

Corporate Social Responsibility Report 2015

# Index

Letter from the Chairman Methodological note Its foundations Materiality analysis	10 10 11 12
Its foundations	10 10 11 12
Materiality analysis	
Report contents	
Report boundary	
Process of drawing up and assurance	
- The Commitment of Piaggio Group	
Piaggio's Corporate Social Responsibility Model	
Generation of sustainable value	
Sustainability strategy	
Stakeholders' involvement	
The process of the Sustainability Plan	
Group profile	28
Main events and recognitions in 2015	
Piaggio - facts and figures	
Piaggio Group Certifications	
Corporate Governance	
Role of the Board of Directors	
Code of Ethics	
Business Ethics Committee	42
Organisational model pursuant to Legislative Decree 231/2001	
Compliance with laws and regulations	
Risk management	
The Economic Dimension	
2015 results and future objectives	
Determination and distribution of Added Value	
Public grants and tax benefits	
Value for shareholders	
Dividends	
Communication with shareholders and Investor Relations	
The Product Dimension	56
Group Objective	
Research guidelines	
Applications	
Industrial patent rights	
Funded national and European projects	
The environmental dimension	
Production sites	
Environmental certifications	82
Reduction of energy consumption	
Reducing emissions of CO <sub>2</sub> and other pollutants	
Conserving water resources	
Waste handling and recovery	



# Corporate Social Responsibility Report

REPORTING PERIOD	ightarrow Financial year 2015 (from 1 January to 31 December 2015).
ANNUAL REPORTING	> Cycle.
DATE OF PUBLICATION	<ul> <li>This document was published on 24 March 2016.</li> <li>The 2014 CSR was published on 7 April 2015.</li> </ul>
DOCUMENT FORMATS	<ul> <li>This issue is available in PDF in Italian and English on the Internet website: www.piaggiogroup.com</li> </ul>
SCOPE OF THE REPORT	<ul> <li>The information and data refer to the companies of Piaggio Group included in the scope of consolidation as of 31 December 2015.</li> <li>The financial data reflect those in the 2015 Piaggio Group Consolidated Financial Statements.</li> </ul>
CONTENTS OF THE REPORT	<ul> <li>The contents of the 2015 CSR are based on the requirements of the Global Reporting Initiative G4 - Core option.</li> </ul>
STATEMENT	The CSR Report 2015 has been subjected to a limited audit by PricewaterhouseCoopers Advisory SpA, an independent third-party company. It carried out its work in accordance with the "International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information" ("ISAE 3000"), issued by the International Auditing and Assurance Standards Board for the purpose of checking CSR Report compliance with the "G4 Sustainability Reporting Guidelines" published in 2013 by the GRI-Global Reporting Initiative
CONTACTS	<ul> <li>&gt; BUSINESS ETHICS COMMITTEE Email: businessethics.committee@piaggio.com</li> <li>&gt; INVESTOR RELATIONS Raffaele Lupotto - Senior Vice President, Head of Investor Relations Email: investorrelations@piaggio.com Tel. +390587 272286 Fax +390587 276093</li> <li>&gt; PRESS OFFICE Email: press@piaggio.com</li> </ul>

# Letter from the Chairman



Founded in December 1884, the Piaggio Group entered its 130th year of operations in 2015.

However it was not a year dedicated to celebrations, but to the development of new and important research and innovation platforms, designed to ensure that the Piaggio Group is very much looking to the future.

Indeed, this is the best way to honour our history while also securing growth in the years to come.

The specific focus of our work has been on research into solutions to current and future problems. In fact, that is the main aim of Piaggio Fast Forward, which was founded in Cambridge, Massachusetts, to create innovative solutions in the field of mobility to be used in places

and by people that for now we can only imagine. Also in the United States, over on the West Coast, the Piaggio Advanced Design center (PADc) in Pasadena is exploring the new frontiers of design, to come up with increasingly innovative products focused on functionality, efficiency and superior, distinctive style that are worthy of the history of the Piaggio Group and its most prestigious brands.

In Europe, the Group's Research and Development Centres – traditionally focused on creating new products and bringing them into production – has now been joined by Aprilia Racing. This racing unit has a strong history of sporting glory, having won 54 world titles in a little over 20 years. Moreover, it is now home to with our most advanced development programme, which designs and tests new materials and technological solutions that can benefit all the Group's products.

Throughout the world, our work has a single focus and reference point: the consumer. The Piaggio Group's strategic, technical and business approach is built around this idea. Understanding our customers means sensing their needs before they even express them, offering them new products that are not only useful, safe and exciting, but also – and the Group is especially cutting-edge in this area – more and more new and integrated ways to interact with their vehicle, as enabled by the communications tools of today and tomorrow.

As such, it is a priority for us to gain a better understanding of the end consumer by developing a new global Customer Relationship Management platform, to understand the needs and expectations of customers and accompany them throughout the sales and aftersales experience. A fundamental part of this process is the decisive introduction throughout all our global markets of a new retail concept called the Motoplex, which offers customers a greater range of products and services while reflecting and enhancing our brands' premium image.

In fact, the Group's brands are its principal asset: recognised throughout the world as a byword for quality, innovation, beauty and style, they remain so well-known, liked and strong because they have always managed to reinvent themselves as time has gone on, without losing their values or history. Indeed in 2016, Vespa celebrated its 70th anniversary and Moto Guzzi reached its 95th birthday.

These brands remain a shining example of products 'Made in Italy' – in the wider sense of the term – that have become internationally entrenched as a manifestation of a culture even more so than of an industry. They are symbols of a level of creativity and a lifestyle that is admired and recognised throughout the world.

Thinking, planning, hard work: these are the cornerstones of any business or manufacturing activity, hence I recall them now, at the end of this letter, together with the one factor that makes an essential contribution to our success. It is all about people. To retain its leadership position, the Piaggio Group is committed as never before to finding and fostering the knowledge and skills to take it forward. We do so by giving those who already work here the opportunity to grow, while searching the world for the most qualified people to help drive the Group's growth across every location and in every economic and cultural sphere.

Chairman and Chief Executive Officer Roberto Colaninno

# **METHODOLOGICAL NOTE**

Its foundations	10
Materiality analysis	10
Report contents	11
Report boundary	12
Process of drawing up and assurance	14



Since 2008, the Piaggio Group has published, on a voluntary basis, its annual Corporate Social Responsibility Report, which provides information on the economic as well as the environmental and social performance of the Group and is an important form of dialogue with internal and external stakeholders.

# Its foundations

The 2015 Corporate Social Responsibility Report is prepared in compliance with the "Sustainability Reporting Guidelines" (GRI-G4) Core option, published in May 2013 by the GRI - Global Reporting Initiative. The contents are based on principles of materiality, the inclusion of stakeholders, the context of sustainability and completeness. The quality of information and adequacy of its presentation is guaranteed by principles of fairness, clarity, accuracy, timeliness, comparability and reliability.

Information was provided and the final document was prepared involving all functions and companies of the Group, coordinated at a central level by the Group's Consolidated Financial Statements function, under the supervision of the Business Ethics Committee.

In reference to the principle of materiality in particular, the depth with which different topics were looked into in the reporting was determined based on their weight in the objectives and strategies of Piaggio Group and the relevance to the stakeholders, determined by a structured process of materiality analysis.

## Materiality analysis

The analysis of materiality was conducted based on the GRI-G4 guidelines with respect to the definition of the relevant topics and application of the principle of materiality.

There was a structured process of mapping and prioritisation of the Group's relevant stakeholders, which saw the involvement of the corporate structures which handle the relations with the various stakeholders (Business Ethics Committee, Investor Relations, Personnel Management, After Sales, Product Development, Finance, Technologies Management, Purchasing Management, Sales Management, External Relations Management). The relevance of the different stakeholders was evaluated and pondered in relation to the following parameters: dependency (taken as the importance of the relationship to the stakeholder), influence (importance of the relationship to the Company) and urgency (temporal dimension of the relationship).

The topics relevant to Piaggio were defined based on different sources, among which are the corporate policies and principles, the 2014 Sustainability Report, and the initiatives for listening to the stakeholders. Two dimensions were looked into on these topics:

- > on the Stakeholder side, the relative importance of each topic as perceived by the Company function in relation with the stakeholder;
- > on the Company's side, the topics on which Piaggio means to focus its efforts and the "level" of commitment.

Therefore, in the upper part of the matrix there are topics into which - in the area of the Group's strategic objectives - a significant investment is foreseen in the next few years.

The analysis of the two dimensions has made it possible to prioritise the topics and position them on a matrix. The materiality matrix provides a summary framework of the topics which could potentially influence the actions and performance of Piaggio and the decisions of its stakeholders, as well as the level of "alignment" or "misalignment" between the priority of intervention that stakeholders attribute to the different topics and the level of commitment that the Group takes on relative to them.



# Report contents

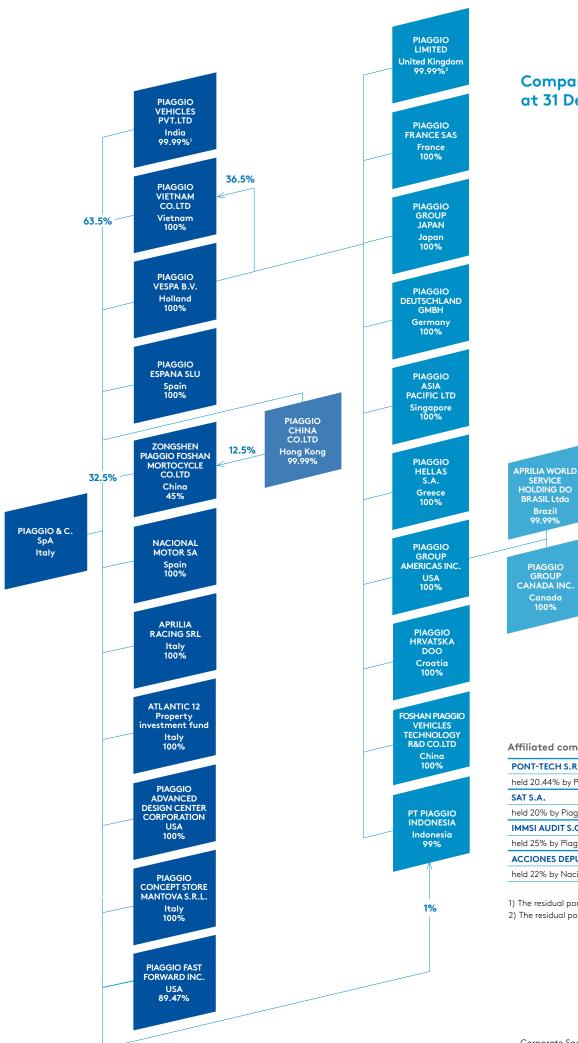
On the basis of the results of the materiality analysis, we can define the structure of the 2015 Sustainability Report focusing it on "material" topics. Similarly, the level of materiality of the topics - in turn broken down into detailed subtopics - has influenced the level of depth with which the individual topics and GRI G4 indicators are gone into, as well as the choice of the most suitable reporting tool to represent them (2015 Consolidated Financial Statements and Corporate Governance Report). These tools are then to be referenced in addressing or deepening into more specific topics, respectively, into the economic performance and governance.

The GRI Content Index in the Appendix contains precise references to the 2015 Sustainability Report and other Group Reporting tools.

Dimension	Торіс	Impact on	Chapter of reference	Reporting perimeter
ECONOMIC	Transparency and creation of economic value	All Group companies - Shareholders and Lenders - Human resources - Suppliers	Corporate Governance and the economic dimension	All Group companies
PRODUCT	Product innovation and sustainable mobility	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited - Piaggio Advance Design Center - Piaggio Fast Forward - Foshan Piaggio Vehicles Technologies - Customers	The Product Dimension	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited - Piaggio Advance Design Center - Piaggio Fast Forward - Foshan Piaggio Vehicles Technologies
ENVIRONMENT	Environmental sustainability	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited - Local Communities - Suppliers	The environmental dimension	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited
SOCIAL	Developing human resources	Human resources	Developing human resources	All Group companies
	Meeting customer requirements	Customers and dealers	Meeting customer requirements	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited
	Responsible management of the supply chain	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited - Piaggio Advance Design Center - Piaggio Fast Forward - Foshan Piaggio Vehicles Technologies - Suppliers	Responsible management of the supply chain	Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited - Piaggio Advance Design Center – Piaggio Fast Forward - Foshan Piaggio Vehicles Technologies
	Supporting local communities	All Group companies - Local communities	Supporting local communities	Piaggio Museum and Foundation - Piaggio & C - Piaggio Vietnam - Piaggio Vehicles Private Limited

# Report boundary

The information and figures contained in this 2015 Corporate Social Responsibility Report refer to the subsidiaries (Italian and foreign) as of 31 December 2015 and their activities developed during 2015, unless otherwise indicated.



Report boundary Process of drawing up and assurance

INDUSTRIA DE MOTOCICLOS SA

# **Company structure** at 31 December 2015

Methodological note

Affiliated companies

Brazil 99.99%

Canada 100%

Annated companies
PONT-TECH S.R.L.
held 20.44% by Piaggio & C. SpA
SAT S.A.
held 20% by Piaggio Vespa B.V.
IMMSI AUDIT S.C.A. R.L.
held 25% by Piaggio & C. SpA
ACCIONES DEPURADORA
held 22% by Nacional Motor S.A.

1) The residual portion is held by Piaggio Vespa B.V. 2) The residual portion is held by Piaggio & C. SpA

The figures for 2013 and 2014, taken from previous editions, are shown only for comparison. The figures in this Corporate Social Responsibility Report refer, when possible, to a three-year period, in order to allow for an evaluation of performance over time.

Financial figures are taken from the Consolidated Group Financial Statements of the Piaggio Group, which have already been audited.

The report duly indicates when aggregate data derive from estimates. In some cases, data could be affected by rounding off defects due to the fact that figures are represented in millions of euros; please be noted that changes and incidence in percent were calculated based on data expressed in thousands and not on the rounded figures expressed in millions.

# Process of drawing up and assurance

The process of reporting and monitoring of Key Performance Indicators (KPI) relevant to sustainability involves the Holding for that which concerns transversal topics, and all the Divisions and Group Companies for the topics and specific indicators of the different sectors of activity.

Within the structures involved, those responsible for gathering, verifying and processing the KPI of competence were identified. The Consolidated Financial Statements Unit of the Administration, Finance and Control Division is responsible for the consolidation of the results. It has to coordinate the entire process of gathering and processing the quantitative indicators, not to mention the coordination of the process of drawing up the Sustainability Report. The Sustainability Report is submitted to the Business Ethic Committee for analysis and evaluation, which verifies its completeness and reliability; the document is then approved by the Board of Directors and finally presented at the General Shareholders' Meeting at the same time as the Group's Consolidated Financial Statements.

To improve the reporting process and assure all stakeholders of the reliability of the information reported, the 2015 Sustainability Report was subjected to a limited audit by PricewaterhouseCoopers Advisory SpA; issue a "Report on the limited audit of the Corporate Social Responsibility Report" based on indications provided by ASSIREVI, the Italian Association of Auditors (Research document no. 153). The report that describes the principles adopted, the activities carried out and the relative conclusions is in the Appendix.



# THE COMMITMENT OF PIAGGIO GROUP

Piaggio's Corporate Social Responsibility Model	19
Generation of sustainable value	20
Sustainability strategy	21
Stakeholders' involvement	22
The process of the Sustainability Plan	26

Expansion only relates to growth from an economic point of view; progress relates to social, cultural and environmental development. Our company mission drives us to pursue progress, to be agents of truly sustainable development with a human face. Piaggio is a group distinguished today by a strong international presence, but which has exported a business model targeting innovation and a strong link with the places where it operates, and a philosophy of doing business characterised by strong social responsibility: a culture of safety, respect for people and the protection of natural resources are a common theme throughout the Piaggio Group.

We are aware that to be able to successfully work in the global market a precise environmental policy needs to be at the centre of our business model which is in line with the needs of the communities where we work and helps their economic and social development.

The Group's conduct is guided by the principles and values set forth by the Group's Code of Ethics, which all Group personnel is required to observe as well as all those who interact with the Company throughout the world.

The Group's objectives include creating value for all shareholders, while complying with business ethics and adopting a number of social values.

In particular, its industrial strategy is based on technological innovation which targets environmentally friendly mobility.

In this context, the Group considers research into cutting-edge solutions as a critical factor for successful investment choices and industrial and commercial initiatives. Innovation is geared to cutting pollutant emissions and consumption, as well as increasing vehicle safety. Plus the Piaggio Group firmly believes that stakeholder involvement is fundamental for the development of the Company and communities where it works, in terms of economic and social well-being.

Safeguarding the environment while carrying out all Company operations is essential for humankind, technology and nature to coexist peacefully. The Group therefore makes sustainable products, which must be manufactured using production facilities with minimal environmental impact. Production systems are made sustainable through optimising process efficiency and converting facilities that are no longer competitive.

In particular, the environmental strategy for the Group's production sites aims for a more rational use of natural resources and minimal harmful emissions and waste from production.

People are fundamental for Piaggio. They are vital to creating added value in the long term. The Group has defined objectives for the growth, promotion and training of human resources, ensuring that each person is rewarded for the contributions they make and that their expectations and goals are met.

In order to achieve the objective of sustainable development, growth must go beyond the boundaries of the Company. It must go further afield to reach suppliers and dealers, with whom Piaggio wants to cooperate being a reliable partner, forging a common ground to work and grow together, to create value for the end customer. The success of a company is also closely linked to customer confidence and satisfaction: customers must be listened to, informed and respected, establishing relations based on transparency and trust.

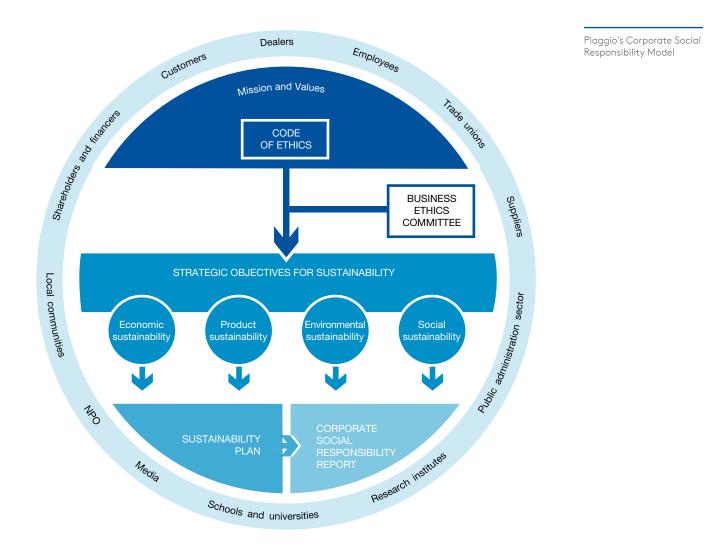
Piaggio's commitment is demonstrated by the trust and focus it receives from socially responsible investors, who have been among the parent company's main shareholders for a number of years.

# Piaggio's Corporate Social Responsibility Model

The Corporate Social Responsibility (CSR) model adopted by Piaggio is based on its mission and the values which have made a name for the Company over the years and which are the cornerstone of the Group's Code of Ethics, established in 2004.

The mission and values form the basis for strategic objectives for sustainability, based on contexts that are important for the Group: economic sustainability, product sustainability, environmental sustainability and social sustainability. With these and the strategic objectives it has defined, the Group has prepared a mid/long-term sustainability plan. This plan is reported on in the Corporate Social Responsibility Report with the utmost transparency and with a view to continually improving economic, environmental, social and product performance.

The entire process is led by the Business Ethics Committee, which was set up in 2008.



#### Mission:

The mission of the Piaggio Group is to generate value for its stakeholders by acting as a global player that creates superior quality products, services and solutions for urban and extraurban mobility that respond to evolving needs and lifestyles.

To stand out as a player that contributes to the social and economic growth of the communities in which it operates, considering, in its activities, the need to protect the environment and the collective well-being of the community.

To be an Italian global player in the light mobility segment, standing out for its superior design, creativity and tradition. To become a leading European company with a world class reputation, championing a business model based on the values of quality and tradition, and on the ongoing creation of value.

#### Values:

Value for customers: Managing and developing a fast, flexible organisation, in which all processes, persons and external partners (suppliers and dealers) are focused on the generation of value perceivable by the client.

Value for shareholders: Achieving objectives for returns on capital employed to meet the expectations of shareholders and ensure ongoing growth.

Value of people: Nurturing the capabilities and talents of each individual, attracting and retaining the highest value resources.

Value of brands: Investing in brand strength as leverage for developing market share and building a unique and distinctive market positioning.

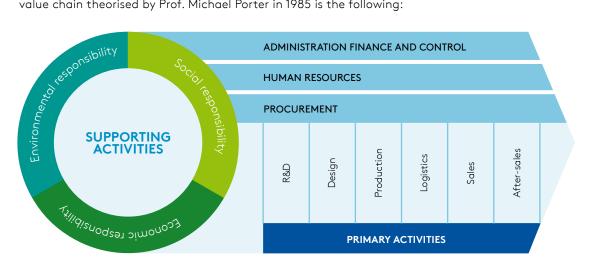
Customer-focussed innovation: Developing innovative products that stand out for their unique style, quality, safety, energy efficiency and low environmental impact.

Internationalisation: Becoming a truly multinational business in terms of organisation, culture, global market presence and respect for local culture in each of the countries in which the group operates, and in exemplary the way its international human resources are handled.

# Generation of sustainable value

Piaggio Group pursues the creation of value and growth over the long term through responsible management of all stakeholder expectations.

The organisational structure of Piaggio Group analysed through the application of the model of the value chain theorised by Prof. Michael Porter in 1985 is the following:



Each primary company function, in carrying out its own activities, seeks to create value for all shareholders, while complying with business ethics and adopting a number of social values.

