces social, environmental, and economic challenges. The non-governmental organization (NGO) Roundtable on Sustainable Palm Oil (RSPO), headquartered in Malaysia, develops and enforces global standards for the sustainable chain of palm oil. Oxiten is an ordinary member of this ONG and supports the causes defended through a Responsible Palm Oil Sourcing Policy, which defines specific requirements for the suppliers of this renewable raw material with strategic importance for their businesses. [102-12]

Other important renewable raw material is the fuel oil, a byproduct of sugar cane refineries that is distilled to produce the alcohol isopentyl (also known as alcohol isoamyl) used in fragrances, scents, and nail polish removers.

The renewable raw material include particularly the ethane, the main Oxiten input, corresponding to 24% of company's global disbursement with raw materials – from which the ethylene oxide is made. Through the alkoxylation process with ethane oxide, the company produces ethoxylated tensoactives, which can be used in many products. The alkoxylation process occurs at the Mauá, and Camaçari units (Brazil), Guadalajara and Coatzacoalcos (Mexico), Pasadena (USA), and Santa Rita (Venezuela).

Not only does the company seek a better production management, but also aims environmental gains from their products and supply chain.

An example of this is that, with the purpose of decreasing the consumption of steel, Oxiten developed, in partnership with a vendor, a project to minimize the thickness of the metallic drums that the company uses. The company started using the Spiral tainer-type corrugation, which allows a decrease of 12.5% of steel in each package, corresponding to a decrease of 700 tons of the mineral transported every year. This allows financial gains of about R\$1.5 million per year.

Another important initiative is the concern with the supply chain of pallets for the Brazilian units, which requires that their entirety is certified by the Forest Stewardship Council (FSC). Every year, Oxiten uses about 150,000 pallets directly or indirectly. Therefore, using this required certification, the company ensures that the wood used to manufacture the pallets originates exclusively from adequate handling areas, which guarantees the origin of raw material and confirms its commitment with the criteria of social responsibility.

### Materials used, discriminated according to their weight and volume |301-1|

	2017		2018	
	Non-renewable (% in tons)	Renewable (% in tons)	Non-renewable (% in tons)	Renewable (% in tons)
<b>Mercosur</b>	77	23	77	23
<b>Brazil</b>	76	24	76	24
<b>Uruguay</b>	99	1	99	1
<b>MAC (Mexico)</b>	69	31	71	29
<b>United States</b>	19	81	71	29
<b>Total</b>	<b>76</b>	<b>24</b>	<b>77</b>	<b>23</b>

### Total weight of materials used\* (tons) |301-1|

	2017		2018	
	Non-renewable	Renewable	Non-renewable	Renewable
	484,365.94	151,392.49	467,549.39	142,633.11

\* Oxiteno manufactures the ethylene oxide from ethane and oxygen.

### Materials used, discriminated according to their weight and volume |301-1|

	2017		2018	
	Non-renewable (% in expenditure US\$)	Renewable (% in expenditure US\$)	Non-renewable (% in expenditure US\$)	Renewable (% in expenditure US\$)
<b>Mexico (MAC)</b>	68	32	65	35
<b>Mercosur</b>	71	29	78	22
<b>Brazil</b>	69	31	76	24
<b>Uruguay</b>	99	1	99	1
<b>United States</b>	12	88	62	38
<b>Total</b>	<b>70</b>	<b>30</b>	<b>76</b>	<b>24</b>

### Top 5 (expenditure)

	Brazil	Mexico	USA	Uruguay
1 <sup>st</sup>	Ethylene	Ethylene oxide	Ethylene oxide	L.A.B. (Bajo PM=242)
2 <sup>nd</sup>	Refined Kosher palm-kernel oil	Lauryl alcohol	Vegetable lauryl alcohol	Ethoxylated lauryl alcohol
3 <sup>rd</sup>	Heavy C4	Nonylphenol ethoxylate	Isotridecyclic alcohol	Linear alkyl benzene sulphonic acid
4 <sup>th</sup>	Glacial acetic acid	Kosher oleic acid	Vegetable lauryldimethylamine	Liquid caustic soda 50%
5 <sup>th</sup>	Phenol	Isotridecyclic alcohol	Distilled primary tallow amine	Bulk sulphur

The decrease in the PKO price justifies the reduction of 6% in the expenses with non-renewable from 2017 to 2018, when the consumption in tons was stable.

# Waste

[103-2 | 103-3: Effluents and waste | 306-4]

Oxiteno is reference in residue management. The generation is avoided as far as possible, however, not always this is feasible, given the business nature. Therefore, the generation and disposal indexes are followed, and the company is constantly seeking to identify opportunities for improvement of processes.

The residues are packaged in appropriated places and then they go through characterization and classification processes (as necessary) to allow their correct destination. Oxiteno performs audits for qualification and maintenance of service providers that deal with the final destination, always upon the authorization by the responsible environmental body.

