

# FY2015/16 Sustainability Report



In it for life

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This sustainability report covers the financial years 2015 and 2016. It shows positive progress when compared with the 2014 report in terms of spread and depth of information gathered and describes a wider scope of initiatives that drive sustainability. We are proud of the company we work at and lead.

Our current performance meets the legal requirements at all our sites. A few occasional excursions beyond emission limits occur and these are permitted by our environmental licenses. All our liquid wastes are discharged to municipal systems. Our ambition is to be ahead of requirements, we are not there yet, we need to do better. Namely we need to see an inversion of trend in the total quantity consumed at our plants in terms of energy, GHG emissions and water.

Investments in the order of €2.5m for the protection of the environment were invested in 2015 and 2016 and a further €6.2m in 2017 and 2018. These investments allow us to anticipate improvements in our environmental performance.

The information in this report does not cover the JV company in China that we sold at the end of 2017. Financial data is also not disclosed in this report. Hovione is a private company and where there is an obligation to disclose such data this is made public. Consolidated financial data is made available to stakeholders when justified.

A word of appreciation and admiration goes to everyone at Hovione that works hard to make quality medicines for patients while making changes to our behaviours and processes to protect the environment. We need to be good for the world.

Guy Villax CEO

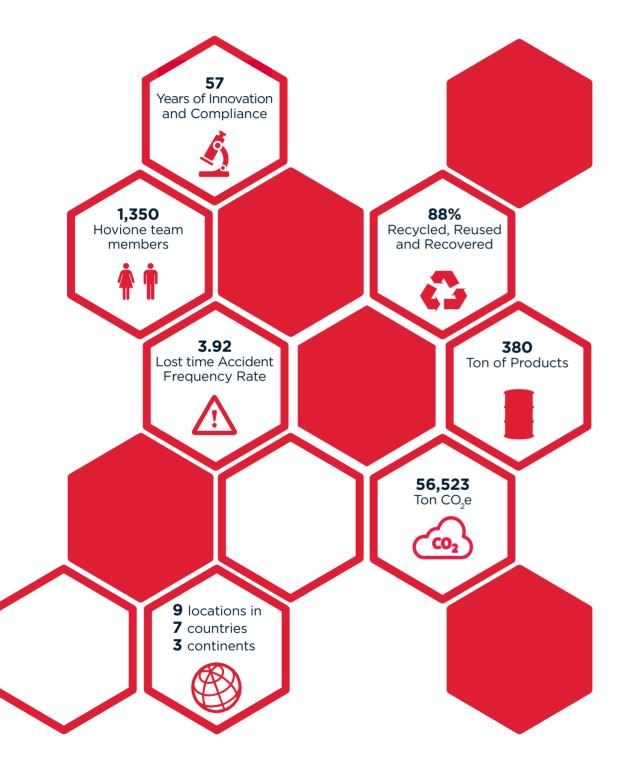
# Message from the Chief Executive



November 21, 2018



# Hovione at a Glance



Note: FY2016 data

# About this Report

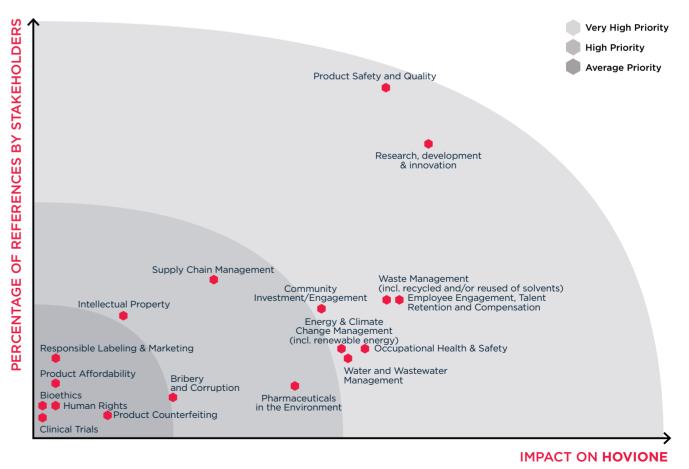
This is the second Sustainability Report published by Hovione, although sustainability indicators have been published on the website since 2006. The report aims to communicate Hovione's economic, environmental and social performance to all its stakeholders.

### **REPORTING SCOPE AND BOUNDARIES**

The report covers all Hovione owned manufacturing facilities worldwide. The data does not include the iMAX Diagnostic Imaging business.

#### **REPORTING PERIOD**

The period covered by the report refers to the 2015 and 2016 fiscal years, from 1 April 2015 to 31 March 2017. Whenever considered relevant, quantitative data from previous years is disclosed to show changes over time.



#### GLOBAL REPORTING INITIATIVE (GRI)

Hovione's Sustainability Report was drawn up in accordance with the GRI Standards, these being the latest guidelines defined by the Global Reporting Initiative and responds to the 'Core' option. A list of all the disclosures reported can be found in the 'GRI Index' at the end of this report.

#### MATERIALITY

In accordance with the GRI Standards, the contents of the report were defined based on a materiality analysis. Hovione considered, for the identification of material issues, inputs and feedback from various external (results of stakeholder consultation, benchmarking analysis and sector references) and internal (impact on Hovione) sources. The Hovione Stakeholders consultation was performed in May 2017 with the objective of understanding which topics are considered relevant for Hovione's activity and how we rank in those. Both External Stakeholders (Academia, Authorities, Community, Customers, Employees and Suppliers) and Internal Stakeholders (Hovione Directors) were asked about the Hovione Sustainability Vision, Reputation and Image, Sustainability Issues & Performance and Sustainability Reporting.

All Stakeholders identified a coincidental number of issues. Furthermore, External Stakeholders rated Hovione's performance above 4 (in a scale 1-5) in the vast majority of items.

The results supported the definition of the materiality matrix, which identifies topics of relevance to Hovione and its stakeholders. The material topics identified and selected in line with Hovione's strategic priorities are:

- Product Safety & Quality
- R&D and Innovation
- Energy & Climate Change Management
- Water and Wastewater Management
- Waste Management
- Pharmaceuticals in the Environment
- Employee Engagement, Talent Retention and Compensation
- Occupational Health & Safety
- Supply Chain Management
- Community Investment/Engagement

Hovione reports according to this matrix and in line with Hovione's strategic priorities.

#### CONTACT

For further information regarding this report and for additional information please consult the website at www.hovione.com/about-hovione/ corporate-responsibility-and-sustainability or contact Corporate Compliance: Phone: **+351 21 982 9000** Email: **sustainability@hovione.com** 



6 CLEAN WATER AND SANITATION

CONSUMPTION AND PRODUCTION

7 AFFORDABLE AND CLEAN ENERGY

### HOVIONE'S CONTRIBUTION TO SUSTAINABILITY

Hovione has aligned its Sustainability Policy and Strategy to the United Nations Sustainable Development Goals. Therefore, Hovione is committed to supporting and contributing to the following goals, namely 3, 6, 7 and 12:

- SDG3: Ensure healthy lives and promote well-being for all at all ages
- SDG6: Ensure availability and sustainable management of water and sanitation for all
- SDG7: Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG12: Ensure sustainable consumption and production patterns

#### REPORTING GOVERNANCE

This report was approved internally by the CEO on November 21, 2018. This was a first best effort to get a baseline and identify needs of definition of RACI, Governance and automated data gathering.

# **1. About Hovione**

6



#### Building S, Lumiar, Portugal

Hovione is an international company with over 59 years of experience as a Contract Development and Manufacturing Organization (CDMO) and is currently a fully integrated supplier offering services for drug substance, drug product intermediate and drug product. With four sites in the USA, China, Ireland and Portugal, and development laboratories in Lisbon, Portugal and New Jersey, USA, the company provides branded pharmaceutical customer services for the development and compliant manufacture of innovative drugs including highly potent compounds. For generic pharmaceutical customers, the company offers niche API products. Hovione also provides proprietary product development and licensing opportunities for drug products. In the inhalation area, Hovione is the only independent company offering a complete range of services.



Diane and Ivan Villax

### 1.1. The History of Hovione

Hovione's story is diverse and rich – from a lab in the basement of the Villax Home to the professionally managed multilocal company of today, Hovione is a company with a story to tell. With sustained growth throughout more than 5 decades, Hovione has its very own culture, and is a brand that has provided better health to many millions around the world.

#### 1959

Hovione was founded in Portugal in 1959 by three Hungarians, Horty, Villax and Onody, who together constituted Hovione's name. From the very start, two factors distinguished our products: technological content and quality in manufacture. Being very much research oriented, the company concentrated on products that were difficult to make and thus had an assured market.

#### 1979

Major commercial success came in the 60s and 70s with the sales of betamethasone and derivative products with Japan as the primary market. Keen to expand in Asia, Ivan Villax opened an office in Hong Kong in 1979.

#### 1986

A second manufacturing site was opened in Macao, China.

1992 Hovione got ISO 9000 certification.

#### 1997

The factory in Portugal was expanded in 1997 with a brand new 200 m<sup>3</sup> automated plant. Hovione was now ready to focus on meeting the outsourced manufacturing needs of the Pharma Industry.

#### 2001

A third manufacturing site was opened in New Jersey, USA. New 50 m3 automated plant in Macao, with an investment of 120 million MOP that duplicated Hovione's production capacity there.

#### 2007

TwinCaps<sup>®</sup> licensed to Daiichi Sankyo. New Jersey site was first inspected by the FDA and received the VPP Star Award by the Occupational Safety and Health Administration (OSHA).

#### 2009

Hovione announced that it has agreed with Pfizer to acquire their Loughbeg Active Pharmaceutical Ingredients (API) site in Ireland Cork.

> 2011 The Mumbai office opened.

2013 EPO grants patent for XCaps. 1969

As the business grew, Hovione built its first industrial manufacturing plant in 1969. Constructed in Loures, on the outskirts of Lisbon, the new factory enabled Hovione to establish and reinforce its position as a key player in the worldwide market for active pharmaceutical ingredients.

### 1982

The Loures plant was inspected and approved by the US Food and Drug Administration (FDA) for the first time. Hovione launched in the USA the semi-synthetic antibiotic, doxycycline, as the product came off patent.

1991

A recycling-recovery plant was opened.

1994 Injectable grade API.

1998

First Large Scale NDA product.

#### 2004

Hovione launches new technology and state-of-the-art Spray Drying facilities

### 2008

Hovione announced that it has purchased 75% of Hisyn Pharmaceutical Co. Limited.

### 2010

TwinCaps® launched in Japan. Quality by Design and Lean Manufacturing.

2012 The Lumiar office opened.

**2016** The Osaka office opened.

### 1.2. Hovione in the World

Today, Hovione is present in nine locations, having a worldwide expertise.

Company	Location	Year of First Operation	Activities
Hovione FarmaCiencia SA	Louros Portugal	1969	
Hovione Farmaciencia SA	Loures, Portugal	1909	R&D and Contract Manufacturing
Hovione Holding Limited	Hong Kong, China	1978	Administration and Finance Office
Hovione PharmaScience Ltd	Macao, China	1986	Manufacturing
Hovione Inter AG	Lucerne, Switzerland	1988	Licensing and Contracts
Hovione LLC	New Jersey, USA	2002	R&D and Contract Manufacturing
Hovione Ltd	Cork, Ireland	2009	Contract Manufacturing
Hovione Holding Limited	Mumbai, India	2011	Sales Office
Hovione FarmaCiencia SA	Lumiar, Portugal	2013	Administration and Finance Office
Hovione Japan KK	Osaka, Japan	2016	Sales and Customer Support Office



Loures site has an extensive capacity for drug substance manufacturing and particle engineering. Hovione Loures can support the development, piloting and full commercialization of drug substance and drug product intermediate based on an available capacity of 430 cubic meters of vessels, ranging from 50 to 14,000 L, complemented with a full range of spray dryers, from laboratory scale to industrial size.

# 1.3. Mission, Vision and Values

Hovione's culture is focused around our values, being customer-oriented, scientific rigor and team work.

#### MISSION

We passionately turn any challenge into a solution by collaborating with our partners to create great medicines. We focus on doing well what is innovative and difficult. We aim to be recognized by customers, regulators and competitors as nr. 1 in the segments we target.

#### VISION

To become the #1 innovative, integrated pharmaceutical solution provider to the global pharmaceutical industry by 2028.

#### **CORE VALUES**





### AND DELIVER

- Passion and rigor in everything we do
- Uncompromising quality
- Committed to our customers

## 1.4. Governance

#### **GOVERNANCE STRUCTURE**

The Hovione highest governance body is the Board of Directors of the holding company (Hovione Holding Limited, Hong Kong) and operates with a majority of non-executive independent directors. The only executive is the Chief Executive Officer. The Board meets at least four times a year on a face-to-face basis. Most of the meetings take place outside Portugal in order to reflect the global nature of the business and the diversity of its clients and sites. The agenda of the meetings and the social events accompanying them are designed to promote contact between the Directors and the Hovione Managers. The Board ensures that the Company's strategies are aligned with the interests of all shareholders, that risks are taken but that these are responsibly analyzed and downsides considered. The Board must also ensure that succession plans are in place for the CEO and the Management Board members.