Specifically:

- > R&D (Research and Development) deals in the development of technologies which may be applied to next-generation products;
- > Design studies the vehicles that will be sold next, which best meet customer needs;
- > Operating activities researches how to lower consumption and emissions and responsible consumption of resources;
- > Logistics seeks to maximise the efficiency of activities to manage the flow of tangible goods going into and coming out of the organisation;
- > The Marketing and sales offices perform product advertising on the market and management of the sales process, strictly following the rules established by the Istituto di Autodisciplina Pubblicitaria Self-Regulatory Institute of Advertising;
- > After-sales service for customers is performed with the care and competence necessary to guaranteeing one of the highest service standards on the market.

#### Support and procurement processes

The support processes are those that do not directly contribute to creation of output, but which are necessary to its production, and are:

- Procurement: all those activities for the purchase of the resources needed to produce output and for the organisation to function;
- > Management of human resources: recruitment, selection, hiring, training, teaching, updating, development, mobility, remuneration, rewards systems, trade union negotiations and collective bargaining, etc.
- > Infrastructure activities: all the other activities including accounting, finance, planning, information systems, legal affairs, general management, etc.

# Sustainability strategy

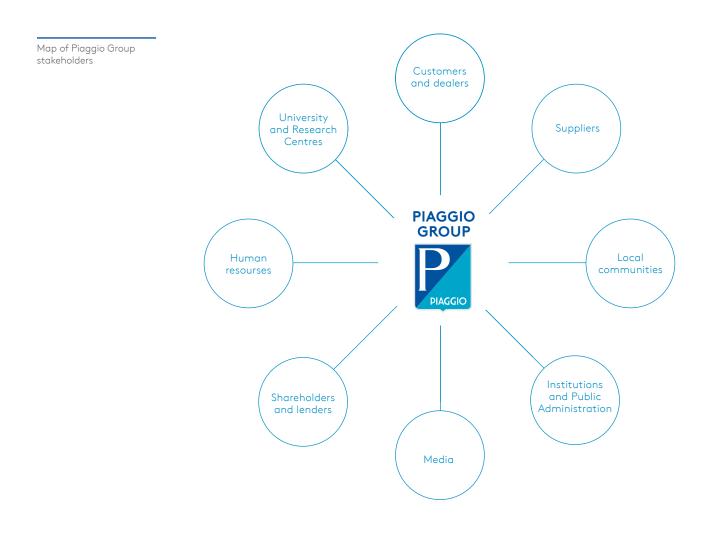
The Group's Corporate Social Responsibility (CSR) strategic objectives - which are largely integrated with and connected to the development of the strategic plan-are based on the following dimensions:

Economic	> Timely, correct, in-depth information to stakeholders.
	> Creating value while respecting business ethics.
Product	> Technological investments to meet the need for sustainable mobility.
	> Innovation to develop products that are environmentally friendly, safe and cost-effective.
Environmental	> Reduction of energy consumption.
	Reducing emissions of CO, and other pollutants.
	Conserving natural resources.
	> Waste handling and recovery.
Social	Developing, training and promoting human resources so that everyone's expectations and aspirations are met.
	> Listening to and assisting customers, to establish relations based on transparency and trust.
	Developing Company Advocacy in co-partnership with the Dealers network.
	Sale of products that are environmentally friendly, reliable, safe and cost-effective.
	> Working together with suppliers, through jointly developed projects.
	Respecting human rights.
	> Engaging and supporting local communities through social, cultural and educational initiatives

# Stakeholders' involvement

Developing a corporate social responsibility strategy goes hand in hand with defining the Company's business context and all its players (inside and outside the organisation) whose activities have an impact on Company operations. In fact stakeholders are defined as having an interest in or expectations (social, economic, professional, human) of the Company.

Based on this definition, the Group has identified a series of categories of stakeholders in relation to its operations.



By pursuing a constructive ongoing dialogue with its stakeholders, Piaggio aims to develop an integrated approach to managing the environment it operates in. Careful monitoring of all its stakeholders' expectations is a great opportunity for it to further improve its operations. It is in this context that Piaggio is focussing its efforts: on understanding possible areas of improvement in order to provide products that always meet the expectations of its customers, communicating its philosophy and business model clearly and effectively at all times.

The corporate website of the Piaggio Group -www.piaggiogroup.com - is designed to offer clear and up-to-date information in terms of financial and institutional disclosures, and on the corporate activities of the Group. It plays a central role in communications between the company and its stakeholders.

# Map of the topics meaningful to stakeholders

#### Customers and dealers

#### Means of involvement

- > Contact centre
- > Customer satisfaction surveys
- > Communication outlets (websites, social media)
- > Events (travelling tests, trade fairs)
- > Dealer Website
- > Dealer Support Services/Help desk
- > Motoplex (new sales format

Stakeholder expectations	Our actions
Quality, safety and reliability of the products.	<ul> <li>Investment in ever safer and more reliable products.</li> <li>Obtaining quality certification.</li> </ul>
Low consumption and emissions.	<ul> <li>Study of innovative engines with low consumption and emissions.</li> </ul>
Rapid response and problem solving.	> Effort to improve professionalism, timeliness and courtesy of the contact centre personnel and dealers.
Sales support.	> Development of a dedicated website and a new sales format

#### Suppliers

#### Means of involvement

- > Daily relations
- > Suppliers portal

Stakeholder expectations	Our actions
Continuity of the supply.	> Implementation of Suppliers Portal.
Collaboration and sharing of best practices.	> Vendor Rating Campaigns.

#### Local Communities

#### Means of involvement

- > Meetings
- > Exhibitions and events
- Rallies

Stakeholder expectations	Our actions
Contributions to supporting charity initiatives.	> Support for numerous charity initiatives.
Organisation of get-togethers and events for connoisseurs	Through the Vespa World Club and the Moto Guzzi World Club, the Group organises shows, get-togethers and contests for its customers.
Development of local communities.	The foundation and the Piaggio Museum carry out the function of meeting place and cultural reference for the territory.
Respecting the environment.	> Attainment of the environmental certification for production establishments.

#### Institutions and Public Administration

#### Means of involvement

- > Ongoing dialogue on the regulatory developments
- > Periodic ad hoc meetings
- > Participation in the parliamentary committees charged with discussing and formulating new regulations
- > Meetings and presentations

Stakeholder expectations	Our actions
Compliance with laws and regulations. Receptiveness and a pro- positional attitude regarding environmental and social themes.	<ul> <li>Investments into R&amp;D of innovative products that are abreast of any restrictions of current regulations.</li> </ul>
Support on specific technical themes.	<ul> <li>Proactive participation in the parliamentary committees charged with discussing and formulating new regulations.</li> </ul>
Pursuing common objectives.	> Participating in trade associations.

#### Media

### Means of involvement

- > Press releases
- > Events and Company communication initiatives
- > Press product launches
- > Product test rides
- > Wide Piaggio Magazine

Stakeholder expectations	Our actions
Availability, transparency and timeliness of information on the Company and its products.	<ul> <li>&gt; Abiding by the self-regulatory code of business communications.</li> <li>&gt; Strengthening relations with the media in the different countries where the Group is active</li> </ul>

#### Shareholders and lenders

#### Means of involvement

- > Conference call/Road Show
- > Piaggio Analyst and Investor Meeting

Stakeholder expectations	Our actions
Clear and timely information.	> Promotion of ongoing dialogue with analysts and lenders.
Remuneration and defence of the asset value of the investment.	> Treasury shares purchasing policy.

#### Human resources

## Means of involvement

- > Company intranet
- > Piaggio InfoPoint
- > Piaggio Net International
- > Web Mail
- > Evaluation Management System
- > Wide Piaggio Magazine
- > Meetings with trade unions

Stakeholder expectations	Our actions
Clear and timely company communication.	> Promotion of ongoing, constructive dialogue with employees.
Safe and healthy work environment.	Attainment of health and safety certifications for Group plants.
Opportunity for professional development and training.	<ul> <li>Preparation of professional and managerial career paths for young talents.</li> </ul>
Transparent reward policies.	<ul> <li>Remuneration policy characterised by meritocratic and fair criteria.</li> </ul>
Respecting human rights and diversity.	<ul> <li>Abiding by a code of ethics that explicitly prohibits any form of discrimination or forced labour.</li> </ul>
Open and constructive dialogue.	<ul> <li>Piaggio promotes ongoing, constructive dialogue with trade unions.</li> </ul>

#### Universities and Research Centres

#### Means of involvement

> Cooperation in research projects

#### > Training

> Work placements

Stakeholder expectations	Our actions
Cooperation on common projects.	<ul> <li>Collaboration with universities and research institutes on research projects.</li> </ul>
Training.	<ul> <li>Promotion of internships for final year students, college undergraduates and graduates.</li> <li>Teaching carried out by its personnel in some departments.</li> </ul>

# The process of the Sustainability Plan

As part of the entire Group's steadfast commitment to social responsibility, Piaggio has adopted a process of continual improvement based on a CSR plan which aims to provide the utmost transparency for stakeholders and continual improvement. For the purpose of defining the Sustainability Plan, stakeholder expectations and Group strategic objectives as well as international reporting standards, such as GRI and disclosure requirements of ethical investors, were taken into account.

The Sustainability Plan is updated each year when the CSR is prepared by the Consolidated Financial Statements team, which also handles the drawing up of this document.

The process is composed of three stages:

- > the planning stage: the commitment and objectives are defined in cooperation with the functions and operating areas involved in their achievement. Thus defined, the proposed Sustainability Plan is submitted to the Business Ethic Committee for approval, which analyses its consistency with the Group's strategies and is formally approved by the Board Of Directors together with the approval of the CSR document;
- > the management stage: the responsibility for reaching individual objectives put in the plan is up to the functions and the operating areas who have the resources, tools, and necessary competence to achieve them;
- > the monitoring stage: to guarantee the commitments taken up in the Sustainability Report, together with the new objectives set for the future, proof of the results achieved towards the commitments taken up is given.



# **GROUP PROFILE**

Main events and recognitions in 2015	33
Piaggio - facts and figures	35
Piaggio Group Certifications	36

"Beautiful engineering for the mobility of tomorrow" Established in 1884 and based in Pontedera (Pisa), Piaggio & C. S.p.A. is today a global player, Europe's leading manufacturer of powered two-wheelers, and an international force in the commercial vehicle sector.

As of 31 December 2015, the Piaggio Group was controlled little more than 50% by the Immsi Group and has been listed on the Milan Stock Exchange since 11 July 2006.

As of the end of 2015, the Group had 7,053 employees, with research and development centres in Italy, India, Vietnam, USA and China and operates through the sites in Pontedera (Pisa), Noale and Scorzè (Venice), Mandello del Lario (Lecco), Baramati (India) and Vinh Phuc (Vietnam).



Company Locations

# **Brands**

The Group's product range is sold in about 100 nations and includes scooters, mopeds, motorcycles, three- and four-wheelers and, since 2015, a new electric bicycle concept, all marketed under the brands Ape, Aprilia, Derbi, Gilera, Moto Guzzi, Piaggio, Scarabeo, Vespa and Commercial Vehicles.



# Ape

Ape is a brand that has clocked up more than sixty years of success. It is associated in many areas of Europe and the world as the most compact, easy-to-handle and versatile light transport solution, to the extent that Piaggio has become an absolute market leader in India in this product segment.



# Aprilia

With a product range spanning 50cc scooters to top-performing 1,200cc motorcycles, Aprilia is the only European "full liner" brand in the powered two-wheeler segment. The brand is known for its sporting style worldwide, winning many important competitions, the excellent performance of its products, and a cutting-edge innovation and design.

In 2015, Aprilia re-engineered its leading products (the RSV4 1000 and Tuono V4 1100), increasing engine performance (the RSV4 has an hp of over 200) and implementing innovative technological solutions related to electronic management, making the RSV4 and Tuono standard setters in the ultraperformance sports bike segment.



## Derbi

For more than eighty years Derbi has represented the first approach to the world of motorcycles for young people. The Derbi brand is synonymous with a product range that includes 50 to 300 cc scooters and small and medium cc motorcycles, in particular 50 and 125cc. For these engine size segments Derbi offers a complete range for modern city, road, off-road and racing mobility.

With 21 world road racing titles to its name, Derbi is very well known in Europe and stands for excellent technical performance and superb delivery in the small and medium engine capacity sector.



## Gilera

Gilera was established in 1909 and became a part of the Piaggio Group in 1969. The brand is extremely well known in the motorcycling world, with fourteen world road racing titles to its name. The brand features premium vehicles in terms of design, performance and technology, distinguished by their thrilling, top-performing, Italian style. Gilera is focused on a young, sports-oriented target clientele looking for a vehicle with superior performance and a dynamic, distinctive design that caters for their mobility needs, with advanced technological solutions that offer a highly rewarding riding experience.



# Moto Guzzi

Moto Guzzi is one of the world's best known brands of motorcycle, with fans and clubs in all four corners of the globe. Founded in 1921, Moto Guzzi is part of Italy and the world's motorcycle history. The company's business has continued uninterrupted for more than 90 years, starting from the legendary Mandello del Lario site where the "Marchio dell'Aquila" originated in 1921.

Moto Guzzi has made a name for itself over the years manufacturing motorcycles renowned for their remarkable reliability, which have become famous thanks to their visibility at international rallies and première sporting events. The current Moto Guzzi range features 750cc to 1,400cc touring, road enduro, custom and naked bikes, all with 90° V twin cylinder engines and final cardan drive.



# Piaggio

The Piaggio brand markets the widest range of scooters in Europe under a single brand name, covering practically every type of model. Since 2015, the Piaggio family has also been joined by a new means of transport that goes beyond the concept of the electric bicycle (Wi-Bike).

Piaggio today features a full range of original, creative and smart city bikes, and has consolidated over the years a remarkable reputation for vehicles that are reliable, safe, extremely stylish and great performers. The Piaggio brand's key values, in particular its capacity for technological innovation, led it to introduce the world's first three-wheeler on the market, the MP3, as well as hybrid engines.



#### Scarabeo

Scarabeo is one of the Piaggio Group premium brands, standing for elegance and uniqueness. A vehicle with timeless style, it can never be accused of being common and exudes a neo-vintage allure: in short, it is absolutely perfect to stand out in the crowded world of modern scooters. Since 1993 the Scarabeo brand has identified a range of high-wheel 50cc-500cc scooters with a unique, exclusive style that has made the Italian brand a symbol of trendy metropolitan mobility.



#### Vespa

Vespa is the expression of a uniquely distinctive lifestyle, and has today become one of the most famous and celebrated brands worldwide. The enduring success of the scooter is tied to its extraordinary historic, symbolic and iconographic heritage. Ever since the launch of the first model in 1946, the Vespa has satisfied the aspirations of customers seeking a "cult" product, a symbol of design, creativity and Italian technology, the star of movies and advertising campaigns all over the planet. The brand's strength lies in its technical nature. The Vespa is a two-wheeler which is reliable and easy to use, and extremely sturdy thanks to its steel body making it unique in the segment. Vespa enjoys an unparalleled level of success worldwide and a consistent brand image in all the markets it operates in. In Europe and America as much as in Asia, Vespa is a byword for an exclusive, elegant, "Made in Italy" scooter.



## Veicoli Commerciali

This is the Group brand marketing four-wheelers that are compact yet have a high load capacity, for short-distance professional and business mobility. The Piaggio Porter range - along with Quargo, a heavy four-wheeler - owes its success to its wide range of commercial transport solutions that are compact, suitable for urban use and feature engines with low or zero environmental impact.

## Main events and recognitions in 2015

**March 2015** – Aprilia presents its sporting line-up for 2015. In 2015 Aprilia entered the MotoGP Championship, the world's foremost motorcycling competition, and continued to race Superbike and Superstock. As regards Aprilia's involvement in MotoGP, a first year will be spent entirely on development, above all in race conditions, before a prototype motorbike with a Full Factory configuration makes its début on the track in 2016.

#### Piaggio Vietnam awarded "Certificate of Merit"

**March 2015** - Piaggio Vietnam was awarded at "Certificate of Merit" by the Ministry for Labour and Social Affairs for its health and safety activities in 2014.

#### ISO 14001:2004 and OHSAS 18001:2007

**April 2015** – The Indian subsidiary Piaggio Vehicles Private Ltd. obtained ISO 14001:2004 certification (environmental management systems) and OHSAS 18001:2007 certification (occupational health and safety management systems) for its Commercial Vehicles and Engines production sites, as well as ISO 50001 certification for the energy management systems of its two-wheeler production site.

#### Euro 4 standard

**May 2015** – Presentation of the new Moto Guzzi Audace, the first Moto Guzzi to comply with the Euro 4 standard.

#### Aprilia RSV4 wins Fast Bikes magazine award for fifth consecutive year

July 2015 – For the fifth year in a row, Aprilia RSV4 won the "Sports Bike Of The Year" award from British monthly magazine Fast Bikes. Fast Bikes tested the 10 "best" super sportsbikes of 2015 at any horsepower around the Algarve race track in Portimao. La RSV4 RF beat the BMW S1000RR, Ducati Panigale 1299S, Yamaha YZF-R1M, Kawasaki H2, MV Agusta F3 800, Triumph Daytona 675R, Kawasaki ZX10R, Ducati Panigale 899 and the MV Agusta F4 RR.

#### Superstock 1000 FIM Cup

October 2015 – Lorenzo Savadori and Aprilia win Stock 1000 FIM CUP on RSV4 RF.

#### Carbon Disclosure Project (CDP)

**November 2015** – In annual research on climate change organised by the Carbon Disclosure Project (CDP), an independent nonprofit organisation which offers companies and countries a system for gauging, measuring, managing and sharing information on climate change and water on a global scale, Piaggio scored 98/B (it scored 94/C in 2014).

#### Arete prize for responsible corporate communications

**November 2015** – The Piaggio Group's 2014 Sustainability Report was a finalist for the Arete Prize for Responsible Corporate Communications.

#### Eicma 2015

**November 2015** – The Piaggio brand was represented by a new vehicle – the Medley – and the new generation of Liberty scooters, which will be fitted with new Piaggio iGet air- or water-cooled engines, both of which are state of the art for motorbike technology. The new Piaggio iGet engines are based on

a design philosophy that targets an improved fuel consumption and emissions, plus a better and more advanced quality and reliability.

Another new introduction at the fair was the Piaggio Wi-Bike, a completely new vehicle that goes beyond the concept of the pedal-assist bike to satisfy the latest transport needs and trends.

#### 70 Million EIB loan for R&D projects in Italy

**December 2015** – The European Investment Bank (EIB) and Piaggio signed a loan agreement for €70 million to support the Piaggio Group's Research and Development projects at its Italian sites. The sevenyear loan will fund the development of innovative technological, product and process solutions in the areas of active and passive safety, sustainability (including electric engines and reduced consumption in petrol engines) and customer satisfaction, with the study of new mobility concepts, new driver/vehicle interfaces, and communication and web connection profiles. Piaggio - facts and figures<sup>3</sup> 1,295.3 Consolidated revenue million EUR 519.7 Vehicles sold thousand units 478.5 Vehicles Produced thousand units 161.8 EBITDA million EUR 11.9 Net profit million EUR 498.1 Net debt million EUR 7,053 Employees as of year end 101.9 Investments million EUR 46.8 Research and Development expenditure million EUR

3) Figures are stated as of 31 December 2015

# Piaggio Group Certifications

The Piaggio Group possesses excellent environmental, quality and occupational management systems at all its production sites.

				Productior	n sites			
Certification		Pontedera	Noale and Scorzè	Mandello del Lario	Baramati Engine Plant	Baramati Two-Wheeler Site	Baramati Commercial Vehicles Site	Vinh Phuc
	UNI EN ISO 9001:2008 - Quality management systems	since 1995	since 2006	since 2010	since 2010	since 2013		since 2009
	EN ISO 14001:2004 - En- vironmental manage- ment system	since 2008	since 2008	since 2010	since 2015	since 2013	since 2015	since 2011
	BS OHSAS 18001:2007- Occupational Health and Safety Management systems	since 2007	since 2007	since 2010	since 2015	since 2013	since 2015	since 2013
	ISO TS 16946:2009 Suppliers' quality systems				since 2012		since 2013	
	ISO 50001:2008 Energy management systems					since 2015		

Piaggio's production sites in Italy–Noalè-Scorze and Mandello del Lario–as well as in Vietnam and the Indian production site 2W have for many years held certifications for **Quality** (ISO 9001), **Environment** (ISO 14001) and **Occupational Health and Safety** (BS OHSAS 18001).

Annual audits by the certification body demonstrate the Company's commitment to its Quality, Health and Safety and Environmental policies established by Top Management and are proof of the reliability of Management Systems which are applied with the contribution of managers from all functions and the individuals who work in them.

In April 2015, the Indian subsidiary Piaggio Vehicles Private Ltd. obtained ISO 14001:2004 certification (environmental management systems) and OHSAS 18001:2007 certification (occupational health and safety management systems) for its Commercial Vehicles and Engines production sites, as well as **ISO 50001** certification for the energy management systems of its two-wheeler production site.



# CORPORATE GOVERNANCE

Role of the Board of Directors	40
Code of Ethics	41
Business Ethics Committee	42
Organisational model pursuant to Legislative Decree 231/2001	42
Compliance with laws and regulations	43

"Good company management, in the deepest sense of the term, means a strong and constant commitment to do what is best".

**Phil Condit** President of Boeing The Corporate Governance system adopted by Piaggio & C. S.p.A. (hereinafter "**Piaggio & C.**" or the "**Company**") conforms to the principles in the Self-Regulatory Code of companies listed on Borsa Italiana SpA and to national and international best practices, guaranteeing the proper and responsible management of the Company, in order to promote confidence among shareholders, customers and partners.

To these ends, over time Piaggio & C. has made all the opportune adjustments required by the changes made to the Self-Regulatory Code of the listed Companies, as last approved in July 2014. Piaggio & C. also has individuated and appointed the roles of Risk Manager and Compliance Officer.

Currently, the Company Boards which make up the system of Corporate Governance of Piaggio & C. are: the Board of Directors, the Board of Statutory Auditors, the committees within the Board of Directors and the General Shareholders' Meeting. Specifically, the Board Of Directors is supported by the Internal Control and Risk Management Committee, the Remuneration Committee, the Appointment Proposal Committee and the committee for the operations with related parties.