The residues of Oxiteno are classified into industrial and non-industrial residues and sub classified as hazardous and non-hazardous. The industrial residues are generated by production processes and supporting or control activities (laboratories, maintenance, pollution control, and others) and classified as hazardous and non-hazardous. The non-industrial residues generated by constructions, toilets, and health services, among others, are also classified as hazardous and non-hazardous residues.

The company recycles and performs the energetic use (co-processing) of residues, and alternatively adopts the burning or, as a last resort, the destination to qualified industrial landfills. The remittance to industrial landfills occurs only in Uruguay, a country with restricted destination options.

In Brazil, 98% of residue generate is sent to recycling (as is the case with metals, batteries, wood, paper, electronics, glass, plastic, plastic-based oil, plastic packaging, etc.), recovery (drums, plastic drums, and others) or the energetic use (rejects such as contaminated sand, absorbent material, obsolete residues, different packages, solid exhausted residues, filtering elements, sludge from biological treatment, different contaminated packages, raw material residues, non-conformant/obsolete materials, exhausted solids, and others). The other 2% are burnt (including, for example, insulating residues and health service residues).

In Brazil, during the year, Oxiteno disposed 3,909 tons of hazardous residues and 2,961 tons of non-hazardous residues. Only the residues from sweeping, works, cafeteria and administrative activities went to the landfill. See the next table: [306-2]

**Zero landfill**  
for residues  
contaminated  
by chemical  
products has  
been **a reality**  
at Oxiteno for  
**more than**  
**15 years**



## Destination of non-hazardous residues (t) | 306-2|

<b>Brazil</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	931	955	986
Recovery (including the energetic use)	750	1,018	809
Burnt (mass burning)	67	65	24
Fill	1,607	1,099	1,054
Site storage			
Others	0.5	28	88
<b>Total</b>	<b>3,356</b>	<b>3,165</b>	<b>2,961</b>
<b>Uruguay</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	3	6	0
Recovery (including the energetic use)	0	0	1
Burnt (mass burning)	0	0	0
Fill	1,503	1,227	82
Site storage			
Others	0	0	0
<b>Total</b>	<b>1,506</b>	<b>1,233</b>	<b>83</b>
<b>Mercosur</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	934	961	986
Recovery (including the energetic use)	750	1,018	810
Burnt (mass burning)	67	65	24
Fill	3,110	2,326	1,136
Site storage			
Others	1	28	88
<b>Total</b>	<b>3,177</b>	<b>4,398</b>	<b>4,681</b>
<b>Mexico</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	321	319	409
Recovery (including the energetic use)	0	0	0.1
Burnt (mass burning)	411	380	517
Fill	52	77	49
Site storage			
Others	0	0	1,205
<b>Total</b>	<b>784</b>	<b>776</b>	<b>2,180</b>
<b>Venezuela</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	0	0	6
Recovery (including the energetic use)	0	0	0
Burnt (mass burning)	0	0	0
Fill	0	0	0
Site storage	0	0	0
Others	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>MAC</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	321	319	415
Recovery (including the energetic use)	0	0	0.1
Burnt (mass burning)	411	380	517
Fill	52	77	49
Site storage			
Others	0	0	1,205
<b>Total</b>	<b>784</b>	<b>782</b>	<b>2,186</b>
<b>Global</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	1,255	1,280	1,401
Recovery (including the energetic use)	750	1,018	810.1
Burnt (mass burning)	478	445	541
Fill	3,162	2,403	1,185
Site storage			
Others	1	28	1,293
<b>Total</b>	<b>5,646</b>	<b>5,174</b>	<b>5,230.1</b>



## Destination of hazardous residues (t) |306-2|

<b>Brazil</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	390	481	304
Recovery (including the energetic use)	2,823	3,323	3,580
Burnt (mass burning)	21	15	6
Fill*	11	40	13
Site storage			
Others	0	141	6
<b>Total</b>	<b>3,245</b>	<b>3,900</b>	<b>3,909</b>
<b>Uruguay</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	0	-	-
Recovery (including the energetic use)	21	84	159
Burnt (mass burning)	0.08	-	0.42
Fill	1,328	1,422	953
Site storage			
Others	2	0	46
<b>Total</b>	<b>1,351</b>	<b>1,506</b>	<b>1,159</b>
<b>Mercosur</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	390	481	304
Recovery (including the energetic use)	2,844	3,407	3,739
Burnt (mass burning)	21.08	15	6.42
Fill	1,339	1,462	966
Site storage			
Others	2	141	52
<b>Total</b>	<b>4,596</b>	<b>5,406</b>	<b>5,068</b>
<b>Mexico</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	6	3	0.04
Recovery (including the energetic use)	27	17	120
Burnt (mass burning)	43	43	47
Fill	0	2	-
Site storage	-	-	-
Others	-	-	-
<b>Total</b>	<b>76</b>	<b>65</b>	<b>168</b>
<b>Venezuela</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	0	0	0
Recovery (including the energetic use)	0	75	0
Burnt (mass burning)	0	8	0
Fill	0	0	0
Site storage	0	0	0
Others	0	0	0
<b>Total</b>	<b>0</b>	<b>83</b>	<b>0</b>
<b>MAC</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	6	3	0.04
Recovery (including the energetic use)	27	92	120
Burnt (mass burning)	43	51	47
Fill	0	2	0
Site storage			
Others	0	0	0
<b>Total</b>	<b>76</b>	<b>148</b>	<b>168</b>
<b>Global</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Recycling	396	484	304.04
Recovery (including the energetic use)	2,871	3,499	3,859
Burnt (mass burning)	64	66	53
Fill	1,339	1,464	966
Site storage			
Others	2	141	52
<b>Total</b>	<b>4,672</b>	<b>5,654</b>	<b>5,234.04</b>