The annual financial statements of all Hovione companies have been independently audited since the 80s, and the consolidated financial statements have been audited by one of the big 4 auditing firms since Hovione was established. The management of the company is passed from the Board to the Chief Executive, who then appoints a Management Board.

#### **Board of Directors**



DIANE VILLAX Founder Chairman of the Board



ELIE VANNIER Chairman of the Board Master of Law and DEA in Political Science from Université Paris-Sorbonne



GUY VILLAX CEO and Member of the Board Degree in Accounting and Financial Management



FRANCISCO VAN ZELLER Non-Executive Board Member Chemical Engineer



SOFIA VILLAX Non-Executive Board Member Degree in Pharmacology



MICHEL PETTIGREW Non-Executive Board Member B.COM from McGill University, Montreal and M.B.A. from York University, Toronto



#### **REMUNERATION AND INCENTIVES**

Hovione's remuneration policy is a key tool of strategic management. Its purpose goes well beyond the scope of Human Resources. The remuneration policy seeks to promote alignment between

- I) The Individual;
- II) The Job Function;
- III) The Team;
- IV) The Company Values and Culture.

It aims to recognize and reward individual performance within the 4 dimensions: the fulfillment of the Job Function, the contribution to Goals of the Team, and the extent to which the individual has lived the Hovione values, thus meeting the predetermined objectives (this assesses the behaviours and the competencies of the individual and does so in a 360° perspective). This policy aims to assure: I) Merit

- II) Internal equity
- III) The ability to capture and retain talent in a competitive environment.



### 1.5. Products and services

#### **OFF-PATENT API PRODUCTS**

Hovione's APIs offer high chemical purity and unique product performance. Hovione provides the peace of mind of a high-quality manufacturer and has an unblemished regulatory track record. The company manufactures generic APIs with proprietary processes and, on an exclusive basis, offers oral, topical, inhalation and injectable grade products. With respect to generics, Hovione has 2 main lines of products: semi-synthetic antibiotics and anti-inflammatory corticosteroids. Currently, Hovione is selling commercially 27 different APIs and has a further 16 under development.

For more information regarding Hovione's products, please consult www.hovione.com/products-and-services/patent-api-products

#### SERVICES

Hovione provides R&D and compliant manufacturing services to pharmaceutical companies. Hovione's capabilities include process chemistry, particle and drug product engineering, namely oral dosage forms and inhalation formulation development and manufacturing. In 2016, Hovione supported the clinical development of more than 80 compounds by providing clinical trial materials and by developing elements of their respective CMC sections (chapters of the drug approval filings at the health authorities). These include a vast range of therapies: anti-AIDS drugs, cancer therapies, cystic fibrosis, diabetes treatments, cardiovascular drugs and other novel therapies currently under investigation. Since 2013, we have supported an average of 3 FDA new drug approvals per year.



#### CONTRACT MANUFACTURING SERVICES

- Drug substance: development and manufacture of challenging products that demand the highest standards of process chemistry and manufacturing expertise coupled with rigorous regulatory compliance.
- Particle engineering: Hovione is the most comprehensive technology provider in Particle Engineering.
- Drug product: Hovione develops services including: development, manufacturing, continuous manufacturing, DPI formulation development, inhalation development services, and DPI devices.

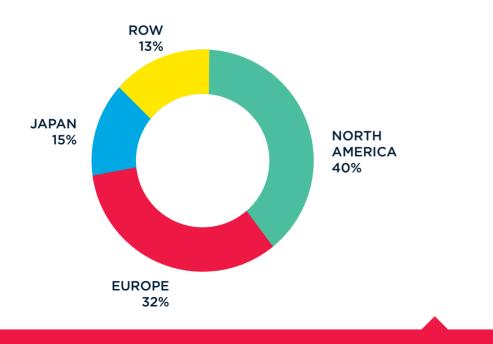
#### PROPRIETARY DRUG PRODUCT LICENSING

- Product portfolio: Hovione's product portfolio consists of innovative, proprietary drug products in the areas of Dermatology, Ophthalmology and Respiratory.
- Partnering opportunities: Hovione offers the opportunity for early partnering under flexible collaboration structures such as Licensing, Investment and Co-development business models.



#### MARKETS

Hovione's main markets are North America, Europe and Japan. There is a steady increase in sales from emerging markets. Our sales are evenly spread between innovators and off-patent APIs and no client represents more than 10% of sales or of profits.



For more information regarding Hovione's services, please consult **www.hovione.com/products-and-services** 

## **1.6. External Initiatives and Memberships**

It is fundamental for Hovione to interact with associations linked to its activity or associations that promote sustainability. Hovione staff are members in 23 industries entities and they have leadership roles in 14 of them. We highlight the following memberships:

#### APEQ

# Portuguese Association of Chemical Companies

APEQ promotes and stimulates business initiatives for the creation of wealth and improvement of services provided to the community, based on a market economy that respects the harmonious and sustainable development of its activity, paying particular attention to the socio-economic, health, safety and environmental aspects of associated companies.

Hovione is a member in Portugal.

#### APIC (CEFIC)

#### Active Pharmaceutical Ingredients Committee (European Chemical Industry Council)

Hovione has two representatives within this organization; one representative has a seat as the Vice-Chair of the Quality Working Group and sits on the Executive Committee, while the other is a member of the Regulatory Affairs Group.

Both actively participate in the working groups and position other Hovione team members within specific working groups that have defined industry practices.

#### BCSD PORTUGAL Business Council for Sustainable Development

Hovione FarmaCiencia SA is a member of the BCSD Portugal which reflects our commitment to work for a more sustainable business.

#### BITC

#### **Business in the Community Ireland**

Hovione FarmaCiencia SA is a member of the BITC Ireland, which reflects our commitment to work for a more sustainable business.

#### EP

#### European Pharmacopoeia

The European Pharmacopoeia (Ph. Eur.) is Europe's legal and scientific benchmark for pharmacopoeial standards which contribute to delivering high-quality medicines in Europe and beyond.

Hovione's Regulatory Affairs Director is a member of the 10b Working Group.

#### EFCG (CEFIC) European Fine Chemicals Group

Non-profit international sector group within Cefic - the Brussels-based European Chemical Industry Council. Hovione's CEO is a member of the Board of Directors.

# 1.7. External Acknowledgement and Awards

Throughout 2015 and 2016, Hovione's performance was recognized in different areas. We highlight the following awards:

#### ICH

International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use

Hovione's Compliance Director is a member of the ICH Q12 Expert Working Group as the APIC representative.

#### IPAC - RS

#### International Pharmaceutical Aerosol

Consortium on Regulation & Science IPAC-RS seeks to advance the science of orally inhaled and nasal drug products (OINDP) by collecting and analyzing data, and conducting joint research and development projects. We have one representative within this Consortium.

#### BPCI

#### **BioPharmaChem Ireland**

Business association whithin Irish Business and Employers Confederation (Ibec) representing the biopharma and chemical sectors. This structure allows members to appropriately address strategic issues, be more competitive, productive and develop their business. Hovione is a member in Ireland.

#### **RX-360 CONSORTIUM**

# International Pharmaceutical Supply Chain Consortium

The International Consortium of pharmaceutical and biotech companies are suppliers to the industry that aims to develop a global quality system to ensure product quality throughout the supply chain. Several Hovione team members also participate in Rx-360 working groups. Hovione is a founding member.

#### **RESPONSIBLE CARE®**

Hovione is, since 1995, a voluntary signatory of the Responsible Care® program and a member of the International Chamber of Commerce Charter for Sustainable Development and of Responsible Care, committing ourselves to responsible conduct and to the continuous improvement of all aspects of health, safety and environment. In 2006, Hovione signed the Responsible Care Global Charter adopted by the International Council of Chemical Associations (ICCA).

#### U.S. PHARMACOPEIAL CONVENTION

Scientific nonprofit organization that sets standards for the identity, strength, quality, and purity of medicines, food ingredients, and dietary supplements manufactured, distributed and consumed worldwide. Hovione has one representative in the Expert

Working Group.



#### HOVIONE RECEIVES B CORP CERTIFICATION

Hovione is the first Chemical/ Pharmaceutical Company integrating this innovative community of companies that use the power of business to solve social and environmental problems. As a Certified B Corporation, Hovione wants to contribute to redefining success in business, meeting the highest standards of social and environmental performance, setting its team members for success and personal satisfaction and aspiring to use the power of markets to solve social and environmental problems. Hovione believes that B Corporations, and especially those that are family businesses, through the power of their collective voice, are competing to be the Best for the World<sup>®</sup> and that through them, society will enjoy a more shared and durable prosperity.

To certify as a B Corporation, a set of rigorous social and environmental standards must be met. This is achieved through the B Impact Assessment process that requires four principle areas to be assessed: governance model, workers, environment protection and community involvement, including the impact on its suppliers. Hovione's certification process began almost a year ago. During this period, B Lab assessed Hovione's policies and procedures in all locations with its operations around the world (Portugal, Ireland, the United States and Asia). They concluded that Hovione follows all the appropriate models and can, thus, be part of this movement.

This is a global movement of people using business as a force for good<sup>™</sup> with the vision that, one day, all companies compete not only to be the best in the world, but to be the Best for the World<sup>®</sup>.

#### HOVIONE IS THE API SUPPLIER OF THE YEAR

Hovione receives the 2016 Global Generics & Biosimilars Award in the category of API Supplier of the Year.

During the 2016 CPhI Worldwide, Hovione was recognised as the API Supplier of the Year with a Global Generics & Biosimilars Award. This award recognises Hovione for its achievements over the preceding 12 months and was judged by a panel of industry experts.

The 2016 Global Generics & Biosimilars Awards ceremony is presented by the Generics bulletin and was held in Barcelona on October 4, 2016.





#### HOVIONE IS AWARDED WITH THE 2016 "GALARDÃO DE MÉRITO EMPRESARIAL"

Loures Municipality awarded Hovione with the "Galardão de Mérito Empresarial". This award recognizes Hovione's achievements in the areas of competitiveness, employment, innovation, human resources management, internationalization, investment, social responsibility, cooperation and environmental dimension and is a consequence of the effort of all the Hovione team members.

#### HOVIONE RECEIVES THE 2015 CMO LEADERSHIP AWARD

Hovione wins two 2015 CMO Leadership Awards from Life Science Leader in the categories of Innovation (the business will improve our inhouse capabilities with customized solutions) and Regulatory (the business is reputable and compliant). CMO stands for Contract Manufacturing Organization.

Life Science Leader CMO Leadership Awards are based on the industry research conducted by Nice Insight.





# 2. Sustainability at Hovione

## 2.1 The 3 pillars of Sustainability

Everywhere Hovione operates, there is a commitment to do so in a manner that keeps the company well within compliance of legal requirements whether with regards to the environment, occupational health or safety. Hovione uses business sense to take sound and long-term decisions that allow the company to be proud of everything it does.

The Management Board of Hovione expressed the intention of issuing a Sustainability Policy and a Strategy, with the objective of clarifying "What do we mean by Sustainability?". The topics that were considered relevant for the activity were highlighted and unanimously selected, followed by an open discussion of problems and solutions with definition of the commitments.



Human rights Diversity and inclusiveness Equality and fair payment Support to local Communities

For each strategic
priority Hovione defines
a commitment, in order
to be able to monitor their
sustainability performance.

STRATEGIC PRIORITIES	HOVIONE COMMITMENTS
ENERGY EFFICIENCY	Hovione is committed to mal Energy Management System energy usage, and to establis our investment plans, we will and minimize losses. The usa whenever that is possible and
CARBON FOOTPRINT	Hovione is committed to min measuring the Eco-friendline capabilities and our Innovatio to defining a sound, appropr in a systematic way. The CF w variance to standard and goa
USE OF MATERIALS: AVOID, REDUCE, RE-USE, RECYCLE, ENERGY RECOVERY, DISPOSAL	As Hovione's portfolio is ch circular economy involves a Hovione is also committed t capabilities to ensure we fo that, Hovione will look to ho reusing a specific material e energy recovery.
UNINTENDED EFFECTS	To avoid resistance, Hovione streams is such that they car
ENVIRONMENTAL PERFORMANCE	Hovione is committed to wor generation processes that m
SOCIAL RESPONSIBILITY	Hovione is committed to labor inclusiveness, equality and pa- and opportunities of persona and mentoring. Hovione actively contributes others -whether these be loc organizations-, or those that face grave challenges / have
HEALTH AND WELL-BEING	Hovione is committed not or success but also to provide v and inspire collaboration and healthy food during working development of the young cl

aking the best use of Energy. Every site will implement an m. This system will be used to systematically measure the lish plans that will make sure energy is used efficiently. In ill select technology solutions that are energy - efficient sage of renewable sources of energy will be considered nd wise.

inimizing the Carbon Footprint (CF) of our activity. By ness of each process, Hovione will be able to use our R&D tion ability to minimize our CF. Hovione is committed priate and meaningful way to measure CF, and to do so will be included in our performance measurement (as pal-setting).

changing, an important goal of our commitment to the adopting recycling technologies, whenever feasible. I to making the best use of our Research & Development ollow the hierarchy of Waste Management. While doing nolistic solutions that are not confined to our plants, e.g., elsewhere in the planet may have priority over internal

e is committed to making sure the quality of our waste nnot contribute to resistance, e.g. to antibiotics.

orking with like-minded clients to implement second ninimize environmental impact.

bor practices that include the principles of diversity, pay that is fair and competitive; and to offer challenges nal development supported by well-thought out training

es to the Community. We support those that help ocal schools, fire departments, NGOs, arts and sports at reveal outstanding merit or worth; or even those that re ambitious goals and are like-minded.

only to creating a mechanism for all to share in its working conditions that promote everyone's well-being ad mutual trust. We commit to do our best to provide g hours, to encourage healthy habits and support the children of our Team-Members.