The Board of Directors has also set up a Supervisory Body pursuant to Legislative Decree no. 231/2001 as well as a Business Ethics Committee.

For more information on the company boards, refer to the Report on Corporate Governance and Corporate Ownership for the year ending 31 December 2015, available online at www.piaggiogroup.com in the Governance section.

# Role of the Board of Directors

The Company is governed by a Board of Directors (also known as "**Board**") composed of a number of members not less than 7 (seven) and not more than 15 (fifteen).

The Articles of Association of Piaggio & C. regarding the composition and appointment of the Board require compliance with relevant provisions introduced by Italian Law 262/2005 and by Italian Legislative Decree no. 29 December 2006, no. 303, as well as Italian Legislative Decree no. 27 of 27 January 2010 implementing Directive 2007/36/EC on the exercise of certain rights of shareholders in listed companies and Italian Law 120/2011 on gender equality.

The Board of Directors is central to the corporate organisation. It is in charge of strategic and organisational functions and responsibilities, and ascertains the existence of controls needed to monitor the performance of Piaggio & C. and of Group companies. As part of its duties, the Board examines and approves the strategic, industrial and financial plans of Piaggio & C. and of the Piaggio Group, as well as the corporate governance system and structure of Piaggio & C. and of the Group reporting to it.

Piaggio & C. Board Of Directors, appointed by the General Shareholders' Meeting on 13 April 2015, is composed of nine members whose professional résumés are lodged at the registered office of the Company and available on the Company website www.piaggiogroup.com/Governance - Management.

Name	Position	Year of birth	In office from	In office until	List M/m	Exec.	Non Exec.	Indep.	Indep. Con- solidated Law on Finance	Participa- tion in Board meetings	Other positions
Roberto Colaninno	Chairman Chief Executive Officer	1943	13/04/2015 First appointment: 23/10/2003	Approval of the financial statements as of 31.12.2017	М	Х				7/7	6
Matteo Colaninno	Deputy Chairman	1970	13/04/2015 First appointment: 23/10/2003	Approval of the financial statements as of 31.12.2017	М		Х			7/7	3
Michele Colaninno	Director	1976	13/04/2015 First appointment: 28/08/2006	Approval of the financial statements as of 31.12.2017	М		Х			7/7	10
Vito Varvaro	Director	1954	13/04/2015 First appointment: 16/04/2009	Approval of the financial statements as of 31.12.2017	М		Х	Х		7/7	2
Graziano Gianmichele Visentin	Director	1950	13/04/2015 First appointment: 13/04/2015	Approval of the financial statements as of 31.12.2017	М		Х	Х		4/5	18
Maria Chiara Carrozza	Director	1965	13/04/2015 First appointment: 13/04/2015	Approval of the financial statements as of 31.12.2017	М		Х	Х		4/5	
Giuseppe Tesauro	Director	1942	13/04/2015 First appointment: 13/04/2015	Approval of the financial statements as of 31.12.2017	М		Х	Х		4/5	
Andrea Formica	Director	1961	13/04/2015 First appointment: 13/04/2015	Approval of the financial statements as of 31.12.2017	М		Х	Х		5/5	2
Federica Savasi	Director	1975	13/04/2015 First appointment: 13/04/2015	Approval of the financial statements as of 31.12.2017	М		Х			5/5	

The Board of Directors comprises a majority of independent, non-executive directors who, thus, due to their number and authority are able to have a significant influence on the decisions the Piaggio & C. Board makes. These directors bring their specific competencies to Board discussions and contribute to decisions being made in the Company's interest.

The independence of the independent Directors is always reviewed, as recommended by the Corporate Governance Code, by the Piaggio & C. Board of Directors on an annual basis.

Already at the moment of joining the regulated market, Piaggio & C. appointed a Lead Independent Director who, in cooperation with the Chairman of the Board of Directors, coordinates the contribution of all the independent Directors.

# Code of Ethics

Piaggio &C. has adopted a Code of Ethics since 2004 for the Organisational Model pursuant to Italian Legislative Decree 231/2001. The Code of Ethics was last updated in 2015 following a review of the Organisational Model pursuant to Italian Legislative Decree 231/2001, in order to tailor it more closely to the social and ethical values that the Piaggio Group is based on and that inspire its work. The Code of Ethics, available on the Company's website (www.piaggiogroup.com/Governance), widely distributed and in force in all of the Group's companies, defines the principles and values which the entire company organisation takes inspiration from in a clear and transparent manner:

- > complying with the laws of countries where Piaggio operates;
- > dismissing and condemning unlawful and improper behaviour;
- > preventing breaches of lawfulness, constant search for transparency and openness in managing the business;

Names and positions of Piaggio & C. Board of Directors members as of 31/12/2015

LEGEND M/m slate: indicates whether the director was drawn from the slate attracting a majority (M) or minority (m) of votes Exec.: indicates if the director can be classified as an executive. Non-exec.: indicates if the director can be classified as nonexecutive. Indep.: indicates if the director can be classified as independent in accordance with the criteria established by the Code. Indep. Consolidated Law on Finance: indicates if the director has the independence reauisites established by Article 148, subsection 3 of the Consolidated Law on Finance (Article 144-decies, of the Consob Regulation on Issuers). Participation in Board meetings: indicates the Director's participation in Board meetings (shows the number of meetings attended by the Director out of the total number of meetings held during the year or since taking office) Other offices: indicates the overall number of appointments in other companies of the Issuer's Group, in listed companies on regulated markets (including foreign), in financial, banking and insurance companies or those of significant

dimensions.

> seeking excellence and market competitiveness;

> respecting, protecting and valuing human resources;

> pursuing sustainable development while respecting the environment and rights of future generations.

The Group's Code of Ethics sets out the social and ethical responsibilities of each member of the Company's organisation. In particular, the ethical and social responsibilities of senior management, middle management, employees and suppliers are defined, in order to prevent any party, acting in the name of and on behalf of Group companies, from adopting a conduct which is irresponsible or unlawful.

The articles of the Code of Ethics also set forth an important principle on how to manage relations with policy makers: "The Company does not make contributions or offer advantages and/or benefits to political parties and trade unions or to their representatives or candidates without prejudice to compliance with applicable law."

# **Business Ethics Committee**

The Piaggio Group was the first organisation to establish a Business Ethics Committee in Italy, in 2008. This committee develops rules and regulations for organisational conduct in line with international best practices on corporate social responsibility.

In coordinating the entire corporate responsibility process, the committee:

- > monitors instruments, conduct, and relations between management and Company personnel and all stakeholders;
- > optimises relations with local communities and stakeholders;
- > measures ethical standards, which are an integral part of the good governance of a Company;
- > implements the provisions in the Code of Ethics, including the activity concerning the receipt and management of reports of frauds that may involve employees, managers, and partners of Piaggio & C. and of Group companies;
- > produces the CSR Report and manages all activities needed for the planning, implementation, monitoring and reporting of the Group's sustainability initiatives.

All operations concerning relations between the Piaggio Group and the external world are analysed and revised by the Committee, with the aim of guaranteeing to all stakeholders that the information cycle is managed transparently. Starting from the assumption that transparency best describes the purpose of corporate social responsibility today, the Committee acts as a "guarantor" for investors, consumers and opinion leaders, to make sure Company conduct is based on conformity to laws at all times, on fairness and on the truthfulness of disclosures to the public.

Lastly, it should be noted that the Business Ethics Committee, as part of the Fraud Policy, is tasked with collecting all of the reports regarding fraud, calling meetings and making opportune assessments together with involved bodies.

# Organisational model pursuant to Legislative Decree 231/2001

The internal control and risk management system of Piaggio & C. includes the Organisational, Management and Control Model for the prevention of corporate crimes pursuant to Legislative Decree no. 231/2001 ("Model pursuant to Legislative Decree 231/2001"), which Piaggio & C. has adopted since 2004.

The Model pursuant to Italian Legislative Decree 231/2001 is comprised of a general part, consisting mainly of the Code of Ethics, General Principles of Internal Control, Guidelines for Conduct, Internal Control Guidelines (divided into Instrumental and Operating processes), and the Disciplinary System,

as well as special individual parts based on the type of offences referred to in Decree 231/2001. The Company has for some time now set in place a special e-mail whose references are in the Guidelines for Conduct, which let anyone send a message directly to the Supervisory Body to report any relevant cases. This message must be read exclusively by the Supervisory Body thus guaranteeing that the operations of the body are carried out in compliance with Model 231/2001 of the Company. The Model pursuant to Italian Legislative Decree 231/2001–widely distributed by e-mail to all Piaggio Group senior management, middle management and employees in Italy, as well as published on the Company intranet – is constantly monitored and periodically updated. Piaggio & C. has also established a "Fraud Policy" with information channels for receiving, analysing and processing reported fraud that may involve employees, directors and partners of Piaggio and Group Companies. The policy is another instrument that the Piaggio Group has adopted to prevent infringement of the principles of lawfulness, transparency, fairness and loyalty which the Model pursuant to Legislative Decree no. 231/2001 takes inspiration from.

The Model is available on the corporate web site www.piaggiogroup.com in the section Governance/ Governance System.

# Compliance with laws and regulations

During 2015, none of the Piaggio Group companies were affected by episodes concerning employee discrimination or the breach of employee rights. Moreover, no infringement procedures have been filed against the Piaggio Group for the breach of anti-competitive or anti-trust laws; in addition, we report that the preliminary assessment of the violation of anti-trust legislation, begun in 2014 in relation to the Croatian subsidiary, ended satisfactorily as it was found that there was no violation of the legislation in question.

As of 31 December 2015, there were no sanctions in place concerning non-compliance with laws and regulations, including environmental laws and regulations, marketing, advertising, promotions, sponsorships and the supply and use of products.

Finally, no cases relative to the breach of consumer privacy or loss of consumer data were reported in 2015.

# RISK MANAGEMENT

"Responsibility cannot be delegated, it is about us and not them, ourselves and not others."

Bertold Brecht

The Piaggio Group is engaged in an Enterprise Risk Management (ERM) project to define and gradually implement a structured and integrated system for detecting, measuring and managing company risks in line with existing best practices in the area, as defined by the Committee of Sponsoring Organizations of the Treadway Commission (CoSO) and the applicable regulatory requirements (Borsa Italian's New Corporate Governance Code).

The Piaggio Group's risk model identifies CSR risks implicit in internal risks, as briefly described below.

# Reputational risk

Risk connected with a worsening of how stakeholders perceive the Group and its reputation, and loyalty to it.

# Risk connected with the environment and with health and safety

Risk that the Group does not guarantee a safe work environment, with potential negative impacts (for example legal proceedings brought by employees, loss of reputation, the payment of compensation). Risk connected with potential negative environmental impact that may damage property or persons and expose the Group to sanctions, costs for compensation and reputational damage.

# Risk connected with the development of environmentally compatible products

Risk connected with inadequate technological investments that are functional for sustainable mobility, for creating environmentally friendly products and an adequate technological level of products to meet new mobility needs of consumers and regulatory developments.

# Risk connected with the sustainable supply chain

Risk connected with the use of suppliers or subsuppliers that do not meet adequate standards of sustainability, in line with the Group's sustainability strategy.

#### Risks connected with diversity

Risk arising from a failure to value diversity within the organisation and the absence of management that is heterogeneous as regards competency, experience, age brackets and gender; risk arising from discriminatory actions that may occur on the labour market due to gender, sexual orientation and other diversity aspects.

To deal with these risks, the Piaggio Group has excellent environmental, quality and safety management systems at all its production sites.

For a more detailed analysis of all the risks identified by the Piaggio Group, refer to the Report on Operations in the Consolidated Piaggio Group Financial Statements 2015.



# THE ECONOMIC DIMENSION

2015 results and future objectives	50
Determination and distribution of Added Value	50
Public grants and tax benefits	52
Value for shareholders	53
Dividends	54
Communication with shareholders and Investor Relations	54

"Capital as such is not evil; it is its wrong use that is evil. Capital in some form or other will always be needed."

M. K. Gandhi

Integrating economic choices with those of a social and environmental nature is a fundamental commitment for the creation of value in the long term.

The creation of economic value is fundamental for a Company's operations and it is what its existence and business outlook depend on. For a manufacturing Company, creating added value is the first way to be socially responsible, and this value may benefit a plurality of stakeholders in different ways.

The economic dimension of acting as a company must be fully enhanced within the role that it plays for all its stakeholders. To these ends, Piaggio Group carefully oversees the process of producing value and makes transparent, punctual and exhaustive communication regarding the process in the Report on Operations of the 2015 Consolidated Financial Statements (see chapter "Financial position and performance of the Group") to which reference is to be made for any in-depth information.

# 2015 results and future objectives

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives
Shareholder remuneration.	<ul> <li>Safeguarding shareholder value.</li> </ul>	<ul> <li>Maintenance of the asset value of the share.</li> <li>Distribution of dividends.</li> </ul>	<ul> <li>Safeguarding shareholder value.</li> </ul>	<ul> <li>Distribution of dividends and protection of equity for shareholders.</li> </ul>
Conducting business operations fairly and transparently.	> Continuing improvement of the corporate web site.		Continuing improvement of the corporate web site.	<ul> <li>&gt; Swift and timely compliance with laws and regulations.</li> <li>&gt; Continuing improvement of the corporate web site.</li> <li>&gt; Ongoing adaptation of the Code of Ethics to national and international best practices.</li> </ul>

# Determination and distribution of Added Value

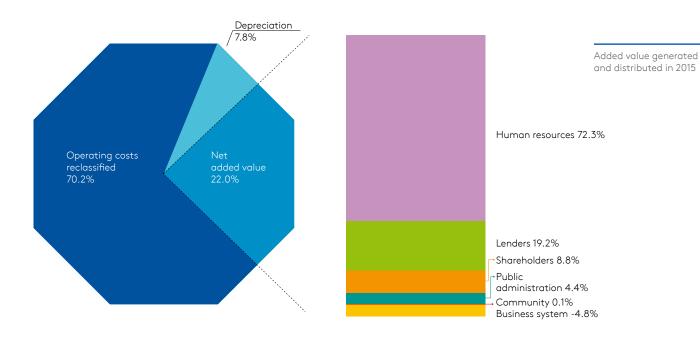
Added Value is an asset produced by the Piaggio Group, which is distributed, in different forms, to various stakeholders.

Net Global Added Value is distributed among stakeholders as: remuneration to human resources (direct remuneration comprising salaries, wages and termination benefits and indirect remuneration comprising social security contributions), remuneration to lenders (interest payable and exchange losses), remuneration to shareholders (dividends distributed), remuneration to the Public Administration sector (total taxes paid), external donations and donations to the community. The value held by the Group comprises retained earnings.

2015 results and future objectives Determination and distribution of Added Value Public grants and tax benefits Value for shareholders Dividends Communication with shareholders and Investor Relations

	2015	2014	2013
(figures in thousands of euros)			
Net revenues	1,295,286	1,213,272	1,212,535
Income/(loss) from investments	295	-184	2,264
Financial income	19,783	13,956	13,095
Other operating income reclassified	26,054	25,499	21,461
Economic value generated	1,341,418	1,252,543	1,249,355
Operating costs reclassified	-941,429	-864,019	-872,543
Depreciation	-105,014	-89,353	-83,115
Net added value	294,975	299,171	293,697
Remuneration to human resources	213,326	211,513	211,656
Remuneration to lenders	56,685	56,919	47,720
Shareholder remuneration	26,007	0	33,087
Remuneration to the Public Administration sector	12,684	14,383	40,358
External donations and donations to the community	413	292	491
Distributed added value	309,115	283,107	333,312
Business system	-14,140	16,064	-39,615
Added value retained by the Group	-14,140	16,064	-39,615





Global Net Added Value generated by Piaggio in 2015 amounted to € 294,975 thousand, equivalent to 22.0% of economic value generated. The majority of this value is accounted for by remuneration of human resources (72.3%), followed by remuneration of lenders (19.2%) and shareholders (8.8%). Global Added Value increased 1.4% compared to 2014.

# Public grants and tax benefits

In 2015 the Piaggio Group benefited from government aid in the form of research grants, training grants and tax benefits in the amount of  $\in$  7,230 thousand.

Research grants, totalling € 3,729 thousand, were obtained for research projects. The contents and results of these are commented on in the chapter on the product dimension.

Training grants totalled € 245 thousand and were obtained by the Parent Company.

Piaggio Vehicles Private Limited (India) obtained a grant for exports and its amount, €1,143 thousand, was calculated as a percentage of the FOB value of the exports.

	2015	2014	2013
(figures in thousands of euros)			
Grants	3,729	173	2,079
Export grants	1,143	853	1,167
Training grants	245	334	430
Total	5,117	1,360	3,676

Instead, tax benefits totalling  $\in$  2,113 thousand were obtained by the companies operating in Vietnam and France.

Specifically:

- > Piaggio Vietnam benefited from an exemption on income tax resulting from manufacturing and trading activity on the Vietnamese market, which led to a tax reduction of 50% compared to the rate for these activities.
- > Piaggio France received a tax credit totalling 44,650 euro, related to the total of salaries paid in 2015. Specifically, this credit is 6% of the total amount of salaries which do not exceed a particular limit equal to a basic reference salary (i.e. the SMIC-the guaranteed minimum wage in France) multiplied by 2.5.

Tax benefits		2015	2014	2013
	(figures in thousands of euros) <sup>4</sup>			
	Tax exemption			
4)Values in currencies other	Piaggio Vietnam	2,068	1,462	1,370
than the Euro have been	<u>Tax credit</u>			
converted using the annual	Piaggio France	45	54	34
average exchange rate. medio annuo.	Total	2,113	1,516	1,404

During 2015, a loan agreement was signed with the European Investment Bank (EIB) to support the Piaggio Group's Research and Development projects, which will be disbursed in 2016.

#### Subsidised loans obtained

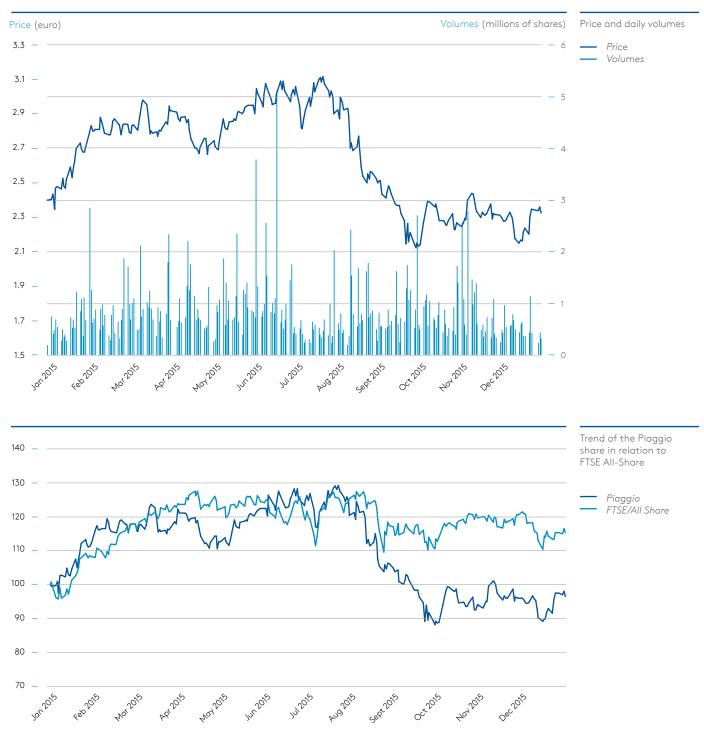
	2015	2014	2013
(figures in thousands of euros)			
Loans			2,032
- of which subsidised loans	-	-	2,032
- of which EIB loans	-	-	-

#### Grants obtained

2015 results and future objectives Determination and distribution of Added Value Public grants and tax benefits Value for shareholders Dividends Communication with shareholders and Investor Relations

# Value for shareholders

Piaggio & C. SpA has been listed on the Milan Stock Exchange since 11 July 2006. Shares in Piaggio–which also felt the effects of the market volatility of the second half of the year – ended 2015 at € 2.34 per share, slightly down compared to the end of 2014.



# Dividends

The Shareholders Meeting of Piaggio & C. S.p.A. of 13 April 2015 resolved to distribute a dividend of 7.2 eurocents per ordinary share. During 2014, dividends were not distributed.

Statement of Piaggio & C. SpA dividends for -2012 -2013 - 2014

Reference Financial Statements	2014	2013	2012
Detachment date	20 April 2015		20 May 2013
Payment date	22 April 2015		23 May 2013
Dividend per share (euro)	0.072		0.092

# Communication with shareholders and Investor Relations

Piaggio considers financial disclosure to be of fundamental importance in building a relationship of trust with the financial market.

In particular the Investor Relations function engages institutional and individual investors as well as financial analysts in an ongoing dialogue, producing transparent, timely and accurate information to promote a correct perception of the Group's value.

In 2015 there were numerous opportunities to interact with the financial community, with the Group meeting more than 130 investors on main European financial markets during road shows and conferences. Initiatives also included direct meetings and conference calls, managed daily by the IR function, and institutional communication events concerning quarterly results.

The Company's website www.piaggiogroup.com is constantly updated with exhaustive information concerning the Group and all major corporate documentation, in both Italian and English.

In particular, press releases disclosed to the market by the Press Office, the Company's periodic financial reports, the Corporate Social Responsibility Report, and the Company's business and financial performance are all published on-line, along with the material used in meetings with the financial community, Piaggio share consensus as well as corporate governance documents (articles of association, insider trading and material concerning shareholders' meetings).

2015 results and future objectives Determination and distribution of Added Value Public grants and tax benefits Value for shareholders Dividends Communication with shareholders and Investor Relations

Etica Sgr's intervention at Piaggio's general shareholders' meeting for approval of the financial statements on 13 April 2015



For the fifth year, on 13 April 2015, Etica Sgr voted at the General Shareholders' Meeting of Piaggio, Italian motorcycling company which deals in the scooter, motorcycle and light transportation vehicle sector with different brands, which include Piaggio, Vespa, Moto Guzzi and Ape.