\* Asbestos tile.







# SAFETY

|103-2 | 103-3: Occupational health and safety|

Also, Oxiteno seeks to be a reference concerning the health and safety of chemical and petrochemical industries in the countries where it has activities. Therefore, the company maintains a management system dedicated to these topics, including all units and that was designed according to the criteria of OHSAS 18001, with the purpose of increasing safety; obtaining the continuous improvement, rationalization and reliability of projects, processes, and services; decreasing accidents and occupational diseases, as well as process costs; motivating and increasing the life quality of workers; and qualifying its image and incrementing the productivity, competitiveness, and profitability. [\[403-8\]](#)

The system develops new directives, synergies – sharing the best solutions with the different units and cultures of the company – and involvement of the professionals with the good practices, including third parties. [\[403-8\]](#)

Oxiteno extends this concern/responsibility about health and safety to all areas and activities, to guarantee safe and healthy environments, processes, and products also for the clients and final consumers.

## Occupational Safety

For the company, the offer of work conditions that guarantee the safety and health of their professionals is valuable and must be constantly reinforced, and the management of these aspects is part of its strategy to seek the operational excellence. Oxiteno assumes the premise that all labor accidents and diseases can be avoided and invests in research, training, and actions to improve the culture to define – and then disseminate – the best practices.

Most serious threats to employees' safety and health relate to the operation of the industrial units: transfer of chemicals, load and unloading of hazardous products, handling of hazardous chemical products, stop and interruption of process equipment, among others. Also, most significant risks to occupational safety are connected to maintenance works in machines and process equipment, requiring the need to block dangerous sources, such as electric, chemical, and thermal sources. [\[403-8\]](#)

In the area of **process safety**, Oxiteno has performance indexes that are **among market references**

In 2018, supported by an external consulting, Oxiteno preformed the Diagnosis of Culture in Behavioral Safety. The survey offers an understanding about the safety maturity stage where the company is, to direct with certainty the definition of the best strategy to reach the next level through the execution of a cultural change plan. The execution of this diagnosis achieved a high level of adherence at the industrial units, offices, and Research and Development centers (R&D). The work involved approximately one thousand people, with interviews and focus groups with professionals from different hierarchies, document analysis and observation of field activities. This is the first step of a comprehensive project that will prepare the company to achieve, in the next few years, the generation of a curve of maturity Hearts and Minds – where the culture has a high level of awareness, confidence, and responsibility in safety, which becomes part of the strategy of company to conduct its businesses and obtain profit. The next year is expected to bring the consolidation of 2018 diagnosis results and, consequently, the development of a cultural safety transformation plan. [\[403-8\]](#)

As to the Preparation, Planning, and Response to Emergencies, the works started in 2017 in Brazil and were extended to Uruguay and Mexico. Those two countries initiated the diagnosis phase of the main elements that form the management of emergency response. Also in 2018, the qualitative and quantitative evaluations of systems and components for fire protection occurred in Camaçari, Triunfo, and Suzano – an initiative already completed at Mauá and Tremembé units. As a result, Oxitenó now is able to identify the efficiency of available resources and equipment used in emergencies. [\[403-1\]](#)

The management system of health and safety contemplates the analysis of risks in all tasks. The potential threats are mapped and described by a qualified multidisciplinary team and are always revisited to check for changes in the scope of activities or to see whether some employee detects an opportunity for improvement in the document. In any case, the employee has the right not to perform any task, if he/she identifies a serious or imminent risk situation. Also, the company maintains procedures with specific requirements described to perform high critical tasks, such as those that deal with working at height, blockings and maintenance labeling. Supplementary to the risk analysis, in case of non-routine tasks, a work permit is issued to support the employee in the previous verification of risks at the activity site. [\[403-2\]](#)

The workers can also report the risks through existing unit committees. For example, there are commissions at the industrial plants, formed by contracted employees and contracted companies' employees who deal with the themes of health and safety. In Brazil, the Internal Commission for Accident Prevention (Cipa) is present in all units and performs, for example, the activities of safety inspection, campaigns to promote the health and well-being, participates in accident investigations, among other activities. In Uruguay, the unit has the Bipartite Commission, formed by representatives of Oxitenó leadership and employees with the function to suggest improvements. [\[403-1\]](#)