# **2.2 Hovione Policies**

In March 2017, the Board has approved a Sustainability Policy, as follows:

#### SUSTAINABILITY POLICY

Hovione is a family business, its paramount goal is the construction of a robust and prosperous business for the long term that serves society through harnessing science and industry. To ensure our long term viability we will contribute positively to economic, environmental and social sustainability.

These concerns are embedded in our core values and purpose. Sustainability is integrated into the business strategy and makes best use of science, innovative technologies, systems and business conduct to make sure we endeavor to protect the environment. We give back to society while conducting business in a responsible way. We will not make sustainability depend on a pay-back, for us sustainability is a matter of principle, it is simply another dimension of our integrity. We do not just comply with legislation minimums, we want to be ahead and proactively act as a force for good. These are tough commitments and difficult goals requiring from us all the courage and wisdom to take new decisions in a new dimension. We know we will not build Rome in a day but we will not lose a moment, we will be decisive, generous and relentless because we have set for ourselves a high bar: competitive and sustainable.

As we grow our business we want to impact our environment in a positive way and contribute to the social dimension of those that surround Hovione everywhere we operate, from sourcing materials to the interaction with our local communities. In the long run, we will be prouder of our work and we will inspire others.

Hovione is committed to doing its part for a better world.

#### OTHER POLICIES

Hovione Policies communicate and document Hovione's values.

POLICY	FRAMEWORK
Quality Policy	We are wholly committed to G be right the first time and deliv work, failures and client dissat safety of our products for pati
Health, Safety, Environment and Energy Policy	As the protection of people, o concern and is strategic to our its activities in accordance wit environment.
Human Resources Policy	Hovione recognizes that peop continued success depends or everyone that works at Hovior
Innovation and Entrepreneurship Policy	Innovation allows us to make b quicker. Entrepreneurship turn



Quality. Our operations use capable processes, aim to iver without deficiencies (such as errors, repetition of tisfaction); thus, we assure the right quality and the tients.

of facilities and of the environment is a constant ar development, Hovione is committed to managing th the principles of protecting health, safety and the

ole are its main asset and that the company's on the commitment, effort and professionalism of one.

better products and to work better, leaner and ns risk into value and makes us more competitive.



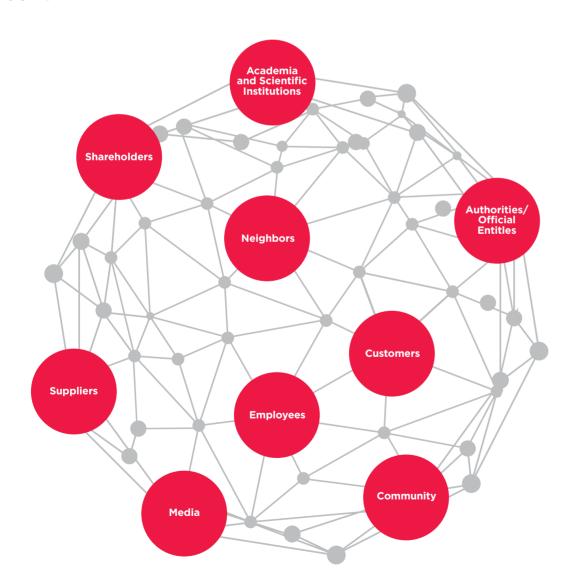
For more information regarding Hovione's policies, please consult: **www.hovione.com/about-hovione/our-policies** 

## 2.3 Stakeholder identification and consultation

All stakeholders are essential for managing our activities. For that, we monitor our stakeholders, identifying and integrating their expectations and concerns into our business management model, aligning our strategy with their expectations.

#### IDENTIFICATION OF STAKEHOLDERS AND MECHANISMS FOR COMMUNICATION AND ENGAGEMENT

Key stakeholder identification was conducted on the basis of the criteria of responsibility, influence and dependence. Nine key groups were identified:



# MAIN MECHANISMS FOR COMMUNICATION AND ENGAGEMENT WITH STAKEHOLDERS

Transparency is a key factor in the development of Hovione's activity, therefore Hovione has different mechanisms to engage with each stakeholder group.

Websites	Tradeshows/ Conferences/ Seminars	Webinars	Articles Ads (On&Offline)
We	Ser Tra	Me	Or Art

ACADEMIC AND SCIENTIFIC INSTITUTIONS	٠	٠	٠	٠
AUTHORITIES/ OFFICIAL ENTITIES	٠	٠		٠
COMMUNITY	٠			٠
CUSTOMERS	٠	٠	٠	٠
EMPLOYEES	٠	٠	٠	٠
MEDIA	٠	٠		٠
NEIGHBOURS	٠			
SHAREHOLDERS	٠	٠		٠
SUPPLIERS	٠	٠	٠	

Communication will improve the company's ability to reach the right stakeholders with the right messages, in the right channels, at the right time and in the right place.

- Engages effectively with stakeholders
- Demonstrates the success of our work
- Ensures that people understand what we do In it for Life
- Changes behaviors and perceptions where necessary



# RELEVANT SUSTAINABILITY ASPECTS FOR STAKEHOLDERS

In 2017, HOVIONE carried out a stakeholder consultation to consider the expectations and concerns of internal and external stakeholders in the definition of our new Sustainability Strategy. The process focused four main areas:

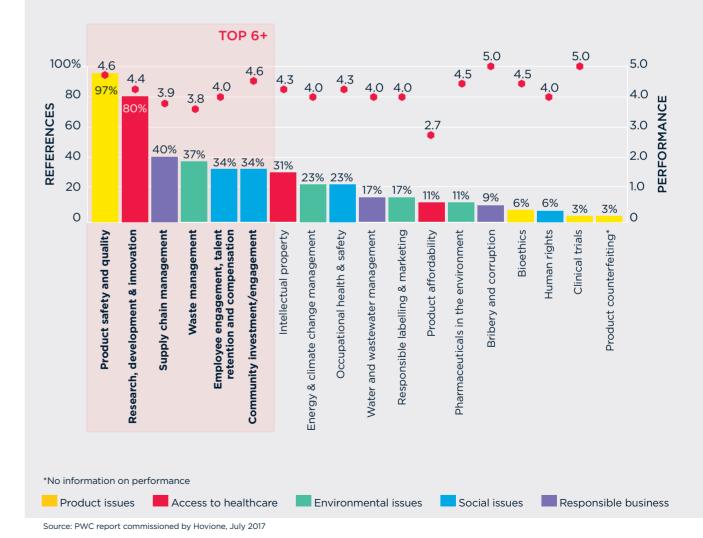
- Sustainability Vision;
- Reputation and Image;
- Sustainability Issues and Performance;
- Sustainability Reporting.

#### MAIN STAKEHOLDER CONSULTATION RESULTS

- 6 stakeholder groups were consulted: Academic and Scientific Institutions, Authorities/Official Entities, Community, Customers, Employees, and Suppliers.
- The survey ws sent to 50 sample stakeholders, 76% of which responded.
- The stakeholder groups with higher response rate were Academic and Scientific institutions (100%), followed by Employees (100%). Customers registered the lower response rate (30%).

RESULTS

	SUSTAINABILITY VISION	The majority of stakeholders con organization regarding sustainal 79% of the stakeholders conside contributes or just contributes to
	REPUTATION AND IMAGE	100% of the stakeholders consic regards to reputation and image
	SUSTAINABILITY TOPICS - ISSUES	The topics considered as most r presented below (in percentage
	SUSTAINABILITY TOPICS - -PERFORMANCE	The topics ranked as best perfo Community Investment/Engage





Informative session for local neighbors, Loures, Portugal

onsulted (92%) agrees that Hovione is an active ability issues and only 5% disagree about that. ered that Hovione's sustainability performance highly to their perception of the reputation of Hovione.

der that the global performance of Hovione with e is Good or Very Good.

relevant for a greater number of stakeholders are e of answers).

ormance are: Bribery and Corruption; Clinical Trials; jement and Product Safety and Quality.

### 2.4 Ethics and Compliance

# REPORTING

**SUSTAINABILITY** 26 % of stakeholders knew, had access or read HOVIONE's 2014 Sustainability Report. Stakeholders would like to see more information published in HOVIONE's 2015/16 Sustainability Report about sustainability progress made against the objectives and priorities defined.

Information that stakeholders would like to see more detailed in the report:

#### AUTHORITIES/OFFICIAL ENTITIES

- Sponsorships;
- Career progression;
- Community involvement;
- Discussion of dust and noise problems with stakeholders;
- Accessibility conditions around the factory;
- Development of events such as walking and running.

#### **EMPLOYEES**

- Actions being taken to prevent the contamination of the environment by antibiotics
- Carbon footprint of HOVIONE's activity and what are the initiatives to compensate it
- Control of emissions to the atmosphere in the different production areas and levels to which operators are subjected in the production areas
- Actions developed by HOVIONE for the dissemination /teaching of industrial sustainability
- Environmental issues

#### **CUSTOMERS**

- Environmental issues
- Control costs and lower prices to their customers

#### SUPPLIERS

• Business and markets

#### CODE OF ETHICS

The Hovione Code of Ethics issued by Diane Villax, founder, in December 2004 establishes fundamental rules of conduct which govern the relationships between Team Members, between Team Members and the Company, Hovione's relationships with its Clients, Suppliers, Lenders, Competitors, Shareholders, Public Authorities, the Community where we operate and the Public, at large. This Code is regularly updated to ensure the same ethical principles are applied in line with our growth and internal and external changes. Hovione expects from all Team Members, irrespective of their level of responsibility, a conduct in accordance with these principles, our values and our policies.

All the Team Members must read and sign the Code of Ethics on their first day at Hovione as well as each time it is updated, and the evidence of the signatures is to be archived within the Team Members information in the HR area.

Other measures taken by the company to prevent the unethical and illegal behaviour of their Team Members are to ask them to read and acknowledge other documents that emphasize different aspects of ethical behavior within the organization and to provide training to conduct an in-depth review of the most relevant concepts and rules. For example, LCBC (Legal Compliance of Business Conduct) form is a document that assesses the level of exposure to risk of each Team Member from clients, suppliers, banks and government officials and commits the Team Member to perform eLearning training to review the type of behavior expected by Hovione. Another important document signed by the Team Members is the Statement of Principles and Commitment, where good practices regarding the Environment, Security Quality, Health, Ethics, Business Conduct, Civility and Respect, Confidentiality, Intellectual Creation, Data Integrity, Signatures and Data Security are reinforced. Both documents are re-signed every three years. Additionally, the CEO or a person appointed by him, periodically holds a workshop to work on the concept of the Values of Hovione.





For more information regarding Hovione's policies, please consult: www.hovione.com/about-hovione/ our-policies

#### HOVIONE RULES OF CONDUCT

• We do the right things, for the right reasons, in the right way.

• We trust each other and treat each other in a fair, courteous and respectful manner.

• We have a duty to uphold Hovione's reputation, interests and image of excellence.

• We treat business partners (clients and suppliers) with honesty, professionalism and openness.

• We work with our business partners under contractual obligations of confidentiality. We protect and keep confidential all scientific, industrial and business information obtained under that relationship. We protect all Hovione information and know-how and respect others' intellectual property rights.

• We respect the Law that rules everywhere we do business. When we become aware of any instance of noncompliance with the Law or with this Code of Ethics we inform the Company.

• We strive to maintain good and stable neighborly relations within our community and take an interest in its needs and contribute.

• We have zero-tolerance for: Using company resources, information, assets or authority for our personal use or gain; Unethical business practices to attract a client to the detriment of a competitor; Giving or accepting any personal presents or personal favors which are intended to influence the business relationship with the company; Bribery or seeking an unfair advantage; Obtaining information about competitors in an illegal or irregular manner or denigrating their reputation; Colluding with competitors or competing disloyally; Discrimination of any kind, bullying or harassment.

#### CODE OF ETHICS ACKNOWLEDGEMENT AND RELATED TRAINING

All employees are required to acknowledge the Code of Ethics and sign a declaration, at the moment of joining the company and every 3 years, these commitments are re-signed.

Training and awareness is provided on company values and rules of conduct to prevent unethical and illegal behavior. LCBC (Legal Compliance of Business Conduct) on-line training has been completed for more than 80% of the employees.

#### COMPLIANCE

Hovione has an uncompromising commitment to Compliance. Compliance is more than a set of rules, it is a state of mind. Hovione believes that all industrial processes and other activities should be properly managed in accordance with the company principles, policies and procedures and should meet legal requirements. The final product must conform to pre-defined standards before release is authorized. Throughout this process, Hovione must do everything possible to minimize risk and error.