This year Etica Sgr once again attended the shareholders' meeting to call management's attention to some aspects linked to corporate sustainability.

Despite appreciating the Company's return to profits, Etica Sgr abstained from the first item on the agenda (Financial Statements of Piagqio & C. S.p.A. as of 31 December 2014; Directors' Report on Operations for 2014 and proposal to allocate profit for the period; Report of the Board of Statutory Auditors; Report of the Independent Auditors; Related and consequent resolutions; presentation of the consolidated financial statements of the Piaggio Group as of 31 December 2014 and related reports), considering the percentage of profits distributed to the shareholders not to be in line with a solid and long-term investment policy. It also abstained in relation to the request for authorisation to purchase and dispose of treasury shares, with respect to which it would have been preferable to have further details on the business goals and strategies that Piaggio intends to pursue and the only item of the extraordinary shareholders' meeting relating to the cancellation of the totality of treasury shares, due to the absence of clear and detailed information regarding that request. Etica Sgr also voted against the remuneration report since the absence of clear, detailed and transparent information regarding the methods of paying the variable components of the remunerations was assessed negatively. Etica Sgr supported, along with the other institutional investors and members of Assogestioni, a minority list of candidates for the Board of Directors and one for the Board of Statutory Auditors.

In its speech at the shareholders' meeting, Etica Sgr requested updates in relation to the employment situation of Piaggio's Italian plants and it welcomed the incorporation of the Climate Change questionnaire promoted by the Carbon Disclosure Project, as had been requested by Etica itself during the last shareholders' meeting. In that regard, there was a call for a further effort, responding also to the questionnaire regarding the use of water resources. Finally, Etica Sgr asked the Company to pay increasing attention to the management and assessment of its suppliers.

# THE PRODUCT DIMENSION

Group Objective	60
Research guidelines	62
Applications	63
Industrial patent rights	73
Funded national and European projects	74

"We design innovative, beautiful, efficient, smart and sustainable technologies to reinvent mobility for future generations."

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives
<b>2W Vehicles</b> Study, research and development of environmentally	<ul> <li>&gt; eBike sales</li> <li>&gt; Research into new engines.</li> </ul>	> Wi-Bike in production.	<ul> <li>Creation of new Wi- Bike versions</li> <li>Use of Wi-Bike in sharing services.</li> </ul>	<ul> <li>Research into electric vehicles for urban mobility.</li> </ul>
<ul> <li>sustainable</li> <li>products:</li> <li>reducing fuel</li> <li>consumption and</li> <li>emissions;</li> <li>increasing</li> <li>performance.</li> </ul>	<ul> <li>Reduction of consumption by working on transmission and engine efficiency.</li> </ul>	> Development and industrial production of new air and water iGet engines, fitted on the new Liberty and Medley.	> Spread of iGet engines to other models.	<ul> <li>Research and development for new devices aimed at further reducing consumption and emissions by decreasing absorption and improving engine use.</li> </ul>
	<ul> <li>Research on electronic and electromechanical devices to reduce pollution in urban use, in particular the Start &amp; Stop device.</li> </ul>	<ul> <li>Development concluded, device installed on iGet water-cooled 125 and 150 on the Piaggio Medley.</li> </ul>	<ul> <li>Spread of device to other vehicle models.</li> </ul>	<ul> <li>Research on electronic and electromechanical devices to reduce pollution in urban use.</li> </ul>
	<ul> <li>Study of innovative high performance automatic transmissions, both simplified and high performing.</li> </ul>	<ul> <li>First phase completed in the high- performance field.</li> <li>Research ongoing into for simplified budget models.</li> </ul>	<ul> <li>Refinement of high- performance version.</li> <li>Creation of prototypes for simplified models.</li> </ul>	<ul> <li>Creation of versions available for sale and their industrial production.</li> </ul>
	> Study of modular battery applications for secondary or alternative use to the vehicle mounted ones.	<ul> <li>Prototypes of accumulators made based on Group batteries.</li> </ul>	> Extension of contact with partners from other sectors assess profitability.	<ul> <li>Continued research into making batteries with higher energy densities, longer ranges and greater reliability at a lower cost.</li> </ul>
	> Spread of PMP system.	<ul> <li>&gt; The system is currently available for:</li> <li>Aprilia RSV4;</li> <li>Aprilia Tuono 1100 My2015 (version V4-MP designed specifically for these models);</li> <li>Aprilia Caponord;</li> <li>Aprilia Caponord Rally;</li> <li>Moto Guzzi California;</li> <li>Moto Guzzi V7 II ABS;</li> <li>Piaggio x10;</li> <li>Piaggio Mp3 300-500;</li> <li>Piaggio Mp3 500 ABS ASR;</li> <li>Vespa Gts ABS ASR;</li> <li>Vespa 946;</li> <li>New Piaggio Liberty;</li> <li>Piagio Wi-Bike.</li> </ul>	Increase functionality, introduction of version with internal phone and call management.	Continuous improvement of system and harmonisation with other electronic on-board devices in terms of safety, comfort, data exchange, improved reliability.

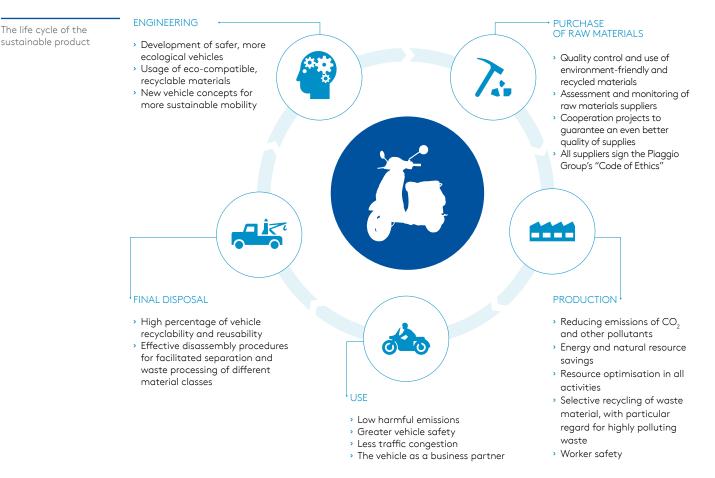
The product dimension Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives
3/4W Vehicles Developing environmentally friendly products: > low consumption and low CO <sub>2</sub> emissions; > good product end life recycling and recovery levels.	<ul> <li>Porter Europe:</li> <li>Production launch of Euro6 petrol version September 2015, LPG and CNG by March 2016.</li> </ul>	Porter Europe > Successful production launch of Euro6 petrol version September 2015.	<ul> <li>Porter Europe         <ul> <li>Start of production of GPL version in February 2016 and CNG version in May 2016.</li> </ul> </li> <li>Porter Electric:         <ul> <li>Feasibility study to update traction and fast-recharge system.</li> </ul> </li> </ul>	<ul> <li>&gt; New vehicle for urban goods and passenger transportation mobility (European and Indian markets) with the following main objectives:         <ul> <li>reduced consumption;</li> <li>high mobility/handling in urban settings;</li> <li>high specific payload;</li> </ul> </li> </ul>
	<ul> <li>3W India:</li> <li>&gt; Launch of development activity in keeping with market demands and type approval restrictions.</li> <li>&gt; Reduction of the cost per kilometre and environmental impact.</li> </ul>	<ul> <li>3W India:</li> <li>&gt; Ape City Upgrade developed and launched (start of production Feb. 16)</li> <li>- Average 4% reduction in fuel use in all petrol and AF<sup>5</sup> versions.</li> <li>- 5% improvement in TCO<sup>6</sup> on the petrol version and 30% on the LPG and CNG versions.</li> </ul>	<ul> <li>3W India:</li> <li>&gt; Development of Ape City BSIV and Ape 501 BSIV in view of new legal limits that will enter into force on 1 April 2017 and the continuous improvement of TCO.</li> <li>&gt; Development of Ape Classic and Calessino in line with the new EU4 standards in force from 1 January 2017.</li> </ul>	<ul> <li>use of environmentally</li> <li>friendly tractions.</li> <li>&gt; Use of recycled plastic.</li> </ul>
	Porter 600 India: > Freezing of new contents as far as the vehicle, drawing up of Business Plan for approval initiative (start of production Q2 2016). Development and industrialisation activities consistent with the Business Plan.	Porter 600 India (Porter 650 BSIV): > Business Plan prepared and approved (start of production Q3 2016). Development and industrialisation activities consistent with the Business Plan.	Porter 600 India: (Porter 650 BSIV): ) Development and industrialisation activities consistent with the Business Plan. ) Target TCO improvement of 20%.	
Meeting demand for professional and commercial short-distance mobility, offering a last-mile transport solution:	> Broadening of the LAM range (high slope vehicles) with launch of the LAM LPG version of the Ape City.	> Ape City LPG-LAM version- launched on the market. This vehicle sets out to be best-in- class in terms of market and mission performance.	<ul> <li>Feasibility study and subsequent development of the Ape City medium Body AF for use in suburban environments.</li> </ul>	
<ul> <li>&gt; compact, agile, easy- to-drive vehicles, with good handling in urban environments;</li> <li>&gt; vehicles with a high load capacity and specific payload;</li> <li>&gt; definition of a vehicle for new sales activities such as street food and street shop</li> </ul>	<ul> <li>&gt; Technical/economic assessments of the solutions identified.</li> <li>&gt; Monitoring of the Street food market.</li> <li>&gt; Ongoing broadening of the export market.</li> </ul>	<ul> <li>&gt; Technical/economic assessments of the solutions identified.</li> <li>&gt; Monitoring of the Street food market.</li> <li>&gt; Expansion of the export market with entry into new markets (e.g. Ethiopia, Indonesia, Argentina)</li> </ul>	<ul> <li>&gt; Feasibility study for a new vehicle for urban mobility.</li> <li>&gt; Monitoring of the Street food market.</li> <li>&gt; Ongoing broadening of the export market.</li> <li>- Launch of the Ape City Upgrade range in export markets.</li> </ul>	
	New Ape City Cargo: > Feasibility study for new urban ground transportation tricycle with Powetrain Petrol and Alternative Fuel to replace the vehicles with a diesel engine in specific missions.	New Ape City Cargo: > Feasibility study completed. Comparison begun with e-commerce agencies to check response to specific market demands.	New Ape City Cargo: > Development of AF-powered goods transport vehicle for the Indian market and for export	

5) AF – Alternative Fuel 6) TCO – Total cost of Ownership

# **Group Objective**

The main objective of the Piaggio Group is to meet the most progressive needs for mobility, reducing the environmental impact and consumption of its vehicles, ensuring customers excellent levels of performance. In its effort to ensure the sustainability of its products, the Piaggio Group takes into account the entire life cycle, which comprises the design, procurement of raw materials, production proper, use of the product by customers and, finally, decommissioning, which consists in disassembly at the end of service life and in the disposal and/or recycling of the components and raw materials.



During its life cycle, every product interacts directly and indirectly on both the health and safety of people and the environment understood as ecosystem quality.

For this reason the Piaggio Group focuses its R&D activities on developing innovative solutions to reduce the emission of pollutants and to increase the safety, reliability and recyclability of its products. A constant focus is placed on research into vehicles that are at the forefront in terms of:

- > ecology: products that can cut the emissions of pollutant gases and  $CO_2$  in urban and extraurban areas; this is achieved by further developing traditional engine technologies (increasingly sophisticated internal combustion engines), as well as making more use of renewable, sustainable energy sources;
- > reliability and safety: vehicles that allow a growing number of people to get about town easily, while contributing to ease traffic congestion and ensuring high levels of active, passive and preventive safety;

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

Piaggio-An "electric"

story

- > recyclability, products that reduce the environmental impact at the end of their life cycle to a minimum;
- > cost-effectiveness, vehicles with lower running and maintenance costs.

# A vocation that reaches far back

Piaggio's emphasis on the environmental compatibility of its products has deep roots; in 1978 it produced the Ape Elettrocar, featuring an electric motor with incorporated differential and Pb batteries, a forerunner of zero emission vehicles (ZEV). In 1995 it was followed by the electric Porter. In the field of two-wheelers, in 1994 the Zip&Zip was put on the market, the first scooter with dual mode drive in the world, that is, equipped with two engines-electric and conventional catalytic, to be used in alternation; in 2001 came the Electric Zip, a ZEV.



Still today, this emphasis is seen in the spread of hybrid or full electric products on different vehicle types (2, 3, 4 wheels). 2015 saw the start of production of the Piaggio eBike, marketed under the name

Wi-Bike to emphasise its eco-friendly and connected characteristics.



# **Research guidelines**

## Orientation

The awareness of public opinion and institutions on the issues of environmental sustainability and urban and extra-urban mobility is constantly increasing.

Rapid and often chaotic urbanisation, which is not always supported by the development of a public transport network, has increased the number of vehicles on roads and, as a result, traffic congestion and the amount of pollutants emitted in urban areas.

This awareness further fuels the Piaggio Group's commitment to providing mobility solutions designed to improve the quality of life in towns and cities by reducing traffic congestion and air and noise pollution.

Spread of motorcycles for individual mobility is in and of itself a way to reduce traffic and pollution, but to be effective, it requires an actual increase in two-wheeler vehicle safety, which may be attained through research and installation of active, passive and preventive safety systems on products. Indeed, making two-wheeler vehicles safer and more comfortable may increase their use and, at the same time, decrease the number of cars on the road, which in turn cuts fuel consumption and harmful emissions by approximately 50% (in the same traffic conditions)<sup>7</sup>.

- Therefore the main guidelines for the Group's research are:
- > reduction of consumption and emissions, improvement of internal combustion engines, improvement of vehicles, better performance;
- > safety and comfort;
- > alternative, hybrid, electric engines;
- > environmental compatibility of the product and the process.

#### Partnerships with universities and research centres

The Piaggio Group is aware of the great value of innovation and research and believes in the importance of sharing knowledge and ideas and in the stimulus that it can give to improving technologies, processes and products.

Universities and research centres are perhaps the ideal place for this type of cooperation. For this reason the Piaggio Group has always been engaged on many fronts to consolidate the synergy between the world of research and its industrial sector.

Over the years, and especially in 2015, the Group has entertained ongoing relationships with a national scope involving research and exchange with the University of Pisa, University of Florence, University of Bologna, University of Modena and Reggio Emilia, the Politecnico of Milan, the Politecnico of Turin, University of Padua, University of Perugia, University of Rome - Tor Vergata, University of Rome - La Sapienza, University of Naples, Centro Ricerche Fiat, the Istituto Motori CNR in Naples, COMETA Research Consortium of Catania, the QUINN Consortium of Pisa, the Technos Consortium of Rieti, the Numidia Consortium of Rome and the SCIRE Consortium in Naples.

The main collaborations in Europe were with the University of Athens (GR), the Hellenic Institute of Transport of Athens (GR) and the Fraunhofer IAO (University of Stuttgart (D), Austrian Institute of Technology, CERTH-APTL (A), IK4 CIDETEC (E), University of Warwick (GB), Czech Tech University of Prague (CZ), Ricardo (UK and D), Idiada (E).

The objective of these partnerships is to support continuing innovation through:

- > partnerships in research and development projects;
- > participation in European and national projects;
- > experimental research dissertations.

7) See research conducted by the French ADEME Agency (Agence de l'Environnement et de la Maîtrise de l'Energie), in Paris on a circular route, with 31 km travelled in different traffic conditions.

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

## **Technological Antennas**

In addition to external partnerships, the Group has three technological antennas of a high-calibre: the Piaggio Advanced Design Center in Pasadena (USA), the multiple world champion Aprilia Racing team and Piaggio Fast Forward.

The PADC was founded in California in 2012 as an in-company research centre with the purpose of providing a window into changes in society, lifestyle and the formulas of urban and metropolitan mobility, developing an international system of skills and research in the field of style and product marketing which generate spin-offs and stimuli to develop in the technical sphere.

As one of the most victorious and prestigious teams in the world, Aprilia Racing has an ongoing technical partnership with the Group's Innovation, with constant comparing of notes and sharing skills.

This was complemented in 2015 with the creation of Piaggio Fast Forward (piaggiofastforward.com). Piaggio Fast Forward was established to develop a new way to do research, to interpret signs of change and find intelligent solutions to future problems and new challenges. It is a massive workshop for people with open, forward-thinking minds. It is an inclusive, multicultural and multidisciplinary project bringing together history, research, design and industry. Piaggio Fast Forward is based in a place famed for excellence: Cambridge (Massachusetts, United States) - a platform where research, the university, visions for the future, technology and businesses all come together and encourage ideas. Piaggio Fast Forward is an ambitious project that will help the Piaggio Group to work alongside its R&D centres around the world to develop increasingly hi-tech, innovative products that answer consumers' changing needs – the key to future growth.

# **Applications**

Continuous improvement of its products is the main objective of the Piaggio Group's Research. In this ongoing process, improving engines and in particular cutting fuel consumption and emissions while improving performance (including rideability and user enjoyment) are of the utmost importance.

For example, since 2006 the Piaggio Group has developed solutions in line with the Euro3<sup>8</sup> standard for the entire range of over 50cc versions sold throughout the world, reducing both pollutant emissions (for example NOx emissions cut by 50%) and consumption<sup>9</sup>.

To achieve the best possible results, engine research must be focused on three key areas:

> optimisation of engine thermal fluid dynamics, with particular reference to the combustion process;
 > reduction of organic leaks (friction, pumping);

> improvement in the performance of the CVT transmission system.

Engine acoustics and timbre were also focussed on, developing numerical/experimental methodologies for designing the intake and exhaust systems and engine components with acoustic emissions that are lower and "more pleasant".

#### Engine improvement: real examples from the scooter sector

An example of continuous improvement is the work on the 125 cc engine, which is fitted on all scooters with that size engine and meets the Euro4 standard<sup>10</sup>.

In 2011, the "Three Valve" 125 and 150 cc generation – extremely advanced for that time<sup>11</sup> – was launched on the Vespa LX and then on the Liberty.

During 2013, the 3V engine was fine-tuned to further reduce fuel consumption to 44 km/l during the global WTMC benchmark test<sup>12</sup>. This value is taken as a benchmark in the comparative table below, referring to the various versions of the Liberty 125.

In 2015 the continuous improvement process led to the new iGet air-cooled 125 and 150 cc engines,

8) "Euro3 Mopeds" and "Euro4 Motor Vehicles" are the most advanced and stringent standards in force; even though the same name can be misleading, EuroX standards for cars are based on criteria entirely different from those for motorcycles and mopeds.

- 9) Piaggio was the first Company to put a Euro3 scooter with electronic injection on the European market: the Vespa 250 GTS, unveiled in May 2005 ahead of mandatory Euro3 regulations which came into force on 1 January 2006.
- 10) As from 1 January 2016, all new models of motorcycles shall meet Euro 4 standards. Euro 3 motorcycles may still be sold for one year, provided they were previously type approved. Starting 1 January 2017, all newly registered motor vehicles must meet the Euro4 standard.
- 11) The "Three Valve" used innovative technical solutions designed to limit emissions and fuel consumption such as "tumble" suction ducts and combustion chamber, reducing internal friction by improving lubrication, adopting roller rocking levers, roller bearings etc.

12) WMTC - Worldwide (harmonized) Motorcycle (emission) Test Cycle. established by UNECE Global Technical Regulation No. 2, it has been used since 2006 as a test cycle for measuring emissions as an alternative to the European driving cycle for L3e motorcycles and then extended to all "L" vehicle categories. It is referred to in Italian Official Gazette no. 29 of 14 April 2014 as a "Measurement method applicable to two-wheeler motorcycles equipped with positive-ignition and compression-ignition engine with respect to emissions of pollutant gases, CO, emissions and fuel consumption". The Piaggio Group also uses this standard cycle and results are presented in this form.

which debuted on the new Liberty ABS 3V. The design aims to reduce the overall noise and improve rideability, with visible changes including a new sports silencer with an aluminium support, but the most important work was on optimising the injection and engine control system.

# Improved efficiency: a leap into the future

The greatest efforts in 2015 were focused on the development of a new family of engines called "iGet 4V Water", available in 125cc and 150cc. These engines come equipped with electronic injection, four-valve timing system and a radiator built into the engine. They can be used with the "Start & Stop" system. This device replaces the starter and alternator and has no transmission gears that can cause noise.

Compliant with the Euro4 standard, they are the result of a design philosophy guided primarily by new and higher levels of quality and reliability.

Each component, from the exhaust to the inside of the gearbox cover and the new air filter has been designed to make for a smooth, quiet and comfortable ride, and to lengthen the life of the engine. The design aims above all to reduce friction and in particular friction in the timing system.

The mechanical noise of the new iGet is also extremely low thanks to a reduction in play and the optimisation of materials and shapes.

Building the radiator into the engine has reduced the overall weight of the vehicle and engine warmup times, with benefits in terms of consumption and cold emissions.

The gearbox has been entirely redesigned and uses a latest-generation double toothed belt to minimise passive losses, as well as a setting that improves rideability, performance and consumption. The new built-in engine electronic control unit, integrated with the S&S management part (Alternator, S&S Inverter, RISS), has been entirely developed by Piaggio.

Mileage on the WMTC cycle improved for the 125cc scooter.

Year (model)	km/l	Change vs. 3V
Liberty 125 3V (2013)	44	benchmark
New Liberty iGet (2015)	45	+2.27%
Medley 2015 iGet water-cooled	47.5	+7.95%

#### **Riding pleasure**

One example of the application of research to improve riding pleasure is the new power unit for the Moto Guzzi Roamer V9 and V9 Bobber, developed to increase maximum torque and elasticity, key ways to ensure a pleasurable ride and fun on the road.

The changes have affected practically everything, except the traditional transversal 90° V-twin engine. In addition to the crankcase and the drive shaft, the lubrication system has also been redesigned to reduce power consumption. The reduced-flow oil pump is new, made possible by the use of new piston cooling oil jets equipped with a control valve and flow and thermodynamic management, starting with the bore and stroke values. The timing now has inclined valves to improve volumetric efficiency. The electronic engine control unit and electronic injection system are new. The engine is in line with the Euro4 anti-emissions standard.