In 2018, the company continued focusing a safe behavior at the region of Mauá Complex. In the same year, for the first time, representatives of Oxitenó Brasil and Uruguay attended a specialized training at the Texas Engineering Extension Services, a division of Texas A&M University (USA), which develops courses related to the preparation and response to emergencies, such as strategies to combat industrial fire, vertical and confined spaces technical rescue, chemical emergencies, crisis management, and others. The estimates show the involvement of other representatives in the next years and the formation of experts in the area. [\[403-5\]](#)

This set of actions have been allowing the company to improve the safety reactive indexes. From 2016 to 2017, there was an increase in the number of more serious events that, thanks to the measures adopted, showed a significant improvement from 2017 to 2018, when we had a 57% reduction of lost time accidents. However, in 2018 there was a case of highly serious labor-related injury.

The labor accidents and incidents occurred at Oxitenó are recorded in an integrated system of non-conformities and are investigated according to their seriousness. Every year, these events are submitted to a critical global analysis, which is communicated to the company to help with the continuous improvement of this process through increasingly assertive actions.

A highlight of the period was when the Tremembé unit obtained the OHSAS 18001 certification, which represented the completion of a certification process for the industrial units in Brazil under that standard. For 2019, the expectation is to define the strategy to migrate to the new ISO 45001 at the already certified units and to evaluate the implantation at the units in other countries.

The global attendance rate, considering employees and third parties, registered in the period was of 1.65 for events involving lost time. There was no death in the period. The table containing information about injury indexes per country is as follows. [\[403-9\]](#)



## Safety indexes (per million worked hours) |403-9|

### Mercosur

			2016		2017		2018	
			Number	Rate	Number	Rate	Number	Rate
Brazil	Employees	Deaths	0	0	0	0	0	0
		Lost time accidents (excluding the deaths)	2	0.811	8	3.271	4	1.576
	Third parties which work site is controlled by the organization	Deaths	0	0	0	0	0	0
		Lost time accidents (excluding the deaths)	3	1.090	6	2.231	3	0.965
Uruguay	Employees	Deaths	-	-	0	0	0	0
		Lost time accidents (excluding the deaths)	-	-	3	17.80	4	14.32
	Third parties which work site is controlled by the organization	Deaths	-	-	0	0	0	0
		Lost time accidents (excluding the deaths)	-	-	5	84.88	0	0
MAC								
Mexico	Employees	Deaths	0	0	0	0	0	0
		Lost time accidents (excluding the deaths)	4	4.20	4	4.28	1	0.62
	Third parties which work site is controlled by the organization	Deaths	0	0	0	0	0	0
		Lost time accidents (excluding the deaths)	2	5.69	1	4.39	0	0
Venezuela	Employees	Deaths	0	0	0	0	0	0
		Lost time accidents (excluding the deaths)	0	0	0	0	0	0
	Third parties which work site is controlled by the organization	Deaths	0	0	0	0	0	0
		Lost time accidents (excluding the deaths)	0	0	1	22.22	0	0
United States	Employees	Deaths	-	-	-	-	0	0
		Lost time accidents (excluding the deaths)	-	-	-	-	0	0
	Third parties which work site is controlled by the organization	Deaths	-	-	-	-	0	0
		Lost time accidents (excluding the deaths)	-	-	-	-	0	0
Global	Employees	Deaths	-	-	-	-	0	0
		Lost time accidents (excluding the deaths)	6	1.756	15	4.228	9	2.289
	Third parties which work site is controlled by the organization	Deaths	-	-	-	-	0	0
		Lost time accidents (excluding the deaths)	5	1.817	12	4.462	3	0.965

Note: The symbol in the table refers to non-available data.

The main risks to workers health refer to the use of potentially hazardous products. The company adopts all the prevention measures and performs a strict medical follow-up and did not record any specific disease related to the contact with these raw materials in the work environment, which reflects the permanent focus on the theme, with messages and guidelines about safe practices and occupational hygiene programs to help prevent the exposure of worker to occupational risks, whether operational (risks that can generate an accident), behavioral (human factors) or environmental (physical, chemical, and ergonomic factors).

Also, the company maintains a program dedicated to the promotion of employees' health, supervised by a professional trained in occupational medicine and based on risk evaluations at workplace and the identification of specific requirements for each worker, which are identified during the selection process. [\[403-3\]](#)

Based on examinations, the employees receive individual medical orientation. In Brazil and Mexico, the industrial units have medical ambulatories for the demands related to occupational health and well-being promotion. Also, the plants located in the industrial complexes in Brazil count with the extra structure of PAMs, medical centers with supporting resources in case of emergencies. [\[403-6\]](#)

The benefit package granted to the employees also includes medical and dental health plans, pharmacy aid, periodic medical tests, executive check-up, Program for Employee Support, incentive to running and travel assistance. Vaccination campaigns and events related to well-being promotion occur every year. [\[403-6\]](#)

## Product Safety

Oxiteno is fully dedicated to the evaluation of its products concerning the environmental, health, and safety aspects. This is achieved through the identification of best products, practices, and innovation, follow-up of current legislations of the countries where the company acts and the participation in national and international organizations of their activity sectors.