This is the solid basis on which the Company has built its management system. Today, Hovione has in place an enviable management system that gives everyone who manufactures and uses our products a high degree of quality, safety and environmental protection. Internal and external audits are used to proactively detect and address deficiencies. Compliance and the performance of the management system is monitored, reviewed regularly and improvements made whenever necessary. Management review meetings are performed in all sites, at least once a year. Employees are encouraged to voice any ethical concerns they may have. Hovione has a speaking-up system, which is available to all employees, with a dedicated email address. During 2015 and 2016, there were no cases of code of ethics violations.

# 3. Providing Clients with a High Quality Product and Service

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# 3.1 Product safety & quality

#### QUALITY

Hovione is fully committed to Quality in all our operational areas. It is our uttermost objective to develop and deliver products for safe and efficient medicines to serve patients in need, all around the world. The company operations are centered on designing and consistently executing effective manufacturing processes that can deliver high quality products to customers, in full and on time. Sustaining Quality is based on our company culture, our internal systems and on our collaborative and transparent relationship with clients and regulatory authorities. As a learning organization, the Hovione approach to Quality is based on innovation, productivity and is nourished by a mindset of continuous improvement.

#### QUALITY MANAGEMENT SYSTEM

The Quality Management System is designed to guarantee GMP compliance and to ensure all operations are executed within worldwide regulatory and legal requirements that govern the manufacture of our products. The Hovione Quality System is based on a set of regulations and guidelines, mainly the European GMP guidance as published in Eudralex, Volume 4, Parts I and II and applicable annexes, the USA 21CFR, Parts 210 and 211, the Japanese GMP Ministerial Ordinance, applicable ICH guidelines and local regulations of our manufacturing sites.

Quality is the responsibility of all our employees, at all levels, from all sites, departments and areas. This includes overseeing all our suppliers and service providers. Our Quality Management System consists of an adequately staffed organizational structure, mechanisms for global governance and oversight. In addition, controlled procedures ensure that all products, throughout their life-cycle, are manufactured according to GMP, in line with applicable guidelines and regulatory requirements.

The performance and effectiveness of the system is assessed periodically through internal and external audits, and Quality Performance Reviews. The Top Management Review is executed at least once a year during a "Formal Review", in which each department presents its achievements, weaknesses, strengths and objectives for the following year. During these events, both the performance of manufacturing lines and of global Quality and HSE Systems are assessed. Areas for improvement are identified

and appropriate actions are defined and approved.

All manufacturing sites (Loures, Macao, New Jersey and Cork) are regularly inspected and approved by at least one of the main three health authorities in the world, namely from the USA, the EU and Japan. The following GMP certificates from the EU Health Authorities have been granted to Hovione sites:

#### **EUROPEAN GMP CERTIFICATES**



#### INSPECTIONS

Hovione sites are periodically inspected by local and international authorities. The US Food and Drug Administration (FDA) has inspected Hovione sites for over 30 years (Portugal since 1982, Macao since 1987, New Jersey since 2007 and the Cork site (acquired from Pfizer) in 2008). Portugal, Macao and Ireland have been inspected by EU medicines' agencies either for human or veterinary use products. The Macao site is routinely inspected by the Portuguese Health Authority Infarmed (*Autoridade Nacional do Medicamento e Produtos de Saúde, I.P.*) for human products and DGAV (*Direcção Geral de Alimentação e Veterinária*) for veterinary products.



AT HOVIONE, EVERY SINGLE EMPLOYEE IS RESPONSIBLE FOR QUALITY. OUR APPROACH HAS ESTABLISHED A QUALITY CULTURE WITHIN THE COMPANY THAT IMPACTS ON EVERYTHING WE DO.

#### COMPLIANCE AUDITS

These Audits are used to assess the supplier's Quality Management System and its compliance with applicable regulations.

Much of the decision-making around audits (frequency, length and depth, whether performed by in-house auditors or contracted, shared or otherwise) should be driven primarily by a risk-assessment process where the importance of the API to the Pharma company's business, the nature of the API itself and past experience are some of the items to be evaluated.

During FY 2015 and FY 2016 the following inspections were conducted:

Health Authority	FY	LOCATION
FDA	2016	Loures, Macao, Cork
FDA	2015	New Jersey
Infarmed	2016	Loures
Infarmed	2015	Масао
HPRA	2015	Cork
Turkish Ministry of Health	2016	Loures
KFDA	2015	Cork

#### COMPLIANCE

At Hovione, all industrial processes and other activities are properly managed in accordance with the company principles, policies, procedures and all meet legal requirements. The final product must conform to pre-defined standards before a release is authorized. Throughout our history, we have done everything possible to minimize risk and error.

This is the solid basis on which the Company has built its management system. Today, Hovione has an enviable management system in place ensuring that we deliver high-quality products to customers while manufacturing operations are focused on the health and safety of our employees and neighbors and a strong commitment to the sustainable use of resources and environmental protection.

Internal and external audits are used to proactively detect and address deficiencies. Compliance and the performance of the management system is monitored, reviewed regularly and improvements are made whenever necessary. Management review meetings are performed on all sites, at least once a year.

#### PROCESS SAFETY

Process Safety involves a collaborative approach between areas namely Chemistry, Engineering, Health, Safety & Environment, and experts from the Process Safety area.

Corporate guidelines support a systematic approach to identify, evaluate and control hazards involved in each process and safely conduct activities at the different stages of process development and manufacturing.

Our Process Safety Laboratory performs activities that aim to ensure a safe scale-up, evaluate thermal stability of substances and mixtures, process related heat production and pressure rates and their dependence on time as well as the ignitability and flammability of substances. The laboratory has access to equipment such as RC1, the automated gas release measurement system, DSC (Differential Scanning Calorimetry) with high pressure golden crucibles, RSD (Rapid Screening Device), Carius tube, MIE (Minimum Ignition Energy), MIT (Minimum Ignition Temperature), LIT (Layer Ignition Temperature), combustibility, CRT (Charge Relaxation Time) and Resistivity. Results of this area are presented in reports that evaluate, summarize and present conclusions and recommendations for risk assessments.

### 3.2 Research, Development & Innovation

At Hovione, Innovation is more than great ideas, cutting-edge technology and highly specialized laboratories. Innovation is one of the pillars of our growth and our business sustainability.

At Hovione, we distinguish between R&D and Innovation. While R&D transforms financial investment into knowledge, Innovation is the process of generating business through knowledge. It all comes down to finding sustainable and commercially viable solutions that meet the needs of our customers.



HOVIONE HAS AN UNCOMPROMISING COMMITMENT TO COMPLIANCE. COMPLIANCE IS MORE THAN A SET OF RULES, IT IS A STATE OF MIND.



AT HOVIONE, PROCESS SAFETY IS A BLEND OF ENGINEERING AND MANAGEMENT SKILLS THAT FOCUSES ON THE PREVENTION OF EVENTS IMPACTING SAFETY, ENVIRONMENTAL DAMAGE AND BUSINESS LOSSES.

- As one of the largest investors in Portugal's pharmaceutical industry, Hovione has developed more than hundreds of manufacturing processes and other inventive successes, holding more than 400 patents worldwide.
- Hovione is a company that is fertile in ideas and innovation in all its areas of activity. The Hovione team members are entrepreneurial and encouraged to take risks. They are motivated to bring about change and scientists thrive on finding elegant and clever solutions to improve processes, solve problems and make innovations. Hovione has structured a long-term investment in Innovation strategy to develop new technologies as well as to create new product developments. The areas of research aim to secure IP in areas of innovation that the various businesses are likely to need in the coming years. Hovione encourages and celebrates innovators' achievements. Our innovators make a difference in the Company because of the added value of their ideas.

#### AT HOVIONE WE CELEBRATE:

- Patent authors
- Significant innovations with the Innovation Annual Prize - for major advances at Hovione that have shown significant commercial results
- Significant operational innovations with the Remarkable Ideas Prize

FY	Number of innovation ideas, projects and significant achievements	Awarded
2015	172	10
2016	149	4

#### **IDEAS ON INNOVATION ONLINE**

#### INTELLECTUAL PROPERTY

Hovione currently holds more than 400 patents registered worldwide and is Portugal's most prolific patent applicant.

The foundation of Hovione and, to a large extent its success, are deeply rooted in the inventions of its founder, Ivan Villax, author of a large number of patents.

Hovione holds and has held proprietary know-how over the last decades in antibiotics, contrast agents and inhalation. Its extensive portfolio allows Hovione to maintain a privileged position in the international market. Patentable inventions have been and will continue to be in Hovione's genes.

Hovione has implemented a system that recognizes researchers and inventors.

As a result, our investigators are annually named inventors not only in Hovione patents but also in client's patents.

#### PATENTS FILED

Year	New patents
2015	15
2016	10

#### STRATEGIC PARTNERSHIPS

The mission of the R&D group is to "develop new processes and products that are fit for commercial manufacturing employing the best and most innovation technologies and methodologies". Continuous innovations is promoted both internally and through collaborations with academic and scientific institutions.

# Hovione has established partnerships with several universities and national colleges:

- University of Coimbra, Portugal
- University of Minho, Portugal
- Institute of Molecular Medicine (IMM), Portugal
- Faculty of Sciences and Technology (FCT NOVA), Portugal
- Faculty of Pharmacy, University of Lisbon (FFULisboa), Portugal
- Instituto Superior Técnico (IST), University of Lisbon, Portugal

# Hovione has established partnerships with several national PhD Programs:

- i3DU Faculty of Pharmacy, University of Lisbon (FFULisboa), Portugal
- MedChemTrain Faculty of Pharmacy, University of Lisbon (FFULisboa), Portugal

# Hovione has ongoing programs with universities:

- University of Bath, UK
- University of Hull, UK
- Karolinska Institutet (KI) Medical
- University, Sweden

Hovione catalyzes the strategic creation of international partnerships through the EIT (European Institute of Innovation & Technology) Health Program, of which it is an Associate Member.

#### SCIENTIFIC COMMUNITY

Hovione Scientific Community is very important for our company.

More than 200 Team Members (about 10% of the workforce) dedicate themselves to R&D on a daily basis, 54% of which hold a higher academic degree (PhD, MSc, BSc.). They are working in the areas of Chemistry. . Analytical Chemistry, Process Engineering, Particle Design, etc, by two different locations (USA and Portugal).

Most of our R&D units work side-by-side with sales teams, in order to constantly improve on customer needs. In addition, scientists lead specific areas of expertise dedicated to increasing scientific knowledge within their areas and providing continuous support to the translation of this knowledge into new business opportunities.

### HOVIONE RESEARCH PROGRAM (HRP)

Hovione's culture is traditionally scientific and technological. A spirit of exploration and curiosity are key characteristics of our scientists. This spirit is encouraged and nurtured through the establishment of strong relationships and partnerships with academia, supporting nationally executed scientific work through several types of collaboration and funding schemes. This is the basis of the HRP.

The main objectives of this program are:

- Development of technologies, know-how and IP (Intellectual Property) proprietary in areas of strategic importance to Hovione;
- Stimulate our talents, promote careers and test the potential recruitment of students who participate in the Program;
- Take advantage of national and international funding funds as well as the best available know-how;
- Collaborate with the best, expand Hovione's network of national and international partnerships and strengthen the Hovione brand.

Hovione currently has more than a dozen students undertaking PhD and Masters' degrees in strategic areas.

#### PhDs AND MASTERS' SPONSORED BY HOVIONE

	Active Students (2015-2016)
PhD	13
MSc	10



#### 9° W PROGRAM HOVIONE INVESTS 5 MILLION EUROS IN SCIENTIFIC RESEARCH

The 9° W Program (in partnership with Portuguese Academia) is an initiative whereby, for three years, Hovione intends to work in partnership with Academic Institutions to develop innovative and relevant projects that meet the current and future needs of Hovione and the pharmaceutical industry, in general.

The communication of 9° W Program projects started on 28 September, 2016. The 3 projects are R&D and training challenges that have prompt industrial application. They are:

#### CONTINUOUS PRODUCTION OF PHARMACEUTICAL PRODUCTS

This project aims to respond to the emerging challenges in the pharmaceutical industry, with regards to the new paradigm of continuous production. In this context, Hovione recently announced a partnership with a US company to set up a continuous drug production facility in its New Jersey facility.

#### SMART ANALYTICAL LABORATORIES

Analytical chemistry has grown significantly, not only at Hovione, but in the pharmaceutical industry, as a whole. As a result of the increase in the number of projects and the increase in the complexity of the molecules being developed, this project will involve the use of intelligent systems, automation and robotics in analytical laboratories to better use existing resources and provide more requirements of the industry and its regulators.

#### CHEMICAL ANALYST TRAINING COURSE

The analytical chemistry has grown significantly, and the industry faces a scarceness of qualified human resources. Hovione intends to work together with the education system to find a solution that will enable our young people to be trained in areas of high employability. Hovione plans to set up an analytical chemistry laboratory, fully equipped with state-of-the-art equipment in the educational institution itself, to create the working environment for developing know-how and the right behavior.

# 3.3 Supply Chain Management

#### VISION AND MISSION

Our Vision is to create a state-of-the-art global Supply Chain.