The six-speed gearbox is new and highly precise with soft changes, and the clutch is single disc. The final transmission again uses a cardan shaft.

# Increasing performance

While this initiative applies to all the Group's projects, the product that is emblematic of its technical ability in the field of performance research is certainly the 2015 version of the RSV4 1000.

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

This motorcycle is the 2014 World Superbike champion, with an entirely redesigned engine to get 16 horsepower more and a 1.6 kg weight reduction. Keeping the list down to the most important news, the 2015 version of the 65° V4 has a newly designed air box - just like all the internal fluid dynamics - with CFD (Computational Fluid Dynamics). New upper injectors, new intake ducts with adjustable length with individual management per cylinder bank, a perfect solution for being integrated with the new PRC system. Now the valves are made out of titanium and the entire distribution has been lightened, just like the driveshaft and the connecting rods. The upper crankcase has been made lighter and stronger; the ventilation system has been optimised to reduce power losses due to the pressure inside the cases. Improved oil suction and reduction of the level to lower friction. The transmission and exhaust system are new, the latter with new electronic management of the valve and equipped with two lambda probes (one per bank). The calculation capacity of the engine control system has also been improved for even more accurate engine management in the maximum reachable rotation area.

2015 also saw the evolution of the 1100cc version of the V4 engine for the "Naked" Aprilia Tuono V4 1100. The Tuono is not subject to the SBK regulations limiting the size of the engine to 1000cc and the increase to 1100 cc – together with different settings and calibrations – aims to increase its road-rideability, considerably increasing torque at low rpm and manageability at high rpm.

## Adjustment of engines for the demands of Asian Markets

Models sold on Asian markets offer customers the style, image and technology of the Piaggio Group, but reinterpreted according to their needs. They maintain the same high technological, quality and performance standards of their European counterparts, but often differ to models for the EMEA Market.

The Vespa manufactured and sold in India has a 125HE<sup>13</sup> engine with carburettor, with type approval based on Indian Bharat stage III regulations (that differ from Euro3 standards).

In August 2015, a 150cc version was introduced, also with a carburettor. The main reason for retaining the carburettor was ease of maintenance, which is greatly appreciated by customers and garages. Versions with carburettors able to meet future Bharat IV regulations have already been planned.

The engines mounted on models of the "LEm 3V" family made in Vietnam have been specifically finetuned to make them more suitable for the country's specific conditions, characterised in cities by very low speeds caused by highly congested traffic. For these reasons, a special setting of the CVT gear change has been adopted to ensure smoother running and lower consumption (and hence also  $CO_2$ emissions) since Vietnamese customers are not particularly interested in pure performance.

At the end of 2015, the new "iGet 125" was launched in Vietnam on the Piaggio Liberty; in 2016 it will be extended to other Vietnamese models.

## Improvement of the vehicles, reduction of absorption

This objective is methodically pursued by using aerodynamic simulations (CFD) and validation of the results through comparative analysis with experimental data obtained in the University of Perugia's wind tunnel.

#### Increase in safety and comfort

Recent years have seen major focus on this year, which can be summed up in the following points: > ABS for light scooters: the new Medley, developed in 2015 and on sale in 2016, is equipped as standard with disc brakes with ABS. Each wheel is equipped with a sensor and a phonic wheel for measuring angular speeds. The 2-channel hydraulic control unit continuously compares the two signals and activates the

13) The "High Efficiency" or "HE" engine, specifically for the Indian market, is based on the "LEm 3Valve" but features major changes to the piston rods (bearings instead of bushings) as well as the final transmission (lighter, less absorption). The changes are also designed to further reduce the fuel consumption of an enaine which, for market reasons, is less powerful in its EMEA and Vietnam versions.

ABS system, when the change of speed of one of the two wheels is abnormal, avoiding locking and ensuring stability and braking efficiency even on a low friction coefficient surfaces. The new Liberty 125 is also equipped with single-channel ABS, a completely new feature especially for Asian markets, which will get a specific version;

- > wireless traction control for vehicles without the ride by wire system, combined with ABS, for optimal grip during acceleration and braking; the system was extended to the entire Vespa product line > 50cc, MP3, Beverly, X10; in particular, in 2015 it was extended to the Moto Guzzi V7 Range;
- the study and trial of an advanced semi-active electronic suspension system ADD (Aprilia Dynamic Damping) and its application to the mass produced Aprilia Caponord 1200;
- > extension of the Ride by wire to the majority of Group vehicles, including the 500 version of MP3 2014; allows adoption of "by wire" Traction Control together with ABS, to maximise traction while accelerating or breaking, and offers the multi-map management of the engine to adapt the power supply to the traction or driving conditions;
- > cruise control (based on Ride by wire); available on Aprilia and Moto Guzzi motorcycles;
- > the APRC system (Aprilia Performance Ride Control based on the ride by wire system) on the RSV4 includes:
- ATC (Aprilia Traction Control, which is adjustable while riding, without shuttling the throttle, on 8 levels thanks to a practical joystick on the left semi-handlebar, with state-of-the-art operating logics);
- aWC: Aprilia Wheelie Control, the wheelie control system, adjustable on three levels was recalibrated for maximum performance in level 1, the least intrusive;
- aLC: Aprilia Launch Control, a system for track use only that can be set at three levels;
- -aQS: Aprilia Quick Shift, a system for extremely fast gear changes without shutting the throttle and using the clutch;
- > the ABS race system (only for the RSV4), designed and developed by Aprilia in conjunction with Bosch to guarantee not only outstanding safety on the road, but also the best performance on the track;
- electrically adjustable suspension, on the Piaggio X10 and Aprilia Caponord, of which the ADD package is a part (electronic suspension);
- > dissemination and expansion of the Piaggio Multimedia Platform info-mobility system, based on linking the smartphone and the vehicle via Bluetooth<sup>®</sup>, iOS and Android<sup>14</sup>;
- development and installation on the Porter and Porter Maxxi of the electronic stability control system (ABS+ESC);
- ightarrow development and installation of the Child Lock system on the VAN glass version of the Porter.

14) See box.

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

# PIAGGIO MULTIMEDIA PLATFORM - putting Piaggio scooters in touch with the world

The innovative multimedia platform, called PIAGGIO MULTIMEDIA PLATFORM (PMP) connects the vehicle via Bluetooth to a smartphone (iOS or Android), making it possible to use a phone to increase on-board instruments and increase functions available to the Customer. PMP also makes it possible to connect the vehicle to Internet through a Data Network connection, offering a function and truly vast range of development possibilities.

PMP debuted on Piaggio X10 in 2012. Its development and extension continued in 2014 adding new functions and new graphics specific for the various models and brands, so that in 2015 it was available for: Piaggio MP3, X10 and Liberty 2015; Vespa GTS 2014, Vespa 946; Aprilia Caponord, Aprilia RSV4, Aprilia Tuono V4 1100; Moto Guzzi V7 and Moto Guzzi California. The main functions of these systems are:

- Extended dashboard
- Safety
- Navigation
- User Manual
- Eco Meter
- Grip Warning

In 2015, the highly advanced Piaggio Multimedia Platform V4-MP was launched for the RSV4 and Tuono, which transforms the smartphone into a semi-professional tool for track use. With this version, there is active communication between the vehicle and the smartphone: the rider can change the settings of their RSV4 and Tuono V4 through the smartphone.

The features introduced by the new version include:

Active Electronic Setup: using the GPS feature of your smartphone, the system recognises the position of the bike at any given time on the track and automatically changes the electronic adjustments (traction control and anti-wheelie), based on the settings the rider has selected, corner by corner. This allows you to increase safety and effectiveness on the track, adjusting the control parameters at every point on the circuit and without distractions.

Adaptive Race Assistant: this feature provides tips in real time to safely take the best advantage of your RSV4. The application compares rider performance to the best lap on the track in real time and assists by immediately indicating how to gradually improve performance.

Advanced Telemetry Dashboard: allows you to use your smartphone display to see, in addition to all the information normally on the standard instrument cluster, numerous other parameters acquired from the bike telemetry such as, for example: instant power sent to the driveshaft; instant torque sent to the driveshaft; percentage of available power; drive to the rear wheel; rear wheel slippage; longitudinal and lateral acceleration (G-G diagram); lean angle, etc.

# **Tilting vehicles**

Certainly, as part of its research work on Active Safety, Piaggio's most ambitious and symbolic objective is the study and development of new vehicles based on entirely new product formulas, such as three- and four-wheeler tilting vehicles that guarantee superior stability even on wet or uneven road surfaces, and shorter braking distances compared to conventional scooters. The benchmark in this sector is the tilting three-wheeler Piaggio MP3, which went on sale in 2006.

These new concepts, in addition to other safety devices, can achieve safety levels close to car manufacturing standards, whilst retaining all the benefits of two-wheeler vehicles in terms of size, emissions and consumption.

# Safer to ride, as proven by measuring the vertical force applied to the front wheels. **ADVANTAGES OF THE MP3** Tests proved that when changing from a smooth or paved surface to a cobbled surface, the reduction in force

#### Shorter braking distance.

The MP3's braking distance is 12% shorter than an equivalent two-wheeler on a smooth surface and 20% shorter on uneven surfaces.

#### Better rideability in traffic.

stationary, for example at traffic lights.

#### Alternative engines, plug-in and electric hybrids

#### Two-wheeler sector

In recent years the most cutting-edge effort to reduce environmental impact has been the development of the 125 and 300 Hybrid engine, which began in 2009. This innovation uses a parallel hybrid powerplant, combining an ultra-modern internal combustion engine with electronic injection and an electric motor. The integrated management of two powerplants improves overall vehicle performance and drastically reduces pollutant emissions. In 2013, the development of new modular 1.5 kWh batteries was completed; these will be the forerunners of future families of modular batteries that will incorporate numerous functional improvements to increase their versatility.

The research continued in 2015, particularly concerning:

- » study and development of solutions aimed at improving performance and reliability of the electronic control systems;
- > study and development of solutions aimed at improving the energy accumulation systems, new 1.5 kWh modular batteries (lithium) and their use even in fields unconventional for Piaggio;
- > study and development of solutions aimed at guaranteeing better vehicle usability for the customer through a Smart Autonomy Management (GIA, patented by Piaggio).

#### Wi-Bike: an entirely new product

As a logical consequence of Piaggio's commitment to technology for the environment, in 2015 the production began on the Wi-Bike – a pedal-assist e-bike built entirely by Piaggio. Wi-Bike is a new vehicle concept that offers a comprehensive response to the most advanced mobility needs, no longer simply seen as the ability to get around but also sharing information locally and online.

Thanks to PMP (Piaggio Multimedia Platform) technology, the Piaggio Wi-Bike Project presents a highly advanced interface between man and mechanical means and guarantees constant sharing of data.

The 250W-350W motor springs from Piaggio's experience in the hybrid and full electric field, entirely

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

designed, developed and built by Piaggio Group, just like the lithium battery and the control electronics. Its compact shape is conceived to fit into the frame harmoniously and ergonomically. The Man/Machine interface is central to the project; the "contactless" automatic display connects to and is powered via NFC<sup>15</sup> and acts as an ignition and antitheft key. The use of PMP - with specific functions derived and extended with respect to that described for motorcycles and scooters - is original and lets you manage the bicycle and your physical performance by adjusting and monitoring effort levels, and also lets you interact with social networks in real time, receive weather information, etc.

You can also use the smartphone to update software, run an initial diagnosis and a more complete check. It can also be used as an electronic key (keyless system): the vehicle recognises the owner and automatically prepares for connection and use.

The battery offers a long range between 60 and 120 km depending on the means and conditions of use. A GPS/GSM module is lodged in the battery, which acts both as a satellite antitheft and as a data transmission unit. This way you can get the charging status through the app; if it is too low, for example after a long winter break, the device sends an alert to the owner's smartphone.

It has a belt transmission and on some versions there is an automatic electronic gear with CVT. The exclusive DEA (Dynamic Engine Assistance) lets you programme the level of assistance in relation to the power offered by the cyclist. For example, the cyclist can set a favourite value for effort (power, frequency, and speed), while the motor instantly adjusts its contribution to absorb the altimetric variations. Piaggio Wi-Bike becomes a true fitness machine.

#### Three/four wheeler sector

In this sector, Piaggio has always set itself apart from the competition for its characteristics of manoeuvrability and compactness of its vehicles, but also for its eye for the environment. In Europe just as in India, this challenge is faced through:

> the study, production and sale of low consumption engines with reduced pollutant emissions;

> the use of alternative fuels;

> the sale of electric vehicles;

> high transportation efficiency (ratio between transportable weight and total weight on ground).

Current Indian regulations call for compliance with BSIV (for Category N1 vehicles) in its major cities; current forecasts estimate that BSIV standards will be extended to the rest of the country no earlier than the first half of 2017.

The choice of anticipating needs is very important in a country such as India where the latest reports on the green economy have confirmed ground gas values not in line with world standards. A common goal for the entire Piaggio range manufactured in India is to reduce consumption, and

TCO (Total Cost of Ownership), with ongoing efforts to optimise the vehicle/powertrain.

In line with the development of the Indian 3-wheel vehicle market, which is increasingly oriented to the use of alternative fuels (petrol, LPG, CNG), especially in towns and cities, in late 2015 Piaggio launched the new Ape City, aiming to reduce consumption and maintenance costs while ensuring a reduction in emissions and therefore environmental impact.

All versions of the new Ape City have benefited from an average reduction in fuel consumption on the road of about 4%, increasingly helping it towards becoming a leader on the market.

A single fuel LPG version of the new Ape City is still planned, with the aim of further lowering the cost per kilometre and environmental impact, thanks to the characteristics of this alternative, environmentally friendly fuel and to comply with the current regulations in some of the main urban centres in India.

Important changes have also been introduced to improve overall ergonomics for the driver and passengers, especially to reduce driver fatigue during everyday use.

This product will also be sold in export markets by mid 2016, including high-slope (petrol, LPG) versions.

The Indian Porter range (Porter600 and Porter1000) is constantly being developed to improve its competitiveness in terms of manoeuvrability and transport efficiency. To complete the range, the BSIII versions were joined in the first half of 2015 by the Porter1000BSIV and at the end of 2016 by the

15) NFC - Near Field Communication - is a technology that enables two devices to communicate by using bi-directional short-range radio connectivity within a few centimetres. Porter600 BSIV, with an increase in load capacity from 600kg to 700kg.

Marketing of the new Porter and Maxxi versions of the Euro6 Porter began in Europe in September 2015, with petrol powertrain and alternative fuels in line with product/customer mission objectives. The commercial vehicle range proposed by Piaggio for Europe is characterised by "intra-city" mobility, with a special focus on the reduction of fuel consumption and levels of pollutant emissions; fundamental elements for a sustainable transport system, above all during the "last mile" of goods handling and delivery, which has a direct impact on the quality of life in metropolitan areas and historical city centres.

Piaggio has directed its efforts for years to equip its vehicles with alternative fuel engines such as LPG, natural gas and electricity. The availability of these engines manufactured directly by the Parent Company has contributed to the circulation of vehicles with less polluting fuels (LPG and Natural Gas) and increase in the circulation of zero emission vehicles equipped with an electric engine.

Bi-Fuel engines cut CO<sub>2</sub> emissions and fuel cost-per-kilometre compared to petrol engines.

In the combined cycle (NEDC), the CO<sub>2</sub> emissions of the Porter Eco-Power fall by about 7% and the cost-per-kilometre for fuel is reduced by about 47% (2015 average fuel price for petrol and LPG, data provided by the Ministry of Economic Development). 2015 average figures for natural gas, (source: Metanauto) (Petrol: 1.535  $\leq$ /I; LPG 0.613  $\leq$ /I, Natural gas 1 $\leq$ /kg).

For the Porter Green Power, however, the decrease in  $CO_2$  emissions is around 17% and the costper-kilometre for fuel is down about 48%. In addition to the reduction in emissions, through the introduction of low environmental impact engines, Piaggio commercial vehicles contribute to low environmental impact transport of goods in city centres, especially historical city centres, thanks to the dimension and high transportation efficiency (ratio between transportable weight and total weight on ground).



More than 7,500 Porter Electric models have been sold throughout Europe since 1995. Full Electric technology at Piaggio has grown from 1995 to date, and even strengthened and improved. This technology is still a winner as it is accessible, reliable, simple and guarantees excellent performance in terms of both power (11 kW@96V) and torque (55 Nm at 1,800 RPM).

The electric factor – a key to success

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

# Environmental compatibility of the product and the process

#### "Life Cycle Management" in two-wheelers

Although no legislation on recyclability for two-wheelers is currently in force or is planned, the Piaggio Group has taken steps in this direction. The technologies and materials used for the design and construction of the Group's scooters and motorcycles have targeted environmental compatibility and their effective end-of-life disposal since the introduction of the Sfera 50 model (1989).

As from 2008, Piaggio has also changed the title blocks of drawings and information in its bills of materials so that materials used in constructing vehicles can be automatically checked and disassembly can be optimised for easier disposal.

Through a partnership with UniFi, the characteristics of recyclability of the MP3 125 Hybrid in accordance with ISO 22628:2002 were analysed. This was done by taking apart a real vehicle and registering all of its components. The recyclability rate was 88%, which is considerably higher than the 85% limit of current laws (currently in force in the automotive segment only for N1 and M1 categories), demonstrating the high environmental compatibility of the Piaggio vehicle as regards end-of-life treatment).

# "Life Cycle Management" in four-wheelers

In the four-wheel sector, the regulatory panorama is similar to that of cars.

With the introduction of the European Regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemical substances) in 2007, automotive manufacturers must follow AIG (Automotive Industries Guidelines) which include monitoring the use of hazardous/prohibited substances, and checking the recyclability and recoverability rates of materials used.

In this regard, Piaggio has adopted a challenging process over the years to guarantee high recyclability levels of its vehicles, achieving important results such as the limited use of materials considered hazardous (lead, chromium, mercury and cadmium) and an end-of-life vehicle disposal manual.

Piaggio constantly monitors the recyclability and recoverability rates of its vehicles, retaining at all times indicators above 85% and 95% respectively, higher than the limits set out in Directive 2000/53/EC. The Porter MAXXI Multitech Euro 6 pick-up, for example, has a 91.5% recyclability rate and a 96.1% recoverability rate. Piaggio's passion for the environment is also channelled into its commitment to guaranteeing the environmental compatibility of its commercial vehicles, from the design stage until the end of their working life.

The survey also paved the way for a database which updates vehicle material compositions and their recyclability and recoverability rates, from the design stage onwards, in real time.

Below are the recyclability and recoverability rates updated based on vehicle BOMs at December 2015, for each vehicle fitted with a Euro6 petrol, LPG and electric engine.

	MULTITECH EURO6	MULTITECH LPG EURO6	EVO
Recyclability (R <sub>cyc</sub> )	PORTER = 89.47 % MAXXI = 91.5 %	PORTER = 89.66 % MAXXI = 91.45 %	PORTER = 91%
Recoverability (R <sub>cov</sub> )	PORTER = 95.39 % MAXXI = 96.1 %	PORTER = 95.38 % MAXXI = 96.1 %	PORTER = 95.8%

# Use of recycled plastics

On all Piaggio Group vehicles, mass-pigmented polypropylene components (floorboard, leg shield back plate, air cleaner, etc.) can be made of recycled materials, at the discretion of the supplier. The table below gives an estimate based on an analysis (Life Cycle Management study) of a product currently on sale (Beverly 2014, vehicle technologically representative of all scooters manufactured).

Plastic materials in body parts

Plastic materials in body parts	%
Total weight of plastic body parts/total weight of vehicle	10
Total weight of mass-pigmented polypropylene parts (possibly of recycled materials) / total weight of vehicle	7
Total weight of mass-pigmented polypropylene parts/total weight of body parts	70

Research guid Applications Industrial patent rights

16) Under the Patent

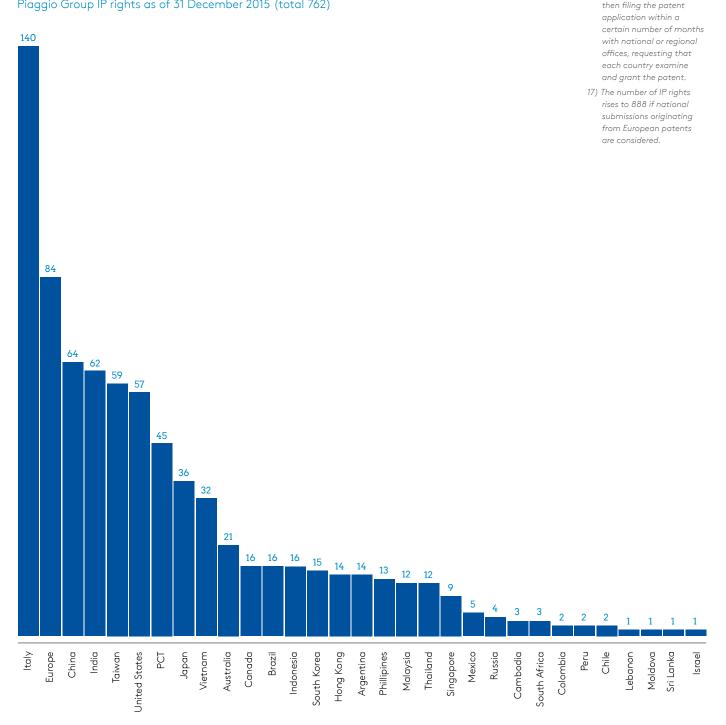
Cooperation Treaty

(PCT), patents can be "reserved" internationally, by specifying the priority date and owner, before

# Industrial patent rights

The intense research and development constantly ends up leading to the filing of patents in countries where the Group operates<sup>16</sup>. The portfolio of patents has increased about 17% since 2014, from 647 to 762<sup>17</sup>.

Piaggio Group IP rights as of 31 December 2015 (total 762)



# Funded national and European projects

Piaggio Group promotes funding applications at the regional, national and European locations, in a nod to the quality of its research.