The activities of Product Safety are planned, executed, and monitored considering indexes that allow the evolution of how the theme is managed. The evaluation is made both internally and by interested third parties. In 2018, Oxiteno began a process to improve the procedures already in force and the preparation of additional guiding documents to globally support the adoption of the best practices.

To guarantee better information to mitigate the risks associated to chemical products, all the raw materials used in production are evaluated and reviewed to ensure their regional and global conformity. In addition, the industrial inputs used in lower volumes are analyzed, as well as the final products and residues from the operations.

The company assumes the responsibility to facilitate the interpretation of chemicals safety evaluations. To do that, the company uses an accessible language. Therefore, the intention is that the knowledge and technical recommendations are increasingly clear, objective and effective to allow that the potential risks are well known.

In addition to the maintenance of the commitment to provide high-performance solutions that are more safe and comply with the regulatory recommendations of the sector, the company stimulates these practices among its suppliers when it requires under a contract that they commit with such practices. In case of transportation and storage of products, requiring specific licenses from government bodies, all service providers must be approved, and the vehicles are submitted to a checklist that results in the interruption of contracted work if they are not complied with.

Oxitenno maintains a corporate system to manage projects as a way to register and recover information about the products. Therefore, any change in a portfolio item, for example, results in a new analysis by several experts to detect whether the risks changed and if it's necessary a review of the information about exposure and manipulation to the clients.

In 2018, 100% of new products that the company marketed went through an analysis of toxicological and ecotoxicological requirements, as determined in the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Approximately 90% of line products were revisited to guarantee that their disclosed information is the more appropriate. The goal for 2019 is to guarantee this review for all existing products. These evaluations are inclusive and have as basis the data published and available from globally known information sources, GHS criteria and the transportation legislation, allowing technically consistent classifications. [\[416-1\]](#)

All the solutions offered by Oxitenno, as well as their raw materials, comply with the rules of classification and labeling of chemical products and transportation. The company also prepared safety information sheets of chemical products (FISPQ), emergency sheets and labels contemplating not only warnings, but also legal requirements and, if applicable, GHS labeling elements.

A different feature in the way how Oxitenno manages their product safety is in the fact that it goes beyond the provisions of Convention 170 of the Labor International Organization (OIT) about the Safe Use of Chemical Products in the Work Environment that require the submission of safety information only for hazardous chemical products, Oxitenno deals with all the solutions in a fair form.

## Process Safety

The safety of processes is a pillar of operating excellence of Oxitenno businesses, which focuses the identification of risk identification and control for people, environment, assets, and reputation as well.

During the last few years, the model of management in Process Safety based on 20 elements of the Center for Chemical Process Safety – AIChE (CCPS) was disclosed, of which 14 elements relate to OSHA 1910.119. The model is adopted globally by the company and is based on the commitment with the process safety; recognition, understanding and management of hazards and risks; and learning from experiences. The Process Safety Management (PSM) of Oxitenno is fully based on the operating discipline and, in 2019, it will continue to give priority to the cycles of Process Hazard Analysis (PHA) at their units, according to an structured planning that deals with 100% of the recommendations about the high/average risk scenarios, based on qualitative, semi quantitative and quantitative studies. At the same time, another objective is to maintain the commitment with the mechanic integrity of assets, assured quality, and safe practices.





VALUE CHAIN



## Vendors |102-9|

In 2018, the Matrix of Supply Risk was revalidated, considering criteria such as risk analysis based on history data, relevance, and criticality of raw material, suppliers, single sourcing, analysis of stakeholders, minimum tanking, intermediary and third-party inventories, contact flow and relationship hierarchies. Based on a survey of this information, a critical analysis defined action plans that are according to each input. |102-10 | 102-11|

Also, the company has a purchase program that approves their suppliers considering quality requirements, environment, social responsibility, health and safety, as well as manufacturing best practices. The suppliers also signed a commitment term that contemplates specific issues about the eradication of child labor and/or similar to slave labor, sex or race discrimination, working hours and labor legislations. |103-2 | 103-3: Supplier environmental assessment | 103-3: Supplier social assessment|

In addition, the items checked during vendor's audits include items of social responsibility and environment and the results are disclosed in an audit report. When any type of irregularity is identified, the vendor shall establish an action plan to correct the problem or even be subject to penalties, such as suspension of homologation. |103-2 | 103-3: Supplier environmental assessment | 103-2 | 103-3: Supplier social assessment|

After the homologation steps, the candidate vendors are subject to reputation researches that contemplate the search of information in public databases and questionnaires to identify any type of legal or reputational history that may represent a risk or exposure to Oxitenó, as well as to ensure the adequacy of the capacities and competencies of vendor.