We aim to achieve a competitive advantage for the company by fully engaging our teams and suppliers in exceeding customer expectations in terms of Quality, Service, Technology and Cost of the products and services we provide.

#### ORGANIZATION

Hovione's global presence shapes the approach of the<br/>company to purchasing both locally and regionally.The Hovione Purchasing Policy requires that<br/>Suppliers are approved from a Quality and Regulatory<br/>perspective. The Qualification Process follows<br/>applicable guidelines and was developed based on<br/>industry best practices.



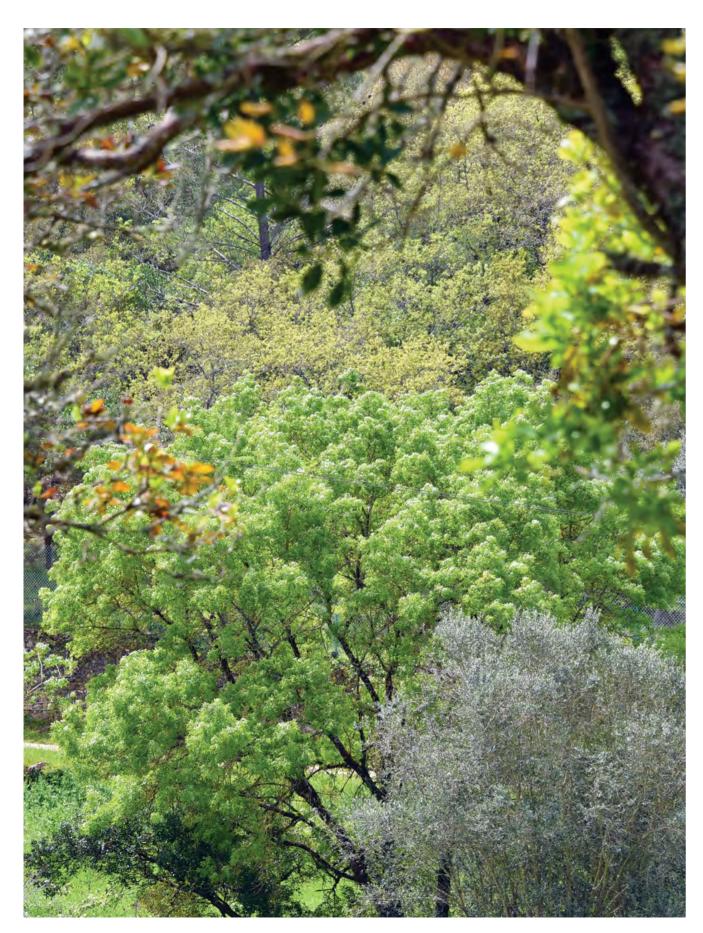




#### **PURCHASING CRITERIA**

Hovione regards suppliers as true business partners who share common values and principles, with respect to Legal, Compliance, Business Conduct, Quality and HSE.

# SUPPLIER QUALIFICATION & QUALITY PERFORMANCE INDICATORS



# **4. Enhancing Eco-efficiency**

Environmental management policies and practices are in place at all Hovione manufacturing sites and offices, supported by technologies which minimize environmental risks and maximize resource-use efficiency. Compliance to the applicable regulations and licenses is a minimum requirement on all sites. In addition to this, reduction of consumption and emissions is a continuous objective and is supported by a management system in accordance with ISO 14001 and/or other similar systems.

The current environmental certifications of the Hovione manufacturing sites are:

Loures	Macao	Cork	New Jersey*
ISO	ISO	-	SOCMA
14001	14001		ChemStewards

\*Hovione LLC (New Jersey) has been part of OSHA's VPP Star site voluntary program since 2007. SOCMA ChemStewards® certification is aligned with ISO 14001.

Communication, training and awareness is provided to all staff, including to subcontracted staff working for the company. Operational control is maintained throughout all activities with significant risk or environmental impact. Annually, the environmental performance data is disclosed internally and externally on the website.



Hovione Team Members at the top of the Macao Tower (Mast Climbing)

#### SETE CASAS ENVIRONMENTAL PLAN

The 2020 Environmental Plan for the Hovione site at Sete Casas is based on the prevention-reduction principle. The site has undertaken a holistic approach to reduce its environmental impact, adopting a concerted strategy that simultaneously acts at the point of generation and, at the end-pipe, increases treatment capabilities and performance.

The strategy focuses on four main areas: improvement of Liquid Waste segregation and treatment; reduction of Diffuse Gaseous emissions; prevention of Soil and Natural Water contamination and Risk Management.

To improve the Liquid Waste management and treatment, the site is investing on the segregation at the source and selective treatment options: eco-toxicity characterization of individual streams, downstream segregation through building manifolds with direct routing to the most suitable treatment, adequate to each stream pollutant for higher efficiency removal rates whilst having economic benefits.

The setup is phased and entails a hybrid treatment system combining four complementary technologies: energy recovery for energetic streams, stripping separation of solvents, advanced oxidation process and biological reaction. The advanced oxidation process applies an innovative technology for wastewater treatment, electroperoxicoagulation (EPC), to degrade Active Pharmaceutical Ingredient (API) and recalcitrant pollutants. It is then followed by biological treatment on a moving bed bioreactor (MBBR) to degrade remaining biodegradable pollutants and to reduce operational costs. Both technologies - EPC and MBBR - are modular and expansive.

These projects bring forward a significant reduction in the Carbon Footprint due to the reduction of Natural Gas consumption for the production of steam and, in a second phase, due to the reduction of consumption of hydrogen peroxide required for the EPC. Furthermore, the EPC will also increase the biodegradability and lower toxicity of the site-treated wastewater which will also benefit positively the biological treatment at the downstream Municipal wastewater treatment plant.

For the reduction of Diffuse Gaseous emissions, the strategy considers in a first approach the collection and treatment of process gaseous emissions on the existing thermal oxidizer, with an activated carbon stand-by unit, ensuring continuous treatment during the maintenance of the thermal oxidizer. By 2020, with the site expansion, the second phase of the process vent treatment is completed with the full revamping and increase of capacity of process vent treatment with high efficiency technologies like regenerative thermal oxidizer or regenerative carbon adsorption.

The Risk Management and prevention of Soil and Natural Water focus on minimizing the impact and reducing the risk of environmental damage. The main projects in these areas involve the revamping of stormwater network with continuous monitoring and divertion in case of contamination prior to water line discharge, by 2018; the elimination of underground process wastewater network to aerial pipelines, reducing the risk of soil/water contamination and enabling leakages to be quickly and reliably recognized, by 2019; the installation of process building spills and leaks catch-tanks, allowing for detection and containment of leaks at an initial stage without compromising downstream systems; and internal containment capacity for emergency scenarios with the installation of a contaminated firefighting water tank and dump tank at the Wastewater Treatment Plant (WWTP).

With this integrated strategy, Hovione sets the commitment to API safe discharge, to combat antibiotic resistance and also to develop site internal capacity to deal with emergency scenarios, minimizing its impact on the environment and neighboring areas.

### 4.1 Energy & Climate Change Management

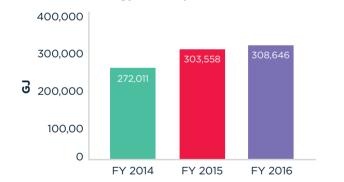
#### ENERGY

Hovione used 308,646 GJ of energy in FY 2016 from which 55% came from electricity and 41% from natural gas. The Cork site had the highest consumption (46%) with electricity representing 47% and the remainder being natural gas.

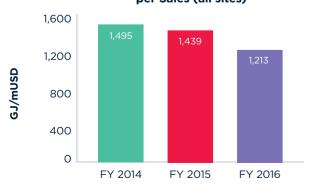
The Macao site is not consuming any natural gas, with electricity being 84% of the energy sources and 16% of diesel.

The energy consumption per ton of products manufactured has increased but the ratio of energy consumption per sales has decreased (see graphics below).

Energy consumption (all sites)



**Energy consumption** per Sales (all sites)

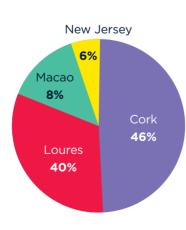


#### ENERGY EFFICIENCY MEASURES

- Installation of solar panels
- Purchase of 100% renewable energy
- Acquisition of electric cars and/or installation of charging points at dedicated parking lots
- Promotion of Nobility solutions
- Awareness of good energy saving practices

Loures is under the Intensive Energy Consumption Management System, in this scope there is a Rationalization of Energy Consumption Plan for the 2013-2018 period.

#### Energy consumption per site FY 2016



#### **EMISSIONS**

As part of its Sustainability Strategy, Hovione undertook the commitment to estimate the carbon footprint generated by its activities, direct and indirect, upstream and downstream.

#### **CARBON FOOTPRINT METHODOLOGY & SCOPE**

#### Activity data

The activity data that served as the basis for the Carbon Footprint determination and the calculated emissions relate to the fiscal years (April 1 to March 31) of 2014, 2015 and 2016.

#### **Operational boundaries**

In determining Hovione's Carbon Footprint and in order to define operational boundaries, the company considers the activities and emission sources associated with the operation of the facilities, including activities developed by third parties. The operational boundaries are defined according to the guidelines of the Greenhouse Gas (GHG) Protocol, according to three scopes:

Scope 1: direct GHG emissions that are controlled by the company, resulting from the activities of Hovione:

Scope 2: indirect GHG emissions not controlled by the company related to the purchase of electric power from an external entity;

Scope 3: other indirect GHG emissions, resulting from the company's activity, associated with the company's value chain (upstream and downstream)

#### **Organizational boundaries**

In the determination of the company's Carbon Footprint and in order to define organizational boundaries, the company opted for the "control approach", by which it determines all quantifiable GHG emissions associated with facilities over which the Company maintains operational control. In this context, Hovione estimates the GHG emissions associated to the following facilities:

- Hovione Loures
- Hovione Cork
- Hovione Macao
- Hovione New Jersey

#### Calculation methodology

A quantification method based on the application of emission factors to activity data was used.

The different GHG identified by the Kyoto Protocol were considered, whenever possible and relevant, and when the source of information was available.

### 4.2 Water and Wastewater Management

The values of Greenhouse Gas Emissions calculated for Scope 1, Scope 2 and Scope 3 are as follows:

#### GHG emissions (ton of CO, equivalent)

	TOTAL	PORTUGAL*	CORK	MACAO	NEW JERSEY
FY 2014	45,825	23,120	13,084	7,250	2,372
FY 2015	55,915	28,046	18,091	7,144	2,634
FY 2016	56,523	27,869	17,847	7,877	2,929

#### GHG emissions intensity (ton of CO, equivalent per ton of product)

	TOTAL	PORTUGAL*	CORK	MACAO	NEW JERSEY
FY 2014	106	114	344	38	2,372
FY 2015	122	142	287	37	2,634
FY 2016	149	203	415	40	2,929

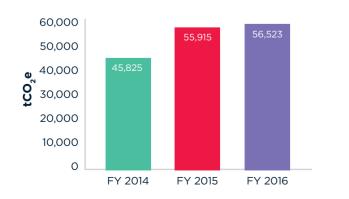
\* Portugal, data includes Loures and Lumiar (when applicable)

In total, GHG emissions have increased but their intensity has decreased.

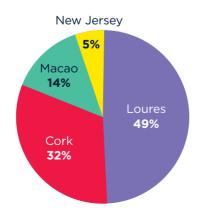
The Loures and Cork manufacturing sites have both decreased their amount of GHG emissions, while

Macao and New Jersey sites have increased. In terms of intensity only the Loures site has decreased its figures which is mainly a result of the product type and portfolio at each manufacturing site.

**Total GHG Emissions - Total** 



#### Total GHG Emissions per Site FY 2016



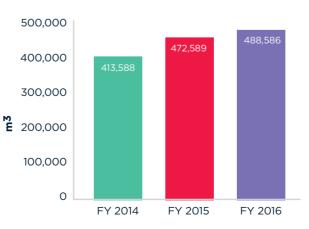
#### WATER CONSUMPTION

In FY 2016 the total water consumption was 488,586 m3 (it includes drinking water and industrial water). 90% comes from the municipal supply. Whenever possible, Hovione reuses water, part of which is reused in the fire network. All sites have a water purification system.

In 2014, the Loures factory installed water meter readings in the areas of consumption, to improve water consumption monitoring. Since then, there was an improvement in the daily management of deviations between the usual and expected consumption.

In the short term Hovione will implement the following measures: Renewal of the rainwater network; Firewater collection tank; Conversion of the effluent network (underground to air).

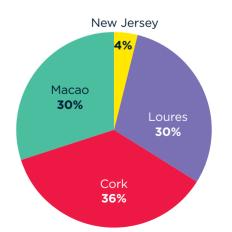




#### WASTEWATER MANAGEMENT

Hovione has a WWTP at all manufacturing sites with control systems to ensure that the quality of the wastewater discharged is appropriate to each location and remains below the contamination parameters established by the legislation applicable in each country.

The Loures manufacturing site discharges the wastewater to the Municipal WWTP. Nevertheless, the Environmental Licences establish limits that are applicable to the discharge of the site. There is an extensive monitoring program in place that comprises 64 test results (some quarterly and others annually). In FY 2015 and FY 2016, 95% of these test results were found in accordance with the Law Limits. For the test results that were found above the limit, an investigation was conducted, and a corrective and preventive action plan was issued with all the actions being effectively implemented.