# **Regional Projects**

# ADAMo

The ADAMo project (Adaptive Digital Aerodynamics for Motorcycles) was entered for a regional competition for ICT and photonics, engineering of components and advanced and smart integrated systems (devices/products/processes). It was accepted, but no funding has been received due to a shortage of funds.

The project concept consists in the creation of an Active System of Aerodynamic Control for motorcycles that can modify the aerodynamic flow and in function of the operating conditions and performance requested, using, among other things, a dedicated user interface on smartphone (App). The University of Pisa (data transmission systems), CUBIT (advanced centre for innovation), RICO (PMI for the development of electronic sensors), TELCOMMS (PMI, advanced communications systems), INFN (entity for research, technical development HPC), PSM (PMI, prototyping and engineering) are part of the consortium (which must be formed by companies and entities headquartered in Tuscany). The application is being evaluated by the Region of Tuscany.

# Centauro

The CENTAURO project (**C**o-working, **E**ffiency and preve**N**tion in the motor vehicle industry through **T**echnlogies of **AU**tomation with **RO**botics) submitted to the FAR-FSC 2014 competition in the Tuscany region was approved. The project will be coordinated by Piaggio and aims to develop robotic automation technologies to:

- > reduce the physical workload for operators involved in the working with and moving materials and goods;
- > increase business efficiency and competitiveness by reducing the time required for the selected production processes;

> reduce the environmental impact of production processes by raising the proportion of separately collected light waste from production sites.

The project started during 2015. It is part of the partnership with the Institute of Biorobotics of the Scuola Superiore Sant'Anna and three dynamic Tuscan SMEs: Robot System Automation, Roggi and Robotech.

# National Projects

# Detech

The DE.TECH (DEsign and aesthetic TECHnologies) project – a project financed by the Ministry for Economic Development in the NEW TECHNOLOGIES FOR Italian PRODUCTS COMPETITION Industry 2015 – concluded on 30 June 2015. The project began on 1 September 2011. Piaggio is the leader of the consortium, composed of 11 partners, including the University of Rome Tor Vergata, three research bodies (SCIRE Consortium, H2CU Inter-University Centre for International Training, QUINN Consortium) and 6 Small and Medium Enterprises (NUMIDIA, COMETA, NIVOL, RELAB, TECHNOS Consortium, TQS). The purpose of the project is to define and fine-tune the processes, methods, tools and competencies for the improvement of the process of defining and developing new products in the two-wheeler sector (motorcycles and scooters), specifically in the following areas:

> virtual-reality, as a support tool in the stages of ideation and definition of the concept;

> new concept development method, to optimise the process of analysis of customer needs up through defining the product functions and requisites;

Group objective Research guidelines Applications Industrial patent rights Funded national and European projects

- PLM, to guarantee integration of product definition and development processes, from the idea through to production;
- > materials and technologies, to develop new technological solutions that help achieve the key factors to product success.

In the first six months of 2015, activities to refine and test the tools were completed (virtual reality room, CFD and Reverse Engineering system). In addition, prototype scooter and motorbike components (Vespa 946, Liberty and Guzzi V7) were built, applying and testing technologies to improve the aesthetics of the current vehicle components such as PVD (Physical Vapour Deposition) treatment and IMD (In Mould Decoration) overmoulding. Lastly, the new PLM system has gone operational.

# ITALY 2020 - Road-based Mobility

Having begun in 2014, the ITALY2020 - Road-based Mobility project is still in progress, financed by the Italian Ministry of Education, Universities and Research (MIUR) as part of the National Technological Clusters programme - Means and Systems for Mobility over Land and by Sea. The leader is ATI Piemonte (CRF, Magneti Marelli Sistemi Sospensioni), for which Centro Ricerche Fiat acts as agent. Numerous industrial players of the Emilia Romagna Region (Ferrari, RIBA, Landi Renzo, HPE), Lombardy Region (Streparava, OMR, Cromodora Wheel), Abruzzo Region (Tecnomatic S.p.A, Difference-Preg Uninominale S.p.A., Progetto Logistico S.r.l., Invemeccanica S.r.l.) and Campania Region (Adler Plastics), academic partners (Politecnico di Torino, Politecnico di Milano, University of Padua, University of Rome La Sapienza, University of Modena and Reggio Emilia) and research bodies (ENEA and CNR) are involved in the project. The project involves carrying out research and development activities with the objective of validating models aimed at describing all aspects (physical, technological, economic, market, and of the territory) of the different possible approaches considered relevant to achieving a decarbonised economy (EU 2050) through Mobility that is Smart, Green and Interconnected. The ultimate objective of the project is to define the ITALY 2020 Future Vision in terms of Strategic priorities (Technologies, Investments, etc.) distributed over the Italian territory (Short, Medium and Long-Term) to obtain scenarios of Decarbonised Mobility. The first year of activity dealt with the Analysis of the State of the Art of Mathematical Models on road-based mobility and the definition of specific and alternative technologies for each area of the Objectives to Be Reached OR2 (Lightening), OR3 (Electrification of the Vehicle), OR4 (Combustibles and Powertrain) and OR5 (Data and Communication).

# HORIZON 2020 and CEF European Projects

The first European projects approved under the Horizon 2020 - Smart, Green and Integrated Transport programme began in 2015. Piaggio was the lead applicant for the RESOLVE project (GV5-2014 programme) and is a partner in the eCAIMAN proposal (GV1-2014 programme). Piaggio also has joined the consortium for the i\_HeERO project (CEF - Connecting Europe Facilities programme).

#### Resolve

1 May saw the official launch of the project RESOLVE (Range of Electric SOlutions for L-CAtegory VEhicles), approved under the programme H2020 - GV.5-2014 - Electric two-wheelers and new light vehicle concepts.

The project, coordinated by Piaggio, also involves KTM, leading industrial partners such as Marelli, Bosch and Ricardo, as well as universities and centres of research excellence (University of Pisa, Florence, Warwick, Idiada). RESOLVE is funded under the European Green Vehicle Initiative and aims to develop electric engines whose efficiency and sustainability will be demonstrated on two electricpowered tilting four-wheelers in categories L2 and L6. During 2015, the initial activities were carried out to identify the needs and expectations of users of electric vehicles and define preliminary technical specifications.

# eCAIMAN

Also under the European Green Vehicles Initiative (GV1-2014-Next generation of competitive lithium ion batteries to meet customer expectations programme), the project "eCAIMAN – **E**lectrolyte, **C**athode and **A**node Improvements for **M**arket **N**ear next generation of Li-ion Batteries" has been approved.

The project aims to develop a new generation of Li-ion batteries with superior characteristics and performance to those currently on the market, while ensuring technological, quality and cost standards that are competitive and attainable at European level. At the end of the project, the results should be usable by all European OEMs in the automotive field.

Project activities officially began in late April 2015. The total duration is three years (2015-2018). The project is coordinated by the AIT (Austrian Institute of Technology) and has a total of 15 partners.

# i\_HeERO

Piaggio has joined the consortium for the i\_HeERO project, coordinated by ERTICO, regarding the third phase of implementation of the emergency call (eCall) system in Europe. The project started in November 2015 and will end in 2017. Piaggio is participating actively in project activities, in particular:

- > in the P2W cluster, together with other 2-wheel vehicle builders, which aims to define the minimum requirements for an emergency call (eCall) system suitable for motorbikes;
- in the Italian pilot site, to test the eCall system in Italy and check its compatibility with the national architecture of emergency systems and the European 112 emergency number infrastructure, together with parters Telecom Italy, Autostrada del Brennero and emergency centres in Lombardy (AREU) and Trentino (CUE) for the management of PSAPs (Public Safety Answering Points) in Varese and Trento.



# THE ENVIRONMENTAL DIMENSION

Production sites	81
Environmental certifications	82
Reduction of energy consumption	83
Reducing emissions of CO <sub>2</sub> and other pollutants	85
Conserving water resources	86
Waste handling and recovery	88
Biodiversity	89
Environmental spending and investments	89
Logistics	89

Authentic development includes efforts to bring about an integral improvement in the quality of human life, and this entails considering the setting in which people live their lives. These settings influence the way we think, feel and act. In our rooms, our homes, our workplaces and neighbourhoods, we use our environment as a way of expressing our identity. We make every effort to adapt to our environment, but when it is disorderly, chaotic or saturated with noise and ugliness, such overstimulation makes it difficult to find ourselves integrated and happy.

"Laudato sii" 2015 - J.Bergoglio

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives
Protecting the environment: > reducing pollutant emissions; > conserving natural resources.	> Mandello Plant: completion of decontamination building D area.	> Mandello Plant: progress with decontamination of building D area.	> Mandello Plant: completion of decontamination building D area.	<ul> <li>Evaluation/application of new technologies with a lower environmental impact (for example, changing the painting cycle).</li> </ul>
	> Pontedera Plant: starting from 2015, start of dismantling of asbestos cement roofing of some buildings (starting from those not encapsulated). Specifically, the dismantling of the roofs of buildings 35, 52, 57 was approved.	Pontedera Plant: 2/3 of the roof of building 35 has been dismantled, the roof of building 44 has been replaced as has the false ceiling of building 25, and the roof of building 12 has been dismantled (demolished).	<ul> <li>&gt; Pontedera Plant:</li> <li>5% reduction in KPIs by optimising energy management through the monitoring system.</li> <li>&gt; New 2W painting plant expected to begin operations in</li> </ul>	<ul> <li>Renovation of the Mandello del Lario production site for a more virtuous management of operations.</li> <li>Final separation of the internal sewage system serving the Pontedera production site by building a new sewage system for the industrial painting wastes.</li> <li>Reduction of asbestos</li> </ul>
	2W painting system. Activation of continuous monitoring system (Pontedera).	Monitoring system launched.	Spring 2016. Continuous monitoring of emissions from after- burners at the new painting plant.	cement roofs (various sites in Italy) At the Pontedera plant, plan to dismantle 100% of non-encapsulated roof by 2017.
	> Baramati Plant: for energy-saving purposes: adoption of heat recovery systems; installation of LED lamps	> Baramati Plant: for energy-saving purposes: installation of LED lamps.		

18) Code of Ethics - Article 8: Without prejudice to compliance with the specific applicable regulation, the Company pays attention to environmental issues in its decisions, also adopting - where operationally and economically feasible and compatible - environmentally friendly production technologies and methods, with the aim of reducing the environmental impact of its activities.

Piaggio aims to apply a model of sustainable development that not only satisfies the expectations of stakeholders (investors, shareholders, staff, suppliers, community, public administration) by guaranteeing economic and social sustainability, but also roots its actions in environmental sustainability, meaning the ability to safeguard natural resources and the ability of the ecosystem to absorb direct and indirect impacts generated by production activities.

Specifically, Piaggio seeks to minimise the environmental impact of its industrial activities through careful definition of the technological transformation cycle and using the best technologies and most modern methods of production. The pursuit of these environmental sustainability goals is blazing a trail of ongoing improvement of environmental performance.

This commitment, enacted in the Code of Ethics<sup>18</sup> and stated by top management in the Group's "environmental policy" which is the basis for the environmental certification (ISO 14001:2004) programmes already undertaken and maintained at production sites, is a mandatory benchmark for

Reduction of energy consumption Reducing emissions of CO. Waste handling and recovery Environmental spending

all company sites no matter where they are working.

Quantitative data on the mitigation of the environmental impact resulting from the Group's operations are reported on in the sections below. Data refer to the entire Group, with the exception of business offices in various countries, whose use of resources, air emissions, exhaust and production of waste mainly concern office activities. Since their contribution to Group data has been deemed to be marginal, these have not been included in the enclosed tables.

The Piaggio Group, which has expanded some production sites (described in detail in the following section), in addition to a strong growth in productivity, continues to pursue an environmental policy aimed at rationalising the consumption of natural resources and minimising harmful emissions and production waste. With these objectives in mind, initiatives and goals for the future focus on the following areas:

> maintaining environmental certification awarded to all production sites;

- reducing energy consumption;
- $\rightarrow$  reducing emissions of CO<sub>2</sub> and other pollutants;
- > conserving water resources;
- > waste handling and recovery;
- > soil contamination;
- > biodiversity:
- > environmental spending and investments.

# **Production sites**

The Piaggio Group has a strong international presence.

At its Italian site in Pontedera (in the area near Pisa), the Group has three facilities, one for the manufacture of commercial vehicles, one for the manufacture of scooters and engines for two-wheeler vehicles, and one for the supply of aluminium and steel components for vehicles and engines.

In addition to the latter, which comprise the most important industrial complex of the two-wheeler segment in Europe, two other sites operate in Italy for European production (Scorzè and Mandello del Lario). Please be noted that the Spanish production complex at Martorelles was closed in February 2013 and that the production of Derbi brand vehicles was moved to Italy.

The Group also has its own production sites in Vietnam (at Vinh Phuc), with a site for the manufacture of two-wheeler vehicles and a site for the production of 3V engines, and in India (at Baramati, in the state of Maharashtra) with a site for the manufacture of commercial vehicles and engines, in addition to a production site for Vespas for the Indian market.

In 2015 the Piaggio Group brought an innovative means of transport to market with the Piaggio Wi-Bike, manufactured at Scorzè, which is designed entirely by the Group.

Unit			EMEA and Americas		India	Asia Pacific	
	Pontedera	Noale and Scorze'	Mandello Del Lario	Martorelles	Baramati	Vinh Phuc	Total
2015	130,148	25,453	7,293	0	218,357	97,274	478,525
2014	144,883	25,747	6,793	0	232,725	103,532	513,680
Difference 2015-2014	-10.17%	-1.14%	7.36%	0	-6.17%	-6.04%	-6.84%
2013	143,935	23,431	7,528	2,255	237,408	106,720	521,277

Vehicles produced (two-three-four wheelers)

**EMEA and Americas** Asia Pacific Unit India Pontedera Baramati Vinh Phuc Total 2015 47,479 90,531 268,577 130,567 2014 142,471 52,271 94,572 289,314 Difference 2015-2014 -8.36% -9.17% -4.27% -7.17% 2013 137,588 59,525 93,313 290,426

The Piaggio Group has defined a specific organisational structure to achieve the environmental sustainability objectives of its production sites.

The responsibilities and roles of the Environmental Management System (EMS) with Organisational Units / Functions involved are reported in the Quality, Environmental and Occupational Health and Safety Management Manuals, for sites in Italy.

Environmental Management System
Personnel, Organisation and Quality Systems Manager
General Plants Operating Unit Manager
Environmental Manager
Process Auditor (Internal Auditor)

The Environmental Management System Manager reports to the Management Representative (Head of Process Innovation & Quality System) on management system performance and all requirements for improvement. The Environmental Management System Manager, a position held by the General Plants Manager, has power of attorney to perform his duties and responsibilities, while Environmental Managers are appointed by the Environmental Management System Manager and appointed after obtaining approval of their affiliated Manager.

The subsidiaries in Vietnam and India (PVPL) have EHS (Environment Health and Safety) teams which work full-time on environmental, health and safety issues, with clearly defined roles and responsibilities. Piaggio Vietnam's EHS team is led by the Technology and Maintenance Manager who reports to the Director of Operations while a full-time employee is responsible for the management of environmental issues. The environmental team at PVPL, consisting of Senior management, engineers and operators, is part of the Maintenance Department and reports to the Director of Operations.

# Environmental certifications

ISO 14001 environmental certification is a useful tool for a structured and co-ordinated approach to processes across the Group's various production sites. The system allows Piaggio to define environmental objectives and identify risks and opportunities for improvement, enabling it to guarantee compliance with all environmental laws and regulations, reduce energy costs, manage waste and raw materials, and put in place a process for the continuous improvement of its environmental performance.

For some years the production plants at Pontedera, Noale and Scorzè, Mandello del Lario, Baramati 2W (India) and Vinh Phuc (Vietnam) have held ISO 14001:2004 certificates for the Environmental Management System. These certificates are renewed every three years and each year the certification company Det Norske Veritas (DNV)<sup>19</sup> carries out audits to confirm them. In relation to the Italian plants, during the maintenance certification inspection performed in October 2015, particular attention was paid to the progress with the project for the restructuring of the scooter painting plant and associated activities.

Environmental organisational structure of Italian sites of the Piaggio Group

 DNV=Det Norske Veritas è uno dei principali organismi di ceritficazione a livello mondiale

Production sites Environmental certifications Reduction of energy consumption Reducing emissions of CO<sub>2</sub> and other pollutants Conserving water resources Waste handling and recovery Biodiversity Environmental spending and investments Logistics

The outcome of the maintenance inspections was positive and no "Nonconformities" in relation to ISO 14001:2004 were found.

During the year, the Piaggio Group earned the environmental certification **Environment** (ISO 14001) for the Indian plants for the production of engines and commercial vehicles.

In addition, the Indian subsidiary PVPL also obtained **ISO 50001** certification for its energy management systems at its two-wheeler site.

# Reduction of energy consumption

Although the structure of the Company's production sites has been designed to run on fossil fuels, Piaggio is engaged in optimising the management of existing sites to cut consumption. In particular, in the course of reorganisation or renovations, analyses and studies are carried out to adopt equipment and methodologies that reduce the environmental impact to a minimum.

In 2014 in Pontedera, targeted research into avoiding and reducing energy waste got off the ground, along with activities to identify, develop and implement plant re-engineering measures in order to increase efficiency.

This process reached completion in 2015 with two significant projects.

The first was the replacement of the plant's air compressors and the introduction of an system that automatically monitors machines in use to optimise overall energy performance, ensuring the needs of the plant are met. The changes became fully operational in March, cutting electricity requirements for each compressed air unit from the prior figure of 0.145 Kwh/Nm3 to the current average of 0.108.

At constant air volume produced, after 10 months, a saving of more than 1,500,000 kwh has been reported.

The second project was for the implementation of the Smart Metering system, which makes it possible to access, observe, compare and analyse usage from the more than 90 utility meters around the Pontedera complex in almost real time (3 hour delay).

This has led to the replacement of more than 60% of the meters to make them more precise and remotely accessible, as well as the implementation of a data platform on a cloud server.

The system will be finalised in January 2016 with the "fine tuning" of the available analyses and measurements. It will provide continuous energy monitoring, making it possible to optimise plant management and allow technical departments to identify inefficiencies, make changes and measure improvements.

The aim is a 5% reduction in 2016 of the main KPIs selected to monitor energy performance.

#### Energy consumption of Piaggio Group production sites

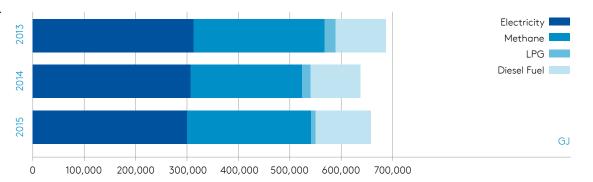
		Pontedera	Noale and Scorze'	Mandello Del Lario	Martorelles <sup>20</sup>	Baramati	VinhPhuc	Total
	2015	38,762	4,180	767	0	25,873	13,330	82,912
<b>F</b> 1 <b>· · · ·</b>	2014	40,213	3,800	746	0	26,562	13,270	84,591
Electricity (Thousand KWh)	Difference 2015-2014	-3.6%	10.0%	2.8%		-2.6%	0.5%	-2.0%
	2013	41,136	3,921	830	913	26,198	13,979	86,977
	2015	5,742,963	309,577	142,125	0			6,194,665
	2014	5,378,771	197,091	135,095	0			5,710,957
Methane/Natural Gas (Sm³)	Difference 2015-2014	6.8%	57.1%	5.2%				8.5%
	2013	5,959,639	354,091	205,248	4,019			6,522,997
	2015					158	20	178
	2014					199	22	221
GPL <sup>21</sup> (Ton.)	Difference 2015-2014					-20.6%	-10.2%	-19.5%
	2013					389	21	410
	2015	1,860				2,322,563	701,390	3,025,813
Diesel fuel <sup>21</sup> (Litres)	2014	1,590			0	2,168,530	696,578	2,866,698
	Difference 2015-2014	17.0%				7.1%	0.7%	5.6%
	2013	1,692			96,000	1,803,725	790,974	2,692,391

since March 2013. 21) Some values are based on estimates. The 2013 LPG and diesel consumption figure for the Baramati plant, published at the time, has been updated with the actual final figure.

20) Plant no longer active

#### Piaggio Group energy consumption

The figures are calculated using conversion standards defined by the GRI guidelines (1 gallon of diesel = 0.138 GJ; 1,000 m3 of natural gas = 39.01 GJ; 1 Kwh = 0.0036 GJ). For LPG, a standard conversion factor of one kilogram of LPG = 46.1 MJ



As was the case in 2013-2014, a comparison of 2015-2014 figures shows a substantial stability in consumption of the main energy sources for all active sites, underlining how normal operating interventions are close to the physiological limit. However there were some clear changes. In particular, at the Noale-Scorzè plant there was a general increase in consumption linked (in Noale) to the performance of trial and tests, resulting in increased plant usage times.

was used.

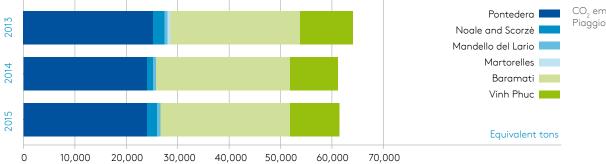
Production sites Environmental certifications Reduction of energy consumption Reducing emissions of CO<sub>2</sub> and other pollutants Conserving water resources Waste handling and recovery Biodiversity Environmental spending and investments Logistics

# Reducing emissions of CO<sub>2</sub> and other pollutants

Greenhouse gases (mainly  $CO_2$ ) and Volatile Organic Compounds (VOCs), released by solvents used in painting, are some of the most hazardous substances for air pollution generated by automotive operators.

There is ample evidence of the effectiveness of the changes brought about by the structural works (replacement of boilers and renovation of distribution networks) carried out over time and already reported in previous editions, specifically at the Pontedera and Mandello del Lario plants. Again in 2015, energy consumption remained essentially stable on the previous years.