Ultra offers the Open Channel to the vendors (details on page 25) to explain any doubt and receive complaints or denouncements about the violation of clauses, codes, and policies set forth in the agreements. In 2018, no occurrence was reported through the channel. |103-2: Supplier social assessment | 102-43|

The relationship with vendors is regulated by the Code of Ethics and specific policies of Ultra (Anticorruption Policy, Relationship with Public Agents, Competition Corporate Policy and Compliance Policies). To guarantee that the entire purchase process is aligned with these documents, Oxitenó created an internal procedure concerning the development, qualification, homologation, and monitoring of vendors procedure. |103-2 | 103-3: Procurement practices|

The evaluation of vendors  
contemplates **social and  
environmental criteria**



## Proportion of expenses with vendors |204-1|

			2016	2017	2018
Mercosur	Brazil	National	89.59	74.66	79.66
		Foreign	10.41	25.34	20.34
	Uruguay	National	18.72	15.73	19.08
		Foreign	81.28	84.27	80.92
MAC	Mexico	National	62.92	65.97	67.99
		Foreign	37.08	34.03	32.01
	Venezuela	National	N.D.	N.D.	0.01
		Foreign	N.D.	N.D.	99.99
United States	National		14.85	5.45	33.06
	Foreign		85.15	94.55	66.94

## Clients

|102-43 | 103-2 |

103-3: Customer health and safety|

Always seeking the best solutions, the key for our strategy to reach the purpose of Oxiteno to contribute for the well-being of people through chemistry is the partnership and co-creation with clients.

Oxiteno is in the category Gold awarded by EcoVadis, a remote audit platform that evaluates the sustainability practices of the companies, including environmental, labor practice, human, ethic and sustainable purchases matters. In addition to self-assessment audits and questionnaires to evaluate Oxiteno practices, the operations are constantly audited in loco, providing evidence of high performance.

The closer relationship with clients allows mutual gains, particularly in the cases where there are partnerships to co-create products. The connection allow the exchange of know-how and the creation or improvement of solutions aligned with the trends or market requirements and/or desires/needs of the industries that act in the segments served by the company.

The products and raw materials used by the company comply with the rules of classification and labeling of chemical products and transportation. Oxiteno prepares safety information sheets of chemical products (FISPQ), emergency sheets and labels

that generally inform the warnings and other legal requirements – and, if applicable, the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) labeling elements.

Also, although the Convention 170 of the Labor International Organization (OIT) about the Safe Use of Chemical Products in the Work Environment establishes that providing safety information is mandatory only for the hazardous chemical products, Oxiteno manages the products in an homogeneous way. In this sense, information contained in labels about the contents and safe use of products are guaranteed, particularly in the case of substances that may generate any environmental or social impact.

With the purpose of minimize the incidence of non-conformities and improve operations, Oxiteno performs audits, disseminates information, guidelines and alerts to comply with laws, resolutions and regulatory rules. Notwithstanding this, some non-conformities of product safety were registered by audits, but none of them resulted in any fine, relevant penalty or advertence in 2018. The company maintains a corporate system to deal with the corrections immediately, which is structured and complete to find solutions for most cases. |103-2 | 103-3: Marketing and labeling | 417-1 | 417-2|

## Distributors

Oxitenos counts with five distribution partners in Brazil. They answer for the provision of services to 90% of the small to medium companies that consume any type of chemical solution, in addition to the major market players. For this reason, the company seeks to maintain a close relationship with them and a mutual commitment since their action is fundamental to guarantee clients' satisfaction.

## Communities

|102-43 | 203-2 | 203-3 | 103-2 |  
103-3: Indirect economic impacts|

Oxitenos understands that it is integral part of the society and seeks to strengthen the relationship with and development of the communities in the locations where it has activities. In 2018, the company entered the project *Baú das Artes*, in Camaçari (Brazil), an action to distribute definitely a collection of 300 children's books, educational games, toys, costumes, and musical instruments for children with ages from five to ten years. Simultaneously, there are workshops for teacher qualification, combined to the distribution of the Manual of Teacher and the Matrix of Competencies and Skills, which help the teachers of benefited schools to better use the collection. The use of materials contemplates playful and educational methodologies that deal with the transversal themes contained in the National Curriculum Parameters (PCN), in other words, environment, sexuality, ethics, work and consumption, health and cultural plurality. During the year, eight schools were involved in the project, 28 teachers qualified, and 1,740 children were benefited.

The company supports the project *Integrar Arte e Vida*, in Mauá, an initiative developed in partnership with the National Sports Association (ANE) and Cora Coralina School that stimulates children and youngsters to remain in school and complete their educational journey. The action offers cultural and sports workshops, in the modalities of dance, futsal, and judo; in 2018, about 200 persons participated in the workshops per month.