#### Total water consumption per site FY 2016

### 4.3 Waste Management

#### APPLICATION OF ELECTROPEROXICOAGULATION (EPC) TO PHARMACEUTICAL WASTEWATERS

Hovione's business is growing in volume and complexity and, therefore, increased volume and complexity of the waste streams are expected for the next years.

The requirements to re-evaluate and design a new concept for managing Hovione's wastewaters emerged in an environmental integrated framework, with the opportunity to include waste segregation at the source, the best available techniques and anticipating API safe discharge regulations.

The EPC, patented by Aquatec, is an innovative technology that combines the electrochemical technology with hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) dosing, causing a Fenton-type reaction, with very high oxidation potential. It is based on electrocoagulation. The coagulant is generated *in situ* by means of the electrolytic oxidation of the iron anode, which is sacrificed so it is not necessary to add other salts to promote coagulation. Simultaneously, the iron radicals Fe<sup>2+</sup> generated in the sacrificial anode reacts with contaminants and hydrogen peroxide, dosed and regenerated at the cathode. Fenton reactions take place, creating a highly oxidizing environment. Under this highly oxidizing environment, organic pollutants are removed by oxidation with the hydroxyl radical and by coagulation with iron hydroxide  $Fe(OH)_{7}$ .

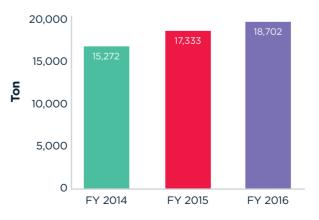
Last November, Hovione initiated EPC pilot testings with their own pharmaceutical wastewaters from the Loures manufacturing site. These tests were conducted with the following sequence: EPC reaction, followed by sludge separation with ultrafiltration (UF) and final step of activated carbon filter (AC) to remove the non-reacted hydrogen peroxide. The EPC unit was submitted to utmost stress conditions in order to validate the higher capacity of EPC to degrade APIs and high concern compounds such as halogenated substances, solvents and metals. The key results and conclusions of the EPC trials were:

- 80% pollution removal (chemical oxygen demand) in the first 30 minutes of reaction;
- 67% increase of biodegradability, from slowly biodegradable to easily biodegradable;
- 88% toxicity removal, by destabilization of the pollutant molecules and APIs, causing their precipitation and oxidation to more biodegradable compounds.

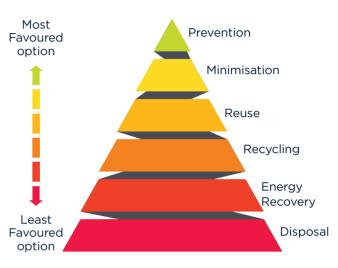
The optimized solution for Hovione pharmaceutical wastewater is based on the segregation at the source: eco-toxicity characterization of individual streams, downstream segregation and routing to the most suitable treatment, adequate to each stream pollutant for higher efficiency removal rates whilst having economic benefits. This figure represents the actual setup where the waste streams are treated according to their calorific value for energy recovery by thermal oxidation or solvent stripping being sent to the downstream Municipal wastewater treatment plant. It also represents the future setup that considers a hybrid treatment system combining four complementary technologies: energy recovery for energetic streams, stripping separation of solvents, EPC to degrade APIs and recalcitrant pollutants and biological treatment to degrade remaining biodegradable pollutants.

With this strategy, Hovione sets the commitment to API safe discharge and combating antibiotic resistance. Furthermore, a significant reduction in the Carbon Footprint is expected due to the reduction of Natural Gas consumption, for the production of steam necessary for the solvent stripping and, in a second phase, due to the reduction of consumption of hydrogen peroxide. The increase in the biodegradability and lower toxicity of Hovione treated wastewater will also positively benefit the biological treatment at the downstream Municipal wastewater treatment plant. Hovione is highly concerned with making the best use of Research & Development capabilities and assuring that the company follows the hierarchy of waste management. While doing that, the company looks to holistic solutions that are not confined to its plants. The amount and treatment of waste generated at Hovione in FY 2016 was 18,702 ton (93% hazardous). Of this total, about 66% are reused or recycled internally (including energy recovery), 22% is reused and recycled externally and only 1% is sent to landfill or incineration.

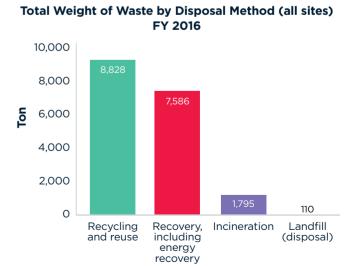
#### 88% OF THE WASTE IS RECYCLED, REUSED OR RECOVERED



#### Total Weight of Waste (all sites)







#### 51

# 4.4 Pharmaceuticals in the environment

Hovione recognizes and understands concerns raised by stakeholders regarding the presence of pharmaceuticals in the environment. This issue already forms part of Hovione's policy and strategy: "Hovione commits to making sure the quality of our waste streams is such that they cannot contribute to resistance, e.g. to antibiotics." The effects of ingestion of pharmaceuticals as drugs are well studied. The continued ingestion of these substances in minimal amounts in water by the general population, and effects on wildlife (e.g. fish), are subject matter of scientific research. Studies and investigations have been developed to evaluate the Pharmaceutical



# **5. Promoting Social** Responsibility

### 5.1 Employee Engagement, Talent Retention and Compensation

#### **OUR PEOPLE**

Our long-term success is based on Hovione's ability to attract, develop and retain talent, on the implementation of a fair system of performance and career management, on the efficient communication with employees and on the development and training of employees. In this context, the policy of each Hovione site is to:

**1.** Attract and recruit high potential Team Members based on a transparent selection process.

**2.** Maintain high ethical standards, encourage diversity and provide a place of work free of discrimination whilst promoting mutual respect and team work.

**3.** Offer a working environment that provides stability and continuous professional challenges.

**4.** Pay a local market competitive remuneration that reflects the individual's qualifications, skills, position and realises his/her potential, experience and merit.

**5.** Promote a culture of training and continuous development to be made available to every Team Member, adjusted to his/her needs on a regular and planned basis and demand that he/she makes the most of this investment.

6. Promote and develop the practice of delegation based on competence, effective communication and mutual trust that enables the taking of good decisions. This implies the acknowledgement of the right to make a mistake as well as the obligation to learn from it and being accountable.

**7.** Set expectations, provide direction and regular feedback on performance.

**8.** Give priority to providing internal professional opportunities to enable career progression.

**9.** Develop a social vision, adequate and aligned with local conditions applicable to each location.



#### IN 2016, HOVIONE HAD 1350 EMPLOYEES, 16% MORE THAN IN 2015, AND 23% MORE COMPARED TO 2014.



	PORTUGAL*		MACAO		CORK		NEW JERSEY		TOTAL	
	FY 2015	FY 2016	FY 2015	FY 2016	FY 2015	FY 2016	FY 2015	FY 2016	FY 2015	FY 2016
Employees	742	888	162	173	169	185	77	86	1,166	1,350
Male (%)	67	65	74	73	73	74	72	72	70	68
Female (%)	33	35	26	27	27	26	28	28	30	32
Average Age	39	38	37	36	40	40	42	40	39	38
% Staff with university degree	44	50	40	44	49	46	77	76	46	49
Seniority	11.3	9.8	9.0	8.5	2.3	2.6	5.5	5.5	9.3	8.4

\* Portugal, data includes Loures and Lumiar (when applicable)

#### TRAINING

During FY 2015 and FY 2016, there was a very significant investment in training, aiming to develop the skills, competencies and talent of Hovione's employees, meaning more than 48,5 hours of training/ employee were registered. In FY 2016, the most relevant areas invested in, in terms of training were: Engineering and related techniques, Transforming Industries, Architecture and Construction (48%), Good Manufacturing Practice (25%), Protection of the Environment, Safety and Health at Work (9%).

To manage training for the whole Group, Hovione uses a system called Trainstream. All the employees have a training plan.

#### **ON BOARDING**

In March of 2017, the Onboarding process, through which new Team Members are inducted into the company, was reviewed and improved. The current process is now held over a period of three and a half days and aims to provide all the necessary information for the new Team Members on their first contact with the organization, thus making their integration easier. This process starts with the signature of all legal and mandatory documentation, such as the work contract, LCBC, statement of principles and commitment, etc.). That is then followed by the presentation of the mission, vision and values of the company, its internal structure and area leaders. Training is provided on key issues such as Safety, Quality, as well as on the main IT systems used like Time Management, Training and Documentation Management. It also includes general guidelines of dress code, corporate identity guidelines, data security, among others. The process finishes with a visit to the plant so that all the new Team Members know the facilities.

#### **ENGLISH IN-HOUSE**

All employees are entitled to English classes according to their knowledge. During working hours, an English teacher travels to Hovione to give classes to employees.



#### **EMPLOYEES EVALUATION**

The Employee Evaluation System is the same for the whole group. The GPS evaluates 4 dimensions: Financial, Process, Client and People. All employees have a Performance Review annually.

### BENEFITS

The benefits provided by Hovione to its employees are the following:

- Health care insurance since the first day at company (employees may include spouses and descendants);
- Life insurance;
- Canteen with free meals made locally;
- Hovione Social and Sports Club (HSSC);
- · Contribution to children's' school books;
- Co-payment at the bar;
- Free fruit and water daily;
- Flexible working hours;

Regarding Hovione Social and Sports Club, each site has implemented different activities:

PORTUGAL	ΜΑϹΑΟ
<ul> <li>Hovione's day</li> <li>Events for employees and for families throughout the year: theatre, cinema, musical concerts, workshops, sports activities, guided tours, summer camps among other recreational offerings</li> </ul>	<ul> <li>Bowling competitio</li> <li>One day trip to Chin</li> <li>Workshop "Making your own folding fa</li> <li>Tower Run</li> </ul>

#### TEAM MEMBERS EFFECTIVENESS SURVEY

Every 2 years, Hovione conducts an Effectiveness Survey with all our Team Members to assess their perception on key topics and to determine how these are positioned in relation to the market. The last survey was conducted in 2016 and the Global Participation Rate was of 79%. The results also show improvements from the previous survey conducted in 2014, in nine of the fourteen dimensions evaluated, namely Engagement, Clear & Promising Direction, Confidence in Leaders, Respect & Recognition, Development Opportunities, Pay & Benefits, Performance Management, Authority & Empowerment and Collaboration. We believe these improvements reflect the engagement and work carried out by the company to enhance the well-being of its Team Members. The company will continue to work on action plans to improve the overall engagement of its Team Members.

### CORK

#### **NEW JERSEY**

- Safety Day on site
- Quality Day on site
- Events for employees and for families throughout the year: Social Nights, Pantomime trip, Family Fun Day, cinema tickets, raffles
- Family Picnic
- Round breaking
   Picnic
- Team Holiday Party Offsite



## 5.2 Occupational Health & Safety

Safety is our priority and zero accidents is our main objective. To ensure that we achieve our objective, all Hovione manufacturing sites have a Health, Safety and Environmental (HSE) management system. Concerning Health & Safety, the management systems are in accordance with the OHSAS 18001 international that is periodically audited and certified by independent external certification organizations. In accordance with the company policy, and the procedures of the management system implemented, compliance with the applicable legal requirements is mandatory and is the baseline for the continuous improvement of the company's performance. Risk assessment is performed to all new and existing activities to prevent incidents and nonconformities.

Communication, training and awareness is provided to all staff, including to contracted/subcontracted staff working for the company. Operational control is maintained throughout all activities with significant risk. Emergency systems and procedures are tested and kept ready in case of emergencies. All accidents, near misses and nonconformities are registered, investigated to identify root causes and addressed with appropriate corrective/preventive actions to prevent their recurrence. Lessons to be learned and best practices are shared within the company across all sites.

Injuries related to chemical exposure, noise exposure, ergonomic handling or any other kind of industrial activity are low and confirm the care and prevention that we actively apply to our processes. During 2016, at the Loures plant, the company doctor performed at least one medical check-up for all employees, and no occupational health diseases related to work were detected. The current certifications of the manufacturing sites are:

	Loures	Macao	Cork	New Jersey*
Health and Safety	OHSAS 18001	OHSAS 18001	-	OHSA's VPP Star program SOCMA ChemStewards <sup>*</sup>

HOVIONE NEW JERSEY

2016 was a year of change for the Hovione New Jersey Facility. Looking back it is clear that the facility took the OSHA VPP Team's recommendations seriously and quickly executed programs, training and resolved critical gaps. Hovione also performed their own internal gap assessment to identify other critical changes that needed to happen to ensure compliance and restore safety at the site. The Hovione NJ facility is in a state of continuous improvement and fully committed to Safety. We are a proud OSHA VPP Member and pleased to help other facilities improve through sharing our new "Best Practices". Some of our best practices are listed below



\* Hovione LLC (New Jersey) has been part of OSHA's VPP Star site voluntary program since 2007. SOCMA ChemStewards® certification is aligned with OHSAS 18001 and ISO 14001. It is also certified for the Customs-Trade Partnership Against Terrorism (C-TPAT) by the U.S. Customs and Border Protection (CBP).