Ton		Pontedera	Noale and Scorze'	Mandello Del Lario	Martorelles <sup>22</sup>	Baramati	Vinh Phuc	Total
2015	direct <sup>23</sup>	11,234	605	278	0	6,213	2,058	20,388
2015	indirect	12,667	1,366	251	0	19,043	7,683	41,010
2014	direct <sup>23</sup>	10,526	388	266	0	5,801	2,052	19,033
2014	indirect	13,270	1,254	246	0	19,550	7,649	41,969
Difference	direct <sup>23</sup>	6.7%	55.9%	4.5%	0	7.1%	0.3%	7.1%
2015-2014	indirect	-4.5%	8.9%	2.0%	0	-2.6%	0.4%	-2.3%
2013	direct <sup>23</sup>	11,673	691	404	294	5,725	2,377	21,164
	indirect	13,575	1,294	274	274	19,328	8,057	42,802



It should be noted that for the determination of gases with a greenhouse effect, diesel, fuel oil and methane sources, the conversion criteria of the "Emission Trading" Directive (Directive 2003/87/EC) were used.

With reference to  $CO_2$  emissions, the industrial plant at Pontedera comes under the sensitivity area classification of the "Emission Trading" directive (Directive 2003/87/EC) which implements the Kyoto Protocol. The site is classed as a "Group A" site, relative to companies releasing the lowest amount of  $CO_2$  indicated in the Directive.

 $CO_2$  emissions are almost entirely due to the combustion of methane and only marginally to the combustion of diesel fuel in back-up power generators.

The monitoring and reporting of  $CO_2$  emissions from the plant are governed by a specific Group procedure, which is periodically audited in-company and annually audited by a certification body.

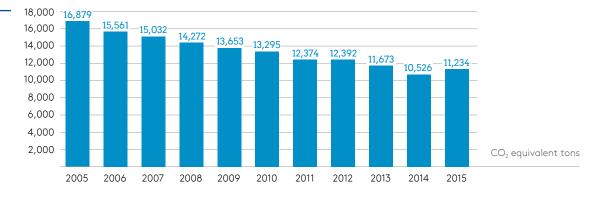
A table summarising  $CO_2$  emissions from Piaggio's plant at Pontedera for the year 2005 onwards is provided below. The quantities reported therein are certified by an audit body accredited by the Competent National Authority (CNA) with the exception of the 2015 figure, scheduled to be certified in March 2016.

Direct and indirect CO<sub>2</sub> emissions of Piaggio Group production sites

22) Plant no longer active since March 2013.

23) CO<sub>2</sub> emissions deriving from the combustion of methane, natural gas, diesel fuel and LPG.

CO<sub>2</sub> emissions of the Piaggio Group Direct  $CO_2$  emissions of the Pontedera site



Other significant emissions at the production sites of the Piaggio Group<sup>24</sup>

- 24) Reported data are also based on processing using estimates.
- 25) Plant no longer active since March 2013.26) The 2013 figure already published was recalculated using the

final data.

		Pontedera	Noale and Scorze'	Mandello Martorelles <sup>29</sup> Del Lario	Baramati	Vinh Phuc	Total
	2015	122.3			380.0	3.0	505.3
	2014	118.4			452.0	4.4	574.8
COV (Ton.)	Difference 2015-2014	3.3%			-15.9%	-31.7%	-12.1%
	2013 <sup>26</sup>	126.0		10.3	411.0	4.4	551.7

Although emissions of VOCs at the Group have decreased considerably in the last few years, the use of technologies with less impact on atmospheric pollution and on water resources is being evaluated. Specifically, installation of a new painting system is currently being finalised at the Pontedera plant and it is estimated that it will cut VOCs by about 80%. These changes will be in full operation starting from the middle of 2016.

# Conserving water resources

Piaggio has always recognised the immense value of the natural resources it uses and has developed production processes designed to reduce water consumption. At its Pontedera site, water supply wells have inverters that can regulate system flow rates based on the amount of water required by the hydraulic loop.

m³		Pontedera	Noale and Scorzè	Mandello Del Lario	Martorelles <sup>27</sup>	Baramati	VinhPhuc	Total
	Water from wells	245,687	7,599	2,490				255,776
2015	Water from the mains	43,110	7,959	704		297,956	119,351	469,080
	Total	288,797	15,558	3,194		297,956	119,351	724,856
	Water from wells	333,337	5,035	8,025				346,397
2014	Water from the mains	45,572	5,897	747		275,781	103,255	431,252
	Total	378,909	10,932	8,772	-	275,781	103,255	777,649
Differenc 2015-201	4 Total	-23.8%	42.3%	-63.6		8.0%	15.6%	-6.8%
	Water from wells	327,855	5,113	16,929	1,496			351,393
2013	Water from the mains	52,267	7,967	1,012	908	282,912	89,300	434,366
	Total	380,122	13,080	17,941	2,404	282,912	89,300	785,759

Water procurement of Piaggio Group production sites

27) Plant no longer active since March 2013

Production sites Environmental certifications Reduction of energy consumption Reducing emissions of CO<sub>2</sub> and other pollutants Conserving water resources Waste handling and recovery Biodiversity Environmental spending and investments Logistics

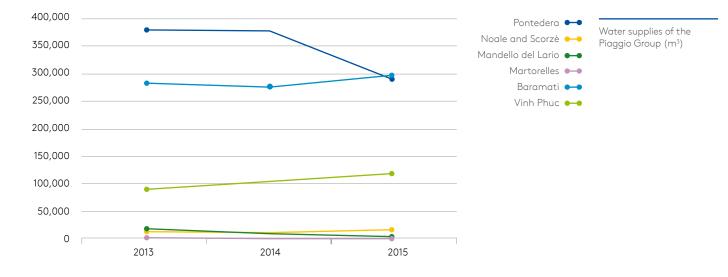
At the Mandello plant, where well water is used exclusively for cooling systems, the low outdoor temperatures recorded, combined with good water management practices, have brought a noticeable drop in consumption.

Water consumption for the active European sites is stable or dropping, and despite having already obtained drastic reduction which could lead to the conviction of having reached a level difficult to further reduce, Piaggio continues to undertake activities and tests aimed at additional reductions. As regards waste water, environmental respect is ensured with processes to treat and purify waste water.

Below we report the destination of waste water produced, estimated to be equivalent to the amount of water supply used, for each production site:

- > Pontedera: all industrial and most non-industrial waste water is conveyed to a chemical/physical purification plant outside the site. After biological treatment, the waste is discharged into an open channel. A small part, from toilet facilities of the two site areas, is directly conveyed to the public sewer system;
- Noale: all buildings are connected to the public sewer system. The waste water is of a non-industrial origin only (from toilets and the site canteen);
- Scorzè: the plant is not served by the public sewer system, so waste water is biologically purified at the site and then conveyed to the local Rio Desolino canal;
- > Mandello del Lario: the plant discharges a part of waste water directly into the public sewer system (non-industrial waste water, canteen waste water, etc.), while waters used in the cooling plants are discharged into the Torrente Valletta stream;
- > Baramati: waste water is treated and used for irrigation purposes;
- > Vinh Phuc: the site has a chemical/physical purification plant to purify pre-treated waste from painting operations before it is conveyed to the public sewer systems, where all other site waste (non-industrial waste) is sent. Final discharge of sewage is into the public sewer system.

In terms of recycled and reused water, only the sites of Baramati and Vinh Phuc reuse part of the drawn water. Specifically, approximately 117,730 m<sup>3</sup> of water were recycled and reused by the Indian plant in 2015, equal to 39.5% of the total amount drawn by the plant. At the Vietnamese plant waste water recovery amounted to 11,800 m<sup>3</sup>/y, equivalent to 9.9%, slightly lower than the year before.



# Waste handling and recovery

Where possible, the Piaggio Group tries to recover rather than dispose of waste and reconditioning and reuse have been a common practice at all sites for several years now. The Company is also committed to using environmentally compatible processes and technologies that can reduce the production of waste. Moreover, it has a priority objective of further increasing its recovered waste/disposed of waste ratio. Sites with an environmental management system have specific procedures in place to facilitate waste disposal and recovery, thus avoiding operations that are harmful for the environment or that may affect activities. At all other sites, general indications are based on the above mentioned procedures and modified to take into consideration applicable local regulations.

Ton		Pontedera	Noale and Scorzè	Mandello Del Lario	Martorelles <sup>28</sup>	Baramati	Vinh Phuc	Total
	Total waste	3,591	710	181	0	1,946	913	7,340
2015	Hazardous	21.9%	3.1%	3.0%		22.9%	66.8%	25.5%
	For recycling	89.0%	90.5%	96.2%		77.3%	24.6%	78.2%
	Total waste	1,876	564	331	0	1,859	1,137	5,766
2014	Hazardous	26.3%	3.8%	0.6%		22.6%	76.1%	31.2%
	For recycling	84.6%	89.6%	99.5%		78.9%	19.0%	71.2%
Difference 2015-2014	lotal	91.5%	25.8%	-45.4%		4.7%	-19.7%	27.3%
	Total waste	2,578	633	207	196	2,018	996	6,628
2013	Hazardous	15.1%	3.2%	2.2%	23.3%	25.7%	80.5%	26.9%
	For recycling	83.8%	87.7%	98.5%	70.2%	75.5%	22.8%	72.5%

Waste produced at Piaggio Group production sites

28) Plant no longer active since March 2013

There were particularly significant changes in waste quantities between 2014 and 2015 from the Pontedera and Mandello production sites.

At Pontedera, the increase is mainly due to the change in Municipal Regulations whereby packaging made of paper, cardboard, wood and nylon is no longer treated as urban waste and instead must be managed directly by the plant. In addition, some machinery was dismantled and scrapped, resulting in waste removal in the areas around the 2W paint department.

The particularly sharp decrease at Mandello was due instead to scrapping activities in 2014, which resulted in a considerable increase in the quantities disposed of during that year. In 2015, as this exception situation no longer applied, the annual values returned in line with 2013.

For other sites, there were no significant increases or decreases and the changes were attributable to production changes or optimisation of the waste cycle.

# Soil contamination

We report that in 2015, as in 2014, no spills or polluting events of significance occurred at any of Piaggio's production sites.

At the Mandello and Pontedera, decontamination initiatives are under way due to historic contaminations of the sites. These situations emerged during demolition work in Mandello and during environmental monitoring campaigns in Pontedera. In both cases, the pollutants found have not been used in the production sites for several decades, providing the historical nature of their origin. In accordance with legal obligations, the two situations have been reported to the relevant authorities and managed according to their instructions.

Production sites Environmental certifications Reduction of energy consumption Reducing emissions of CO<sub>2</sub> and other pollutants Conserving water resources Waste handling and recovery Biodiversity Environmental spending and investments Logistics

# **Biodiversity**

Piaggio's production sites are not located in protected areas or areas with high levels of biodiversity. The sole exception is the Scorzè site, which although located in an industrial zone, conveys its waste water into the drainage basin of the Venetian Lagoon. As such the production site is subject to restrictions imposed by specific laws.

# Environmental spending and investments

The Group's commitment to environmental sustainability is further proven by the approx.  $\leq 2.5$  million invested in the environment by Italian production sites in 2015. This is a significant increase compared to 2014, to which must be added the more than  $\leq 6$  million recognised for the progress made with the construction of the new paint plant. The new paint plant will ensure a high level of quality standards and – as described in the past year – will bring very significant environmental benefits, especially as regards the atmospheric emissions.

	2015	2014
(figures in euro)		
Waste disposal, waste treatment and environmental restoration costs	402,555	332,819
Costs for prevention and environmental management	2,096,939	1,629,451
Total	2,499,494	1,962,270

Environmental spending and investments in Italy

# Logistics

The Group has consolidated its logistics model aimed at benefiting from the synergies among the various distribution centres in Europe and identifying opportunities for optimisation, paying particular attention to service quality aspects.

To optimise distribution the model calls for targeted management of departures and routes to travel.

The procedure also disciplines:

- > the vehicles and equipment used by logistics operators certified by Piaggio, in accordance with the relevant quality standards;
- > replacement of vehicles for internal shuttling with others equipped with systems to cut CO<sub>2</sub> emissions;
- > the packaging collection service to manage the pick-up of packaging from dealers and its disposal according to local regulations in force;
- > disposal and waste sorting of waste material (e.g., due to decontainerisation) and packaging substitution;
- > printing of only the documents which are necessary.

To reduce transfer needs to a minimum the model requires that produced vehicles are stored in the distribution centre adjacent to the production site and that importing of overseas products is centralised.

Thanks to centralised management of all logistics centres (Pontedera, Quinto di Treviso, Mandello):

- > the number of trips needed to transfer stock between centres has been reduced;
- the use of electronic archives for storing shipment documents has been consolidated and paper copies eliminated;
- > printing of shipping documents to send to end customers has been abolished, and electronic documents are used.

In terms of vehicle distribution activities (for the contract covering 2014-2016), a process to improve operating activities has begun, which in 2015, compared to 2014, brought a 1.12% reduction in distribution operations in the two-wheeler sector and a 0.29% reduction in the Commercial Vehicles sector.

The production centres in India and Vietnam also set up procedures aimed at minimising the number of trips for shipping produced vehicles and consumption of packing materials.



# THE SOCIAL DIMENSION

Developing human resources	95
Staff	95
Personnel management policies	96
Meeting customer requirements	114
Responsible management of the supply chain	122
Supporting local communities	125

"We give a voice to different cultures, to drive development, knowledge and greater quality of life."

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives	
Health and safety	> OHSAS 18001:2007 certification of the Indian VC plant.	Task completed for Indian VC and engine plants.	<ul> <li>Structure of responsibilities and sub-responsibilities.</li> <li>Implementation of an IT system to manage legal requirements in the field of H&amp;S and audits of legal compliance.</li> </ul>	<ul> <li>Implementation of an IT system for evaluation of risks and management of health and safety group-wide.</li> <li>Alignment of the health and safety management system with the new ISO 45000 standard – Risk based approach, which will replace the OHSAS 18001:2007 standard.</li> </ul>	
Talent management	<ul> <li>Continuation of the development of Piaggio Way talented individuals, through further global training sessions, remote training and development plans.</li> </ul>	<ul> <li>Global training session provided for talented individuals.</li> <li>End of the training process for the first participants in the Piaggio Way programme, who will remain as Alumni in the pool of talented individuals.</li> <li>Identifying new talents among Piaggio Way participants.</li> </ul>	<ul> <li>Continuation of the development of Piaggio Way talented individuals, through further global training sessions, remote training and development plans.</li> <li>Creating a special community to facilitate networking and remote collaboration.</li> </ul>	> Assessment of the development tools proposed, and analysis of outcomes with a view to continuing improvement.	
Succession       > Finalisation of succession         Planning       > Update of global succession         planning plan.       > Definition of specific         development plan for resources       inserted in succession planning         on posts covered by expatriates.		<ul> <li>&gt; Finalisation of the process for sharing the methodology for succession planning in India.</li> <li>&gt; Succession plan updated on the basis of organisational changes.</li> <li>&gt; Monitoring and initiatives to facilitate expatriates being succeeded by local staff.</li> <li>&gt; External assessment issued for Asia Pacific 2W to validate selections of local personnel in key positions.</li> </ul>	<ul> <li>Consolidation and dissemination of global succession management process.</li> <li>Update IT systems used for managing and monitoring the succession plan.</li> </ul>	<ul> <li>Continuous alignment of the succession planning process based on organisational and business needs.</li> </ul>	
Skills model	<ul> <li>&gt; Update of the evaluation model with extension of the functional evaluation on the matrix organisations.</li> <li>&gt; Review of technical skills and roles in line with the Company strategies and external professional benchmarks.</li> </ul>	<ul> <li>Creation of professional marketing &amp; communication family for mapping of roles and responsibilities not previously present.</li> <li>Update assessment process with addition of functional assessments for employees of the platform.</li> </ul>	> Update and simplify the skills model in line with the organisation and business needs.	<ul> <li>Assessment and alignment of competences to strategic plan requirements.</li> </ul>	
February. Management of all historical data and all future training actions in one place.		> Launch in all of geographic areas covered by the company of Piaggio Global Training and full operation of all functions of the platform.	<ul> <li>Management of a shared management training catalogue for all geographic areas covered by the company.</li> <li>Management of shared e-learning programmes for all geographic areas covered by the company in the field of safety and conduct-related aspects of the safety policy.</li> </ul>	<ul> <li>Identification of skills in the model to which training should be oriented.</li> </ul>	

Staff Personnel management policies Meeting customer requirements Responsible management of the supply chain Supporting local communities

# Developing human resources

Human resources, with their skills, capacities and dedication, are a key factor in Piaggio's competitiveness and growth.

A strong focus on results, commitment to customer satisfaction, innovative drive and a sensibility for the future needs of the market are what must steer both individuals and teams in their work, with the aim of creating value for all our stakeholders. With this mentality, our people are the fundamental element that allows us to take up each and every challenge presented by an international scenario that is becoming increasingly more dynamic and competitive.

It is for these reasons that Piaggio places such central importance on people in the organisation, assuring them our respect and protection in all Group companies.

# Staff

In 2015, the Group continued its rationalisation operations and organisational redesign, extending the activities already under way in the EMEA region to Asia and India. As of 31 December 2015, Group employees totalled 7,053, down by 457 (- 6.1%) compared to 31 December 2014.

Employee/staff numbers	2015	2014	2013
EMEA and Americas	3,872	4,008	4,098
of which Italy	3,638	3,734	3,805
India	2,353	2,622	2,677
Asia Pacific 2W	828	880	913
Total	7,053	7,510	7,688

Company employees by geographic segment as of 31 December

Employee/staff numbers	2015	2014	2013	Average number of
Senior management	105	110	111	Company employees by
Middle management	579	554	558	professional category <sup>29</sup>
White collar	2,012	2,122	2,161	
Blue collars	4,866	5,030	5,343	
Total	7,562	7,816	8,173	

Employee/staff numbers	Graduate	High School	Middle School	Primary School	Total
EMEA and Americas	677	1,670	1,422	103	3,872
of which Italy	545	1,592	1,404	97	3,638
India	589	1,757	7	0	2,353
Asia Pacific 2W	314	514	0	0	828
Total	1,580	3,941	1,429	103	7,053



Company employees by educational qualifications as of 31 December 2015

<sup>29)</sup> In 2015, criteria identifying professional categories in India were updated, to bring them further in line with the Group's criteria, with 2013-14 data also being reclassified.

Company employee turnover in Italy as of 31 December 2015

An entry turnover rate of 1.51% and leaving turnover rate of 4.4% was recorded in Italy in 2015.

Employee/staff numbers	Staff as of 31 December 2015	Men	Women	< 31	31 - 40	41 - 50	> 50	Total	% Turnover
					I	ncoming			
Senior management	63	2	-	-	1	-	1	2	3.17%
Middle management	231	11	-	-	8	3	-	11	4.76%
White collar	934	23	19	24	14	4	-	42	4.50%
Blue collars	2,410	-	-	-	-	-	-	-	0%
Total	3,638	36	19	24	23	7	1	55	1.51%
						Leavers			
Senior management	63	5	-	-	-	3	2	5	7.94%
Middle management	231	9	2	-	4	5	2	11	4.76%
White collar	934	27	10	3	11	11	12	37	3.96%
Blue collars	2,410	81	26	1	6	6	94	107	4.44%
Total	3,638	122	38	4	21	25	110	160	4.40%

# Personnel management policies

Piaggio adopts a system of recruitment, development and salary packages for personnel which recognises and rewards merit and performance. Any type of discrimination is explicitly forbidden by the Code of Ethics.

The central importance of human resources and the development of core competencies for the growth of our business represent the underlying foundations of our relationship with our employees, shaping company policy for the placement, development, training and rewarding of staff.

# Competitive organisation

Organisational innovation is pursued as a means of sharpening the Company's competitive advantage and supporting the creation of a multinational, lean, customer-oriented organisation that generates value and works in an integrated way, based on a "network" logic, with all partners (e.g.: supplier, dealers) that contribute to the Company's value chain.

In its relations with staff and regardless of the work they carry out, Piaggio respects the principles set forth by the Group's Code of Ethics in all circumstances, as well as the laws in force in the geographic areas where it operates.

Piaggio does not resort to child labour according to the age limits in force in the various countries or to forced labour and adheres to main international laws, such as the UN Convention on the Rights of the Child (UNCRC) and the 1998 Human Rights Act.

# Recruitment and internal mobility

The recruitment process is based on ongoing monitoring of the domestic and international labour market. Real recruitment needs are anticipated by creating constantly updated application pipelines.

# Career development

The Group promotes the development of its human resources and keeps a "pool" of resources ready and able to cover key management and professional positions. Career ladders and development paths

Staff Personnel management policies Meeting customer requirements Responsible management of the supply chain Supporting local communities

are based primarily on the review of an employee's competencies, conduct, performance and potential.

#### Reviews

Importance is placed on using transparent criteria and methods used for reviewing employees. Such reviews focus on:

- > performance,
- > managerial and professional competencies,
- > potential,

in relation to the employee's role, company needs and possible development paths.

# Training

The training process analyses training needs and defines training procedures and actions to guarantee that each resource is adequately aligned with the managerial and technical-professional skills model. It involves the transfer of knowledge and procedures conducive to the acquisition of knowledge for the safe performance of business tasks and identifying, reducing and managing risks.

# Rewards

The Group rewards people and their work on the basis of competitive, fair and merit-based criteria that are transparent, and aimed at motivating and retaining the human resources that make important contributions to achieving the Company's results.

# Diversity and equal opportunity

The Group rejects any form of discrimination on the basis of gender, age, nationality, ethnic background, ideology or religion. It operates in strict compliance with law and contractual requirement, and in keeping with the customs, practices and usages of each country in which the Company operates.

# Staff Engagement and Industrial Relations

Workers and their representatives are encouraged to contribute to the pursuit of the Company's objectives, while promoting the underlying values of the Company and its competitive standing in full compliance with existing regulations and collective labour agreements.

# Competitive organisation

Organisational changes continued during 2015 to strengthen global organisation and spread knowledge of the Group's brands with products at the cutting-edge of technology, innovation and quality. Suitable measures were continued to ensure the organisational system is maintained and continually improved, and that the Company's various geographic areas are aligned on an ongoing basis.