In Tremembé, also in the State of São Paulo, Oxitenos supports the social project *Jovem Aprendiz*, at Manuel Cabral State School. Voluntary employees share their work experiences and help second and third grade students to select a profession and/or graduation course to encourages them to seek personal and professional qualification. A total of 21 employees participate in the initiative covering ten different themes in the weekly meetings. The program benefited 175 students. Another educational initiative supported by Oxitenos is the Program *Formare*, a partnership of Instituto Ultra, Fundação Iochpe and companies of the group. The focus is the education of vulnerable youngsters to insert them in the work market. The initiative occurs at the central offices of the company, in São Paulo (Brazil), offering a professional course of administrative and commercial services assistant, which is recognized by the Ministry of Education. During 2018, 25 students attended the course, with 40 volunteers of Oxitenos that teach 14 different disciplines every week.

Also, the units of Mauá (Brazil), Tremembé (Brazil), Suzano (Brazil), Triunfo (Brazil) and Camaçari (Brazil) actively participate in the Consulting Community Councils (CCCs), a relationship channel between the company and community representatives (leaders, civil defense, schools, health centers and others), holding bimonthly meetings to align the themes related to health, safety and environment. The highlight of the year was the creation of the Letter of Contribution to the Sustainable Development Objective (ODS) of the United Nations (UN). In the document, the Brazilian Association of Chemical Industry (Abiquim) formalized the involvement of the Consulting Community Councils with the UN global agenda and its disclosure and application. The CCC of Tremembé, which is 100% managed by Oxitenos, contributed directly to the objectives 3 and 4 of the UN (Health and well-being and Quality education, respectively) through initiatives such as visits and trainings at the plant, a project to combat the dengue fever and workshops about environment with the schools of the region.  
|103-2 | 103-3: Local communities | 413-1|



# GRI CONTENT INDEX

|102-55|

## Standards option Core

### GRI 101: Foundation 2016

GRI 102: General disclosures 2016	Standard	Page	Omission	UNGC	SDG
<b>Organizational profile</b>					
	102-1: Name of the organization	7			
	102-2: Activities, brands, products, and services	7			
	102-3: Location of headquarters	8			
	102-4: Location of operations	8			
	102-5: Ownership and legal form	9			
	102-6: Markets served	7			
	102-7: Scale of the organization	7			
	102-8: Information on employees and other workers	11 and 43 to 45		6	8
	102-9: Supply chain	77			
	102-10: Significant changes to the organization and its supply chain	77			
	102-11: Precautionary principle or approach	29 and 77			
	102-12: External initiatives	57 and 64			
	102-13: Membership of associations	23 and 24			
<b>Strategy</b>					
	102-14: Statement from senior decision-maker	2 to 3			
	102-15: Key impacts, risks, and opportunities	28 and 29			
<b>Ethics and integrity</b>					
	102-16: Values, principles, standards and norms of behavior	25 and 26		10	16
	102-17: Mechanisms for advice and concerns about ethics	27		10	16
<b>Governance structure</b>					
	102-18: Governance structure	20 to 23			
<b>Stakeholder engagement</b>					
	102-40: List of stakeholder groups	13			
	102-41: Collective bargaining agreements	43		3	8
	102-42: Identifying and selecting stakeholders	13			
	102-43: Approach to stakeholder engagement	13			
	102-44: Key topics and concerns raised	13			

<b>GRI 102: General disclosures 2016</b>	<b>Standard</b>	<b>Page</b>	<b>Omission</b>	<b>UNGC</b>	<b>SDG</b>
<b>Reporting practice</b>					
	102-45: Entities included in the consolidated financial statements	14			
	102-46: Defining report content and topic boundaries	13 and 14			
	102-47: List of material topics	13			
	102-48: Restatements of information	13			
	102-49: Changes in reporting	13			
	102-50: Reporting period	13			
	102-51: Date of most recent report	13			
	102-52: Reporting cycle	13			
	102-53: Contact point for questions regarding the report	14			
	102-54: Claims of reporting in accordance with the GRI Standards	13			
	102-55: GRI content index				
	102-56: External assurance	14			

<b>Material topics</b>	<b>Standard</b>	<b>Page</b>	<b>Omission</b>	<b>UNGC</b>	<b>SDG</b>
<b>GRI 201: Economic performance 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	30		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	30			
	201-1: Direct economic value generated and distributed	33			2, 5, 7, 8, 9
	201-4: Financial assistance received from government	Oxiteno benefits from some tax incentives of the Government to stimulate the development of the companies and sector. Two relevant benefits of Oxiteno are SUDENE (R\$80.1 million) and REIQ (R\$43.7 million).			