#### SAFETY STAR

The Safety Star Program is an employee recognition program. It was established to recognize employees that have gone above and beyond with regards to identifying a safety hazard, implemented a corrective action or demonstrate strong leadership in safety. The Leadership Team meets quarterly to review the facility nominations (anyone can nominate) and the winner is granted the Safety Star Title, a USD25 gift card and most importantly, a designated Safety Star front parking space.

#### SAFETY ALERT

The Safety Alert is a means to build transparency with safety-related events that are occurring on site. A Safety Alert is issued with the help of employees during incident investigations. The alert is printed in color and sometimes, colored paper and is posted around the facility (café, bathroom doors, HSE Board, etc). It keeps all departments informed about events that may or may not have occurred in their area. It also serves to communicate the Hovione corrective and preventive actions.

#### **EMERGENCY RESPONSE TEAM**

In 2016 we revamped our Emergency Response Team (ERT). Our Incident Commander (ICS) works with the local Fire Department and serves as the leadership for this group. On an annual basis we will also have drill related exercises. In 2016 we practiced decontamination techniques for PPE. In 2017 we are planning on improving by introducing the local Fire Departments to our facility to review the new expansion areas and revisit the existing areas. Additionally, in 2016 the ERT and other employees participated in an American Red Cross Training on First Aid, Pediatric CPR and Blood Borne Pathogens.

#### SAFETY COMMITTEE

The Safety Committee meets regularly on a monthly basis. This cross-functional team works on Safety Campaigns, Safety Milestone planning, discusses concerns from the respective areas, fosters safety culture change and is responsible for development of new initiatives to fuel the reinvigoration of the safety culture. Most importantly it serves as an avenue for employees and the employee representatives to voice concerns.

#### SAFETY CAMPAIGN

In 2016 the Safety Committee proposed a slogan for the campaign "When it's red, think ahead". This slogan represented the red sample bags that are used as secondary containment for potent/highly active materials. Hovione invited 2 containment industry leaders to the facility. The event focused on engineering controls for handling potent/highly active materials and featured a lunch and learn presentation from the HSE Officer.

We received great feedback from the event and we will continue Safety Campaigns on an annual basis.

#### JOB HAZARD ANALYSIS

The Job Hazard Analysis (JHA) engages employees from respective areas. Their input is essential because they work in these areas every day. Once the JHA Team finalizes the hazard review, HSE then holds department meetings to review/communicate the findings and shortterm and long-term corrective actions. The meetings also serve to align the departments on hazards they face in their everyday jobs.



In the Hovione NJ facility, all employees including supervisors, managers and the general manager are included in the Hovione Safety Training. Based on job functions, "competencies" are created for each employee based on required training. Hovione uses a validated Training Management System that is also used for departments such as Quality to meet stringent FDA requirements. In 2016, the following Safety Training modules were introduced:

In 2016 were introduced the following Safety Training modules:

- New Employee Orientation
- DOT Hazardous Material Transportation-RCRA
- Hearing Conservation
- Hazardous Waste Management
- Flammable Liquids
- HAZWOPER
- Confined Space
- Contractor Safety
- New Walking Working Surfaces Standard/ Fall Protection
- American Red Cross First Aid, CPR, AED
   and Bloodborne Pathogens
- LOTO
- Emergency Action Planning
- Lunch and Learn Potent Materials
   (Safety Campaign featured presentation)



#### PLANT SECURITY

The safety of our employees and the security and integrity of our operating facilities, materials and products is a priority. Hovione, LLC (NJ) is C-TPAT certified by the U.S. Customs and Border Protection (CBP). The Loures site in Portugal has the EU equivalent AEO (Authorized Economic Operator) certification.

#### **PROCESS SAFETY**

Hovione has guidelines that regulate Process Safety. Specialized personnel in a dedicated Process Safety Laboratory develop process safety studies comprising thermal stability of substances and mixtures, processrelated heat production and pressure rates as well as the ignitability and flammability of powders. Data and recommendations are produced to support risk assessment activities related with process development and manufacturing.



#### REACH

REACH, the (EC) Regulation No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals aims to improve the protection of human health and the environment requiring EU importers or manufacturers of chemicals to share data and register their substances with the European Chemicals Agency (ECHA).

In order to ensure compliance with REACH, Hovione has developed internal procedures and IT systems to assess and monitor compliance of the planned and effective imports and manufactured substances on EU sites. SAP, IUCLID 5 and REACH-IT are used to prepare the necessary PPORDS and registrations.



#### GHS

The United Nations' Globally Harmonised System of Classification and Labelling of Chemicals (GHS) prevents the use of different symbols and labels for the same hazards around the world. The sixth revised edition of the GHS has been published in 2015. In accordance with the GHS, Hovione has implemented systems to produce safety data sheets (SDS) and labels in several languages for various countries.

# 5.3 Community Investment/Engagement

The donations made to the local Fire Departments supported the purchase of equipment used for the firefighters' protection.



The donation made to the "*Conservatório de Artes de Loures*" was destined for the premises of the Conservatory, which otherwise would have been closed.



For the "*CrescerSer*" Association, the donation was destined to buy a van.



Hovione wants to get involved with the local communities everywhere we operate, in order to foster positive social change and solve identified social problems. We do it by creating privileged communication channels, enhancing synergies with the community and supporting those that help others through our Corporate Social Responsibility, which are aligned with the following areas of intervention: Education, Culture, Social, Health and Well-being, Sports, Safety and the Environment.

#### During 2016, through a patronage budget of approximately 150 K€, we supported 31 projects and organizations, namely:

- Local Fire Brigades with a donation for equipment renovation;
- *Conservatório d' Artes de Loures*, with the renovation of the buildings of this Music school, which otherwise would have been closed;
- *CrescerSer Casa do Infantado*, donation for a safe and fully-adapted children's transportation van for this under 12-year-old children's shelter home;
- *Centro Cristão da Cidade*, regular donation for the homeless and support for disadvantaged families;
- Casa do Gaiato de Lisboa, an organization that aims to help the neediest in the local community;
- Scholarships for Lisbon French Lyceum and Ar.Co - independent Art school students;
- Youth and Sport support to the *Clube Futebol Bucelense, Escuteiros de Santo António dos Cavaleiros* and *Grupo Sportivo de Loures*;
- Oxfam Macao, a world-wide development organization that fights against poverty.

#### OPEN DAYS AND INFORMATIVE SESSIONS

Hovione holds Open Days and Informative Sessions for the local community, Team Members' families and students.

Every year we provide plant tours to more than 300 high school and university students. Hovione Team Members are, on a regular basis, asked to give presentations at universities, to participate in seminars, or to create opportunities for students to do internships at our laboratories. We sponsor and participate in many Job Fairs and meetings to promote the industry and careers at Hovione.

Hovione has a longstanding close relationship with the local Fire Brigades and regularly holds joint practice drills.

All these initiatives are a great opportunity to promote a dialogue with the local community and the local authorities, encouraging the consolidation of good relationships among stakeholders, while giving them a close insight of subjects related with Hovione's business activity, industrial procedures, safety and environment strategy, corporate social responsibility and growth plans.



Visit of students from the Faculty of Pharmacy - University of Coimbra, Portugal

#### PARKING

Due to the fast growth of the company and factory in Loures, Portugal, the parking needs of our Team Members and service providers place a significant pressure on the area surrounding Hovione, and this impacts on all of us and the neighboring community. Therefore, additional external parking areas were built with a total capacity of 290 parking lots.

#### SIDEWALKS

At Hovione, we consider the protection of people a constant and strategic asset for our development and for the local community as well. After listening to the neighbors' concerns about sidewalk safety, Hovione has committed to rebuild new sidewalks on both sides of the street in front of Loures site.



Hovione Solidarity Running Race, Loures, Portugal

# 6. GRI Indicators

# Hovione

GRI	ECONOMIC INDICATORS	UNIT	TOTAL				
STANDARDS			FY 2016	FY 2015	FY 2014		
GRI 202 Marke	et Presence						
202-1	Ratios of standard entry level wage compared to local minimum wage at significant locations of operation	-	-	-	-		
202-2	Proportion of senior management hired from the local community at locations of significant operation	%	67%	66%	64%		
GRI 204 Procu	urement Practices						
204-1	Proportion of spending on local suppliers at significant locations of operation	%	57%	49%	43%		
GRI 205 Anti-	corruption						
205-2	Communication and training on anti-corruption policies		418	263	282		
205-3	and procedures Number of employees who completed training on Legal Compliance of Business Conduct Confirmed incidents of corruption and actions taken		0	0	0		
GRI 205 Anti-	corruption						
206-1	Total number of legal actions for anti- competitive behaviour, anti-trust, and monopoly practices and their outcomes		0	0	0		

	PORTUGA	L		CORK			MACAC	)	NE	NEW JERSEY	
FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014
17	1.4	17	15	1.0	1.6	10	_	_	2.0	-	-
1.3	1.4	1.3	1.5	1.6	1.6	1.0	-	-	2.8	-	-
54%	57%	58%	100%	89%	56%	100%	100%	100%	55%	50%	-
54%	43%	43%	74%	74%	61%	20%	16%	10%	94%	83%	93%
	_	-		-	_		-	-		-	-
173	67	60	79	35	70	166	161	152	-	-	-
0	0	0	о	0	0	0	0	0	о	0	0
0	0	0	0	0	0	0	0	0	0	0	0

### NOTES

Portugal, data includes Loures and Lumiar (when applicable);
Macao, data includes Hong Kong, Japan and India offices when applicable.

GRI		UNIT		TOTAL	
STANDARD	5		FY 2016	FY 2015	FY 2014
	COMPANY DATA				
	Quantity (qty) of products produced	l t	380	457	433
GRI 302 EN	ERGY				
302-1	Energy consumption within the organization	GJ	308,646	303,558	272,011
	Electricity	MWh	47,231	43,386	40,136
	Natural gas	Nm <sup>3</sup>	3,331.811	3,208.591	3,068.621
	Diesel	L	316,381	256,446	268,217
	% of energy consumption as Electricity	% GJ/GJ	55%	56%	53%
	% of energy consumption as Natural gas	% GJ/GJ	41%	41%	43%
	% of energy consumption as Diesel	% GJ/GJ	4%	3%	4%
	Energy consumption per employee	GJ/employee	229	260	274
	Energy consumption per qty of products produced	GJ/t	812	664	628
	Energy consumption per Economic Value Retained	GJ/kUSD	2,124	2,920	3,258
	Energy consumption per Sales	GJ/mUSD	1,213	1,439	1,495
GRI 303 WA	ATER				
303-1	Total water withdrawal by source	m <sup>3</sup>	488,586	472,589	413,588
	Public network	m <sup>3</sup>	441,052	438,498	408,030
	Other sources	m <sup>3</sup>	21,534	8,091	5,558
303-3	Total volume of water recycled and reused	m³	39,396	45,613	31,636
	% of water recycled and reused	%	9%	10%	8%
	Water consumption per employee	m <sup>3</sup> /employee	362	405	417
	Water consumption per qty of products produced	m³/t	23,590	9,723	16,392
	Water consumption per Economic Value Retained	m³/kUSD	3,363	4,546	4,954
	Water consumption per Sales	m³/USD	10,783	10,249	10,397
GRI 305 EM	ISSIONS				
	Total Greenhouse Gas (GHG) Emissions	tCO <sub>2</sub> e	56,523	55,915	45,825
305-1	Direct GHG Emissions (Scope 1)	tCO <sub>2</sub> e	15,599	14,446	13,075
305-2	Energy indirect GHG Emissions (Scope 2)	tCO <sub>2</sub> e	20,219	22,995	16,326
305-3	Other indirect GHG Emissions (Scope 3)	tCO <sub>2</sub> e	20,704	18,473	16,424
305-4	GHG emissions intensity				
	GHG emissions per qty of products produced	tCO <sub>2</sub> e/t	149	122	106
	GHG emissions per employee	tCO <sub>2</sub> e	42	48	46
	GHG emissions per Economic Value Retained	tCO <sub>2</sub> e/mUSD	389	538	549
	GHG emissions per Sales	tCO <sub>2</sub> e/mUSD	222	265	252

D	ORTUGA			CORK			ΜΑCΑΟ		N	EW JERS	EV
FY 2016		FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014		FY 2015	
137	198	203	43	63	38	199	194	191	1	2	1
	100	200									
123,390	112,705	107,824	143,069	155,200	128,408	24,017	19,357	19,725	18,169	16,296	16,054
				47 5 6 6	45 050	5 010		. =			
18,680	17,174	16,282	18,633	17,582	15,670	5,610 0	4,603 0	4,566 0	4,308	4,027 43.449	3,618
1,274.626	1,165.140	1,123.852 168,488	5,359	2,000.002 3,895	4,740	107,163	78,137	92,193	66,003 3,455	43,449 3,599	76,213 2,796
200,404	170,815	54%	47%	41%	44%	84%	86%	83%	85%	89%	80%
54%	55%	••					0070		00/0		
40%	40%	40%	53%	49%	55%	0%	0%	0%	14%	10%	18%
6%	5%	6%	0%	0%	0%	16%	14%	17%	0%	0%	0%
139	152	172	773	918	980	139	119	130	211	212	303
899	569	531	3,327	2,463	3,379	121	100	103	18,169	8,148	16,054
1,189	1,598	1,914	20,125	16,214	37,669	916	952	990	2,229	4,610	4,186
771	813	858	3,996	4,031	4,309	656	545	518	886	754	991
144,861	137,575	130,514	177,008	172,755	145,971	149,048	151,245	143,658	17,669	11,014	11,156
138,912	135,721	124,956	151,008	146,755	130,971	149,048	151,245	143,658	2,084	4,777	2,887
5,949	1,854	5,558	0	0	0	0	0	0	15,585	6,237	8,269
13,396	19,613	31,636	26,000	26,000	15,000	0	0	0	0	0	0
9%	14%	24%	15%	15%	10%	0%	0%	0%	0%	0%	0%
163	185	208	957	1,022	1,114	862	934	945	205	143	210
1,056	694	643	4,116	2,742	3,841	749	780	752	17,669	5,507	11,156
1,395	1,951	2,317	24,900	18,048	42,821	5,686	7,440	7,211	2,168	3,116	2,909
905	992	1,039	4,944	4,487	4,898	4,072	4,260	3,771	862	510	689
27,869	28,046	23,120	17,847	18,091	13,084	7,877	7,144	7,250	2,929	2,634	2,372
10,088	9,211	8,236	4,096	4,021	3,502	1,264	1,112	1,167	151	103	171
7,128	8,788	5,855	8,771	10,337	6,721	2,037	1,736	1,832	2,283	2,134	1,918
10,653	10,047	9,029	4,980	3,733	2,861	4,576	4,296	4,251	495	397	283
203	142	114	415	287	344	40	37	38	2,929	1,317	2,372
31	38	37	96	107	100	46	44	48	34	34	45
268	398	410	2,511	1,890	3,838	300	351	364	359	745	618
174	202	184	499	470	439	215	201	190	143	122	146

GRI STANDARD	ENVIRONMENTAL INDICATORS S	UNIT	FY 2016	TOTAL FY 2015	FY 2014
(CONT)					
305-6	Emissions of ozone-depleting substances (ODS)	t	0.15	0.09	0.07
	Production	t CFC-11 eq	0	0	0
	Imports	t CFC-11 eq	0.15	0.09	0.07
	Exports	t CFC-11 eq	0	0	0
305-7	NOx, SOx and other significant air emissions				
	NOx, as NO <sub>2</sub>	t	8.00	7.83	7.55
	SOx, as SO <sub>2</sub>	t	0.35	0.32	0.29
	Particles	t	0.04	0.05	0.03
	Carbon monoxide (CO)	t	0.47	0.61	0.49
	Volatile organic compounds (VOC)	t	100.48	34.19	99.94
GRI 306 EF	FLUENTS AND WASTE				
306-1	Total wastewater discharge	m <sup>3</sup>	337,020	313,007	289,537
	To local Wastewater Treatment Plant	m <sup>3</sup>	337,020	313,007	289,537
	To other destination	m <sup>3</sup>	0	0	0
	Total wastewater discharge per ton produced	m³/t	5,533	4,747	5,465
306-2	Total weight of waste by type	t	18,702	17,333	15,272
	Hazardous	t	17,380	16,346	14,730
	Non-hazardous	t	1,322	987	542
	% of hazardous	%	93%	94%	96%
	Total weight of waste by disposal method	t	19,009	17,591	15,527
	Internal	t	12,645	12,397	11,608
	Recycling and Reuse	t	4,690	4,155	4,146
	Energy recovery	t	7,586	7,909	6,913
	On-site stored	t	369	333	549
	External	t	6,365	5,194	3,919
	Recycling and Reuse	t	4,138	1,945	2,426
	Inertization & Landfill	t	110	136	139
	Incineration	t	1,795	2,276	1,268
	Other	t	320	772	86
	Ratio of qty of waste produced per qty of product produced	t	49	38	35
	Ratio of qty of waste not recycled per qty of product produced	t	5	5	3
	% of wastes Recycled and Reused internally	%	25%	24%	27%
	% of wastes Energy recovery	%	41%	46%	45%
	% of wastes Recycled, Reused and Recovered internally	%	66%	70%	72%
	% of wastes Recycled, Reused and Recovered externally	%	22%	11%	16%
	% of wastes Inertization & Landfill	%	1%	1%	1%
	% Recycled, Reuse and Recovered (internally+externally)	%	88%	81%	88%

	PORTUGA	L		CORK			MACAO		N	EW JERSI	EY
FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014		FY 2015	
0.15	0.09	0.07	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0.15	0.09	0.07	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
4.3	4.1	3.9	3.7	3.7	3.7	-	-	-	0	0	0
0.07	0.04	0.01	0.28	0.28	0.28	-	-	-	0	0	0
0.04	0.05	0.03	0	0	0	-	-	-	0	0	0
0.29	0.43	0.31	0.2	0.2	0.18	-	-	-	0	0	0
99	33	99	1	1	1	-	-	-	0.75	0.46	0.21
101,663	84,324	90,575	84,225	72,661	52,417	149,048	151,245	143,658	2,084	4,777	2,887
101,663	84,324	90,575	84,225	72,661	52,417	149,048	151,245	143,658	2,084	4,777	2,887
0	0	ο	0	0	0	0	0	0	ο	0	0
741	425	446	1,959	1,153	1,379	749	780	752	2,084	2,389	2,887
7-11	420	110	1,000	1,100	1,070	7.0			2,004	2,000	2,007
12,723	11,982	10,670	2,557	2,382	1,373	3,116	2,784	3,131	306	185	98
12,286	11,567	10,260	1,869	1,958	1,337	2,942	2,656	3,040	283	165	93
437	415	410	688	424	36	174	128	91	23	20	5
97%	97%	96%	73%	82%	97%	94%	95%	97%	92%	89%	95%
12,723	12,240	10,925	2,557	2,382	1,373	3,116	2,784	3,131	306	185	98
10,529	10,658	9,473	0	0	0	1,809	1,739	2,135	0	0	0
3,861	3,413	3,314	0	0	0	829	742	832	0	0	0
6,668	6,987	5,904	0	0	0	918	922	1,009	0	0	0
307	258	255	0	0	0	62	75	294	0	0	0
2,194	1,582	1,452	2,557	2,382	1,373	1,308	1,045	996	306	185	98
1,689	671	990	2,394	1,245	1,028	43	29	401	12	0	7
87	116	103	0	0	36	0	0	0	23	20	0
98	23	273	162	1,072	309	1,264	1,016	595	271	165	91
320	772	86	0	0	0	0	0	0	0	0	0
93	60	53	59	38	36	16	14	16	306	93	98
1	1	2	4	17	9	6	5	3	294	93	91
30%	28%	31%	0%	0%	0%	27%	27%	27%	0%	0%	0%
52%	58%	55%	0%	0%	0%	29%	33%	32%	0%	0%	0%
83%	87%	86%	0%	0%	0%	56%	60%	59%	0%	0%	0%
			0.407	F-00/		107	10/				
13%	6%	9%	94%	52%	75%	1%	1%	13%	4%	0%	7%
1%	1%	1%	0%	0%	3%	0%	0%	0%	8%	11%	0%
96%	92%	96%	94%	52%	75%	57%	61%	72%	4%	0%	7%

GRI STANDARI	SOCIAL INDICATORS	UNIT	FY 2016	TOTAL FY 2015	FY 2014
			112010	PT 2015	FT 2014
	Number of Employees	unit	1,350	1,166	993
	% female	%	32%	30%	30%
	% with university degree	%	51%	47%	46%
	Average age Seniority	years years	35 8	36 41	36 45
	NDICATORS - LABOUR PRACTICES AND DEC	3	2K		
	mployment				
401-1	Rates of employee turnover	%	13%	16%	8%
401-2	Benefits provided to full-time	-		1070	0,0
4012	employees that are not provided to temporary or part-time employees				
	Life insurance & Disability and invalidity coverage	-	-	-	-
	Health care insurance	-	-	-	-
	Paternity leave	-	-	-	-
	Pension fund	-	-	-	-
	Meals during working time	-	-	-	-
	Free drinking water during working time Free fruit during working time	-	-	-	-
401-3	Return to work and retention rates after parental leave	-			
	Retention rate	%	99%	99%	98%
GRI 403 C	Occupational Health and Safety				
403-2	Types of injury and rates of injury, occupational diseases, lost days and absenteeism and number of work-related fatalities by region and by gender	-			
	Accident Frequency Rate (# Accidents/million worked hours)	-	16.77		
	Lost Time Accident Frequency Rate (# LTA/million worked hours)	-	3.92		
	Number of Lost Days	days	156		
GRI 404 T	Training and Education				
404-1	Average hours of training per year per employee (undertaken by employees)	hours	48	48	47
	Average HSEE training hours per employee	hours	4,4	3,4	6,3
404-3	Percentage of employees receiving regular performance and career development reviews	%	100	100	100

	PORTUGAL		CORK				MACAO		NEW JERSEY		
FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014
888	742	626	185	169	131	173	162	152	86	77	53
35%	33%	33%	26%	27%	26%	27%	26%	26%	28%	28%	37%
50%	44%	43%	46%	49%	59%	44%	40%	40%	76%	77%	80%
38	39	39	40	40	38	36	37	41	40	42	43
9.8	11.3	12.0	2.6	2.3	3.0	8.5	9.0	9.0	5.5	5.5	6.0
5%	6%	6%	13%	14%	20%	12%	25%	11%	10%	16%	3%
Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Free	Free	Free		Subsidized		Free	Free	Free	No	No	No
Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	No	No	No	No	No	No	Yes	No	No
100%	100%	100%	100%	100%	100%	100%	100%	73%	83%	82%	-
12.46	12.65	9.55	39.59	32.13	21.21	3.05	0	6.80	5.46	6.87	0
4.15	3.51	1.59	3.30	10.71	4.71	3.05	0	3.40	5.46	6.87	0
59	155	156	44	66	4	22	0	4	31	4	0
53	56	56	50	32	54	34	47	52	36	20	26
4.8	4.5	7.3	6.0	2.2	9.4	0.8	2.2	3.9	1.8	2.4	5.2
100	100	100	100	100	100	100	100	100	100	100	100

GRI	SOCIAL INDICATORS	UNIT		TOTAL	
STANDA	RDS		FY 2016	FY 2015	FY 2014
GRI 405 D	Diversity and Equal Opportunity				
405-1	Diversity of governance bodies and employees	%			
	% of female within the Board of Directors	%	17%	25%	25%
	% of age group 30-50 years old within the Board of Directors	%	33%	50%	50%
	% of age over 50 years old within the Board of Directors	%	67%	50%	50%
	% of minority groups within the Board of Directors	%	0%	0%	0%
405-2	Equal Remuneration of Women to Men				
	Ratio of basic salary and remuneration of women to men by employee category	-	1.03	1.09	-
GRI 406 N	Non-discrimination				
406-1	Incidents of discrimination and corrective actions taken	-	0	0	0
GRI 408 C	Child Labor				
408-1	Operations and suppliers at significant risk for incidents of child labor	-	0	0	0
GRI 409 F	orced or Compulsory Labor				
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	-	0	0	0
SOCIAL IN	NDICATORS - SOCIETY				
GRI 413 Lo	ocal Communities				
413-1	Operations with implemented local community engagement, impact assessments and development programmes	-			
	Support and donations to local organizations	USD	179,118	122,904	87,939
	Education & Culture	USD	-	-	-
	Social, Health & Well-being	USD	-	-	-
	Sports	USD	-	-	-
	Safety & Environment	USD	-	-	-
	Others % of support and donations per Economic Value Retained	USD %	0.12%	0.12%	0.11%
GRI 415 Pi	ublic Policy				
415-1	Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization	USD	0	0	0
GRI 415 Pu	ublic Policy				
419-1	Non-compliance with laws and regulations in the social and economic area	unit	0	0	0

	PORTUGA			CORK			MACAO			W JERSE	
FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014	FY 2016	FY 2015	FY 2014
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
					_						-
-	-	-	-	-	-	-	-	-	-	-	-
1,03	1,08	-	1,03	1,02	-	-	-	-	0,98	1,39	-
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	U	0	0	0	0	U	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
165,828	92,954	81,039	7,195	2,000	2,000	1,355	1,100		4,740	26,850	4,900
105,020	92,954	01,039	7,195	2,000	2,000	1,355	1,100	-	4,740	20,050	4,900
59,652	26,850	12,754	-	-	-	-	-	-	-	-	0
66,054	33,818	27,434	-	-	-	-	-	-	-	-	0
4,649	3,051	6,908	-	-	-	-	-	-	-	-	0
35,473 0	29,235 0	33,943 0	-	-	-	-	-	-	- 4,740	- 26,850	2,900 2,000
0.16%	0.13%	0.14%	0.10%	0.02%	0.06%	0.01%	0.01%	-	4,740 0.06%	0.76%	0.13%
0.1070	0.1070	0.1470	0.1070	0.0270	0.0070	0.0170	0.01/0		0.0070	0.7070	0.1370
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0



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