Material topics	Standard	Page	Omission	UNGC	SDG
<b>GRI 203: Indirect economic impacts 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	79		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	79			
	203-2: Significant indirect economic impacts	79			1, 2, 3, 8, 10, 17
<b>GRI 204: Procurement practices 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	77		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	77			
	204-1: Proportion of spending on local suppliers	78			12
<b>GRI 205: Anti-corruption 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	25 and 26		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	25 and 26			
	205-1: Operations assessed for risks related to corruption	26		10	16
	205-2: Communication and training about anti-corruption policies and procedures	26		10	16
	205-3: Confirmed cases of corruption and actions taken	27		10	16
<b>GRI 301: Materials 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	64		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	64			
	301-1: Materials used by weight or volume	65		7, 8	8, 12
	301-2: Recycled input materials used	Oxitenno does not purchase/process recycled materials to manufacture products or provide services.			8, 12
	301-3: Reclaimed products and their packaging materials	Oxitenno does not recover products.			8, 12

Material topics	Standard	Page	Omission	UNGC	SDG
<b>GRI 302: Energy 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	58		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	58			
	302-1: Energy consumption within the organization	58		7, 8	7, 8, 12, 13
	302-3: Energetic intensity	58		8	7, 8, 12, 13
<b>GRI 303: Water 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	62		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	62			
	303-1: Water withdrawal by source	63		7, 8	6
	303-3: Water recycled and reused	62		8	6, 8, 12
<b>GRI 305: Emissions 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	59		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	59			
	305-1: Direct (Scope 1) GHG emissions	59 and 61		7, 8	3, 12, 13, 14, 15
	305-2: Energy indirect (Scope 2) GHG emissions	61		7, 8	3, 12, 13, 14, 15
	305-4: GHG emissions intensity	59 and 62		8	13, 14, 15
	305-5: Reduction of GHG emissions	59		8, 9	13, 14, 15
<b>GRI 306: Effluents and waste 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	66		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	66			
	306-2: Waste by type and disposal method	35 to 68		8	3, 6, 12
	306-4: Transportation of hazardous waste	66		8	3, 12

Material topics	Standard	Page	Omission	UNGC	SDG
<b>GRI 308: Supplier environmental assessment 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	77		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	77			
	308-1: New suppliers that were screened using environmental criteria	In Brazil: 2016 = 61.5%   2017 = 52.0%   2018 = 62.5%.		8	
<b>GRI 401: Employment 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	42		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	42			
	401-1: New employee hires and employee turnover	43 and 46		6	5, 8
	401-2: Benefits provided to full-time employees that are not provided to temporary or part-time employees	52			8
	401-3: Parental leave	53		6	5, 8
<b>GRI 403: Occupational health and safety 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	70		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	70			
	403-1: Workers representation in formal joint management-worker health and safety committees	72			3, 8
	403-2: Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	72			8
	403-3: Workers with high incidence or high risk of diseases related to their occupation	74			8
	403-5: Worker training on occupational health and safety	72			3, 8
	403-6: Promotion of worker health	74			8
	403-8: Workers covered by an occupational health and safety management system	71			3, 8
	403-9: Work-related injuries	72 and 73			3, 8
	403-10: Work-related ill health	71			8

Material topics	Standard	Page	Omission	UNGC	SDG
<b>GRI 404: Training and education 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	48		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	48			
	404-1: Average hours of training per year per employee	49		6	4, 5, 8
	404-2: Programs for upgrading employee skills and transition assistance programs	48			8
	404-3: Percentage of employees receiving regular performance and career development reviews	49 and 50		6	5, 8
<b>GRI 405: Diversity and equal opportunity 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	52		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	52			
	405-1: Diversity of governance bodies and employees	47		6	5, 8
	405-2: Ratio of basic salary and remuneration of women to men	54		6	5, 8, 10
<b>GRI 406: Non-discrimination 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	52		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	52			
	406-1: Incidents of discrimination and corrective actions taken	52		6	5, 8, 16
<b>GRI 413: Local communities 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	79		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	79			
	413-1: Operations with local community engagement, impact assessments, and development programs	79		1	

Material topics	Standard	Page	Omission	UNGC	SDG
<b>GRI 414: Supplier social assessment 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	77		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	77			
	414-1: New suppliers that were screened using social criteria	In Brazil: 2016 = 85%   2017 = 52%   2018 = 75%.		2	5, 8, 16
<b>GRI 416: Customer health and safety 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	78		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	78			
	416-1: Assessment of the health and safety impacts of product and service categories	75			
<b>GRI 417: Marketing and labeling 2016</b>					
GRI 103: Management approach 2016	103-1: Explanation of material topic and its boundary	13 and 14			
	103-2: The management approach and its components	78		1, 8	1, 5, 8, 16
	103-3: Evaluation of the management approach	78			
	417-1: Requirements for product and service information and labeling	78			12, 16
	417-2: Incidents of non-compliance concerning product and service information and labeling	78			16



# CREDITS



## **GENERAL COORDINATION**

Global Sustainability (Oxitenio)

## **GENERAL COORDINATION OF GRAPHIC PROJECT**

Global External Communication (Oxitenio)

## **TEXT, EDITION, GRAPHIC PROJECT, PROOFREADING AND GRI CONSULTANCY**

TheMediaGroup

## **PHOTOGRAPH**

Image bank and Oxitenio





Evolution by chemistry