# Recruitment and internal mobility

Identifying and assessing resources who can meet various organisational needs in each country where Piaggio is present.

The Group's desired positioning as an employer is established through employer branding initiatives and an extensive network of Academic Relations (32 agreements with Italian and foreign universities providing internships for young graduates) that covers all company geographic areas.

The process of digitising Recruitment activities across the web and social media was also finalised in 2015.

During the recruitment process, candidates undergo two types of evaluation based on Piaggio's

competencies model: one concerns managerial skills and is carried out by HR, the other looks at professional competencies and is carried out by the line manager. This evaluation method and the authorisation flow for recruitment are fully integrated in SAP in the SAP Recruiting module.

# Developing human capital

The development of core competencies required by business and market developments is a priority. This is why the Group's human resources development policies focus on building, maintaining and developing factors that are instrumental for competing in international contexts which are continually evolving.

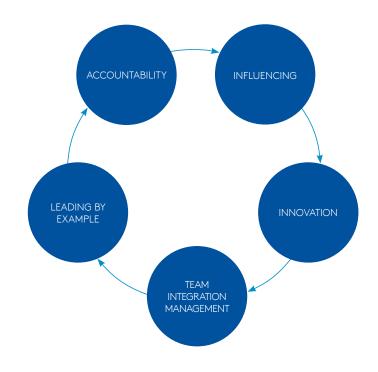
# The Group's managerial and professional competencies model

In line with the Group's strategic plan and its core values, Piaggio has identified a managerial competencies model that represents the skills set to be implemented day by day to ensure personal success and the success of the Company.

At the same time, it has developed a benchmark model of professional competencies that reflect the company's pool of professional skills and know-how, which is the true foundation and the only real guarantee of the continuity and quality of results.

During 2015, the identification of managerial and technical/professional competencies was also updated at Group level, and development and training plans were configured to overcome gaps identified in 2014.

In addition, in line with organisational developments in 2014, the technical and professional competencies model was updated, introducing new roles and competencies in marketing and digital.





Developing human resources Staff **Personnel management policies** Meeting customer requirements Responsible management of the supply chain Supporting local communities

#### Development paths

Development tools are provided with the objective of building and continuously improving the managerial and professional competencies identified in the respective models, while at the same time bringing out people's potential and identifying and rewarding outstanding performance. The set of tools provided by Piaggio includes:

- > development plans, which identify the action to be taken for the growth of the employee;
- > job rotation and participation in strategic or international projects;
- > management and professional training (see "training" section);
- › Piaggio Way the young talent management programme (see "talent management" section).

During 2015, development actions to consolidate the Company's international mindset were consolidated.

#### Career paths

For our highest value human assets, management and professional career paths are designed in order to cover key roles and ensure that strategic and technological know-how is kept and developed in the Group at the international level. In 2014, tools for monitoring and managing plans for taking over key positions within the Group were consolidated. In light of this, during 2015 an analysis was conducted on integrating these processes using a dedicated IT platform.

# Reviews

On the basis of the position they hold, staff reviews focus on the following key aspects, taking into account professional growth and company objectives reached:

- > managerial and professional competencies;
- > performance;
- > potential;
- > international mobility.

Evaluation outcomes are discussed by reviewers with the people they evaluate, and may form the basis of a development and training plan.

Employees are evaluated by comparing their competencies against the Company mode for their specific role, as evidenced by concrete and observable action in their everyday work. The review process is managed in an integrated way through a dedicated IT platform and provides the information necessary for the processes of succession planning, management reviews and a gap analysis of professional competencies, which are conducted across the Group.

Performance reviews affect development paths and career opportunities, as well as rewards (see "reward policies" section).

During 2015, the Evaluation Management System was consolidated at Group level. This standard evaluation system is for all white collar and managerial staff, assisted by computer tools for the real-time management of all evaluations, for human capital development purposes.

Geographic segment	EMEA&Americas	of which Italy	Asia Pacific 2W	India
Senior Management (Executives and Senior Managers)	100%	100%	100%	100%
Middle management	100%	100%	100%	100%
White collar	100%	100%	100%	100%
Blue Collars	n.a.	n.a.	100%31	n.a.

#### Percentage of

employees who received performance and career development reviews in 2015<sup>30</sup>

- 30) The definition of this indicator considered all employees who had worked at least six months during the year and had not left the Company before six months from the evaluation.
- A specific process based on local standards was adopted for worker performance reviews in Vietnam.

# Talent Management: the Piaggio Way programme

The Piaggio Way talent management programme has been one of the development tools adopted by the Group since 2010. It is aimed at employees around the world who show a high potential, great enthusiasm for their work and the courage to undertake new paths, in order to identify and ensure a growth path for the most deserving resources.

Three assessment sessions have been performed since its launch, involving a total of 193 employees of all the Group's geographic areas (52% EMEA, 31% India, 17% Asia Pacific), with an increasing proportion of Asian participants.

At present, the Group's pool talent comprises some 70 employees. Piaggio Way boasts a community of 34 students who have completed their development plan and who still remain active in the programme.



Geographic distribution of talent and breakdown by gender as of 31 December 2015

The talents added to the programme are given fast-lane access to development, involving: > job rotation;

- > strategic and international projects;
- > events involving top management;
- > coaching and personalised training.

To remain on the programme participants undergo a structured annual Talent Review conducted with the involvement of Piaggio top management.

# Training

The training process analyses training needs and defines training procedures and actions to guarantee that each resource is adequately aligned with the managerial and technical-professional skills model. The training process for internal resources is designed to:

- > promote professional development and retention of Key People and Young Talents;
- assist with managing the process of globalisation and internationalisation by harmonising culture and methodologies to achieve a unifying and shared "distinctive identity";
- > facilitate "Digital Transformation and Innovation";
- > manage and mitigate overall risk management, in order to ensure business continuity;
- guarantee compliance with safety rules and procedures by preventing risk through continuous cultural alignment;
- > ensure organisational efficiency and support the company's business objectives by facilitating generational transitions.

Developing human resources Staff Personnel management policies Meeting customer requirements Responsible management of the supply chain

In order to operate effectively, the Group has adopted a Learning Management System called **Piaggio Global Training** to manage the training process. The system matches training needs analysis with the gaps identified during performance assessments (Evaluation Management System), improving active cooperation between managers of the process.

In addition, the system provides a real-time overview of progress with training activities and improves effectiveness by expanding training methods from traditional methods (e.g. classroom-based) to the possibilities offered by e-learning technologies.

		2015 <sup>32</sup>				<b>2014</b> <sup>32</sup>			
Thematic area	Emea Americas	India	Asia Pacific 2W	Total	Emea Americas	India	Asia Pacific 2W	Total	
Managerial training	4,129	10,160	1,431	15,720	5,542	18,440	2,472	26,454	
Technical – professional training	8,429	38,281	52	46,762	16,204	37,496	964	54,664	
Language training	8,074	939	996	10,009	8,707	136	1,993	10,836	
Health and safety training	4,686	7,965	801	13,452	3,763	5,870	6,147	15,780	
TOTAL	25,318	57, 345	3,280	85,943	34,216	61,942	11,576	107,734	

Professional category	2015 <sup>33</sup>	<b>2014</b> <sup>33</sup>
Senior management	1,073	666
Middle management	8,935	10,909
White collar	36,290	56,107
Blue collars	25,847	30,195
Project workers	13,798	9,857
Total	85,943	107,734
Total per-capita	12.2	14.3

<b>The second is served</b>		2015	2014			
Thematic area	Men	Women	Total	Men	Women	Total
Managerial training	14,285	1,435	15,720	24,113	2,341	26,454
Technical – professional training	43,728	3,034	46,762	50,555	4,109	54,664
Language training	7,415	2,594	10,009	7,818	3,018	10,836
Health and safety training	11,913	1,539	13,452	14,994	786	15,780
TOTAL	77, 341	8,602	85,943	97,481	10,253	107,734

Analysing 2015 data, the number of hours devoted to Language training remained stable, strongly influenced by Italy, which alone accounted for 80% of the time (7,982 hours).

The number of hours of training on Health and Safety issues fell, as the figure for 2014 included specific ad hoc campaigns in India and the Asia Pacific area. There was an increase in hours of training in EMEA & the Americas (+24.5%) due to specific training projects aimed at creating a culture of safety.

In India, technical/professional training comprised extensive campaigns on quality management, project management and lean management.

Hours of training by training area

32) Data does not include on-the-job training

Total training hours by professional category

33) Data does not include on-the-job training

Training hours by gender

# **Reward policies**

Reward policies aim to reward people and their work on the basis of competitive, fair and merit-based criteria that are transparent and used in review processes (see the section "Developing Human Capital"). The Group reward system is differentiated for the various professional groups in the Company, and consists of a fixed salary component and variable objective- and benefits-based incentive systems.

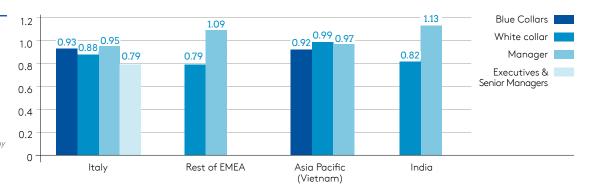
#### Salary packages

Piaggio offers new recruits and all its employees a salary package in line with the best market practices. Accordingly, Piaggio has adopted a structured salary review process based on:

- comparing salaries with market benchmarks, considering the market positioning of the Company as a whole and the review of individual organisational roles, which is periodically revised. Comparisons are conducted using internationally recognised methods, with the support of specialist consultants;
- > setting out guidelines for the salary review process that take into account company results and focus on criteria of meritocracy, competitiveness, internal fairness and sustainability;
- > specific identification of fixed and variable salary components, in accordance with guidelines, with meritocracy logics and retention needs relative to strategic resources for the business.

An analysis performed on a single country basis where Piaggio works did not reveal any significant differences between the basic salary and remuneration of men compared to women with the same category, experience and assigned duties.

In fact, the ratio of minimum standard entry-level salaries and to local minimum wage in Italy in 2015 was 1.06 for male and female White collar and 1.51 for newly-hired male middle management<sup>34</sup>. An equivalent comparison made in Vietnam and India for blue collars alone showed a ratio of 1.10 and 1.00 respectively. In these markets there are no legal minimums for White collar and middle management.



Objective-based incentive systems

Achieving excellent results for company-established objectives is rewarded by variable incentive systems focused on quality and quantity objectives in line with the business, as well as the internal efficiency of each area of responsibility.

The full process of setting objectives and reviewing results is conducted with employees, using objective criteria.

#### Benefits

Piaggio offers a benefits package in line with the best local market practices, which is structured on an organisational basis. Benefits include, by way of example:

- > company car;
- > private health insurance;

34) The ratio cannot be calculated for categories of male/female blue collars and female middle management, as no employees were recruited to these categories in 2015.

Ratio of average basic salaries for women to average basic salaries for men of the same professional category<sup>35</sup>

35) Categories not reported in individual geographic segments do not have any female employees.

The social dimension

Personnel management policies Responsible management

> company medical centre at various sites;

> agreements with local groups and facilities of interest for employees.

Benefits are offered to full-time, part-time and temporary employees without distinction.

# Diversity and equal opportunity

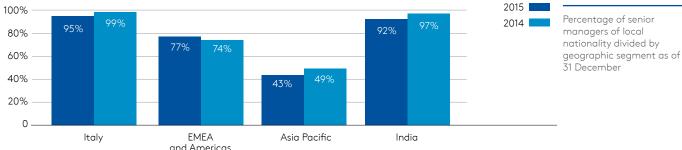
Piaggio operates globally with a diversity of employees, in terms of age and gender, in Europe, the Americas and Asia. For Piaggio, managing diversity means acknowledging and respecting difference as part of the shared substratum of company culture. Staff diversity represents various different ways of pursuing and achieving the highest levels of performance within a single, broader Group organisational design.

The Group's concrete commitment to embracing diversity is reflected by its adoption of a Code of Ethics, conformity to international laws on equal opportunities and use of policies that protect forms of diversity already found within the Company.

The company seeks to spread its culture and values throughout the world with a view to creating the conditions for promoting an international mindset and a truly multinational organisation in which all employees can benefit from equal opportunities.

Human resources management processes are conducted applying the same principles of merit, fairness and transparency in all the countries in which the Group operates, with the accent placed on aspects of relevance for the local culture.

Piaggio selects and hires its staff based solely on the candidates' characteristics and experiences and the requirements of the position. As shown in the graph below $^{36}$ , Piaggio promotes and supports the selection and hiring of candidates from many parts of the world, to contribute to the international mindset that is a key value for the Group.



managers with nationality the same as the country where they work Percentage of senior managers of local nationality divided by

36) Figures include senior managers, first- and

second-level executives reporting to top

management at Piaggio &

local refers to the national level and local senior

managers means senior

C SpA, and the first- and second-level executives of subsidiaries. The term

In order to promote and sustain intercultural exchange and diversity management, the Group encourages the international mobility of its people, enabling the reciprocal secondment of employees between Group companies.

#### Female employment

Female employees at Piaggio play a fundamental role at all levels of the organisational structure and account for 22.5% of White collar.

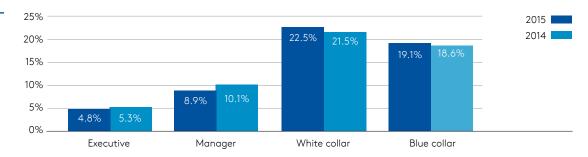
Company employees by gender and geographic segment as of 31 December

Number of women

employees as of 31

December

2014 2015 Women Employee/staff numbers Women Men Men EMEA and Americas 2,725 1,147 2,827 1,181 of which Italy 2,545 1,093 2,622 1,112 India 2,306 47 2,564 58 Asia Pacific 2W 681 147 723 157 5,712 1,396 Total 1,341 6,114



Company employees by contract type, gender and geographic segment as of 31 December 2015

37) For Italy, this data also includes some internship contracts that are considered open-ended contracts.

Company employees by profession, gender and geographic segment as of 31 December 2015

Open-ended contract<sup>37</sup> Fixed-term contract Women Women Men n. persone Men Total Total EMEA and Americas 6 2 8 2,719 1,145 3,864 of which Italy 6 1 7 2,539 1,092 3,631 971 19 990 1,335 28 1,363 India Asia Pacific 2W 131 40 171 550 107 657 1,169 Total 1,108 61 4,604 1,280 5,884

Equal opportunities are offered to employees of both genders, with concrete initiatives in place to help people strike a balance between work and domestic life. Such initiatives include alternatives to full time work.

	Full time Part time			Part time			
n. persone	Men	Women	Total	Men	Women	Total	
EMEA and Americas	2,627	827	3,454	98	320	418	
of which Italy	2,447	778	3,225	98	315	413	
India	2,306	47	2,353	0	0	0	
Asia Pacific 2W	681	146	827	0	1	1	
Total	5,614	1,020	6,634	98	321	419	



Part-time employment in Italy as of 31 December 2015

Developing human resources Staff **Personnel management policies** Meeting customer requirements Responsible management of the supply chain Supporting local communities

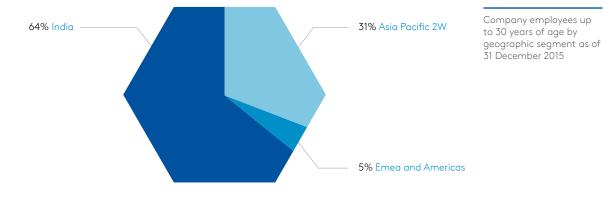
Piaggio's aim is to consolidate its number of female employees and make their working conditions easier. To this end, alternatives to full time work have been in use for several years in Italy and are becoming increasingly popular with employees.

In 2015, 413 employees were working an alternative to full-time hours in Italy. In particular, 4.3% of the workforce was employed with a horizontal part-time contract, and 7.1% on a job-share contract.

#### Young employees

Within the Group, the largest population is in the age group between 41-50 years old, while the youngest population, up to 30 years, is the second largest. This generational mix is a fundamental condition for more expert staff, capable of taking the initiative and handing down the skills they have learnt, to disseminate their knowledge and expertise to younger employees.

Employee/	staff numbers	up to 30	31-40	<b>4</b> 1-50	> 50	Total
	Senior management	0	3	45	62	110
	Middle management	1	148	274	129	552
2014	White collars	381	847	558	316	2,102
	Blue collars	1,795	791	1,237	923	4,746
	Total	2,177	1,789	2,114	1,430	7,510
	Senior management	0	3	40	61	104
2015	Middle management	2	145	290	136	573
	White collars	291	778	547	317	1,933
	Blue collars	1,591	658	1,306	888	4,443
	Total	1,884	1,584	2,183	1,402	7,053



Company employees by professional category and age bracket as of 31 December

#### People with disabilities

Piaggio not only guarantees people with disabilities the chance to work, but also recognises the value of their diversity and importance of dialogue in any activity, from the simplest to the most complex. In agreement with trade union organisations and laws in force, which require companies to employ a certain number of people with disabilities, Piaggio in Italy has also forged alliances with social cooperatives, convinced that work can contribute to personal development.

The insertion and integration of disabled people into the workforce is also made possible in practice by the accessibility of company facilities and the existence of a relative company procedure.

Employee/staff numbers	2015	2014	2013
Middle management	0	1	1
White collars	11	10	10
Blue collars with supervisory duties/blue collars	132	137	130
Total	143	148	141
Percentage out of total employees	3.9%	4.0%	3.7%

In 2015, 143 people with disabilities and from legally protected categories were employed at sites in Italy. The breakdown in the table above shows that people with disabilities account for 3.9% of the total work force.

# Parental/maternity leave

Our companies apply the laws passed by pertinent national legislation.

The Group does not discriminate in any way against women who take maternity leave. On the contrary, to try to help balance family and work life, 156 employees have been granted horizontal part-time contracts in Italy. In addition, as a further supplement to the work-life balance, at the Pontedera site workers can take advantage of the childcare agreement (see Industrial Relations section).

As proof of the above, the following information has been provided for the companies where the phenomenon is more numerically significant.

	Parental/maternity leaves								
	Italy			Vietnam			Emea/Usa		
	М	W	Total	М	W	Total	М	W	Total
Employees on maternity leave during 2015	24	47	71	88	32	120	1	8	9
Employees retuning to work in 2015 after maternity leave	24	18	42	84	25	109	1	2	3
Employees retuning to work in 2014 after maternity leave	23	11	34		23	23	3	5	8
Employees retuning to work and on payroll 12 month after returning from maternity leaves	22	10	32		19	19	2	3	5
% Retention rate	95.65%	90.91%	94.12%		82.61%	82.61%	66.67%	60.00%	62.50%

Employees with disabilities in Italy (pursuant to Law no. 68/1999) as of 31 December

Developing human resources Staff Personnel management policies Meeting customer requirements Responsible management of the supply chain

# Personnel dialogue and involvement

Piaggio Group's Internal Communication Policy is aimed at informing employees on business performance and prospects and bringing them closer to top management strategies.

The system is based on the conviction that sharing strategic objectives with every employee is a key factor to success.

Piaggio uses communication and information tools which respect and empower the social and cultural realities within the Group.

Specifically, in Italy there is the "PiaggioNet" corporate intranet, which provides news and information about the Group, as well as services for staff (e.g. an area devoted to time management, employees' payslips online and internal manuals/procedures). In 2015 the Piaggio Welfare section was enhanced to improve the visibility of related issues and of initiatives to improve the "welfare" of employees and their families (e.g. supplementary healthcare, the Family Space, company catering, special agreements and discounts, and supplementary pension schemes).

These functions are also accessible to blue collars through their corporate badge by using specific "Info Points" in the Italian plants of the Piaggio Group.

Employees of foreign subsidiaries are provided equivalent information through the dedicated PiaggioNet International portal, where content is published in English.

Additional specific initiatives are provided for employees of premises in Asia and India, for example:

- > Forums dedicated to employees in India (V-Speak and Crucial Conversation);
- > A quarterly meeting at Piaggio Vietnam with management to share quarterly results and targets for the next quarter;
- > INDIA E-Care: this is an online platform where external consultants deal with various personal problems of employees and their families, guaranteeing confidentiality;
- > Piaggio Vietnam Safety Corner: brings together reports from employees on safety issues.

# Industrial relations

The Piaggio Group acknowledges the role of trade union organisations and workers' representatives and is committed to establishing relations with them focussed on attention, dialogue and a common understanding; in fact ongoing dialogue is considered as fundamental for finding the best solutions to specific company needs.

The Piaggio Group's Industrial Relations policy is therefore based on involving workers and their representatives in pursuing company objectives, and is focussed on ongoing dialogue and engagement. The solutions and conduct adopted in various countries where the Group operates are in line with the social and institutional context, but are always consistent with the fundamental principles and overall needs of the Group.

#### Italy

In 2015, dialogue and engagement with trade union organisations and workers' representatives continued with the aim of seeking shared solutions to respond to the market crisis and manage consequences for workers. Collective bargaining has made it possible to identify shared management tools that can be used to tackle the long period of crisis in the industry, while safeguarding company competencies, thus avoiding a loss of resources and instead promoting their re-employment.

At the <u>Pontedera site</u>-which has established itself as a centre of excellence in innovation, research and design, and in the production of vehicles and engines-the union agreement signed in February 2015 extended the Solidarity Contract from February to November 2015. An additional agreement signed in October 2015 saw it extended once again until November 2016.

In February 2015, a mobility procedure was activated for 150 employees in order to downsize staff activities and structurally rebalance the production workforce.

At the <u>Noale</u> site, activities continued to streamline staff and staff activities, with a new mobility procedure affecting 20 people. Additionally, the ordinary wage guarantee fund was invoked in light of the unexpected fall in work volumes during 2015.

At the <u>Scorzè</u> site, the union agreement signed in January 2015 affirmed the importance of the production site; however, taking into account, the steady decline in orders and the consequent fall in production runs, a union agreement was reached in December 2014 for the use of the Solidarity Contract for all employees at the site, with effect from February 2015 to January 2016; a union agreement signed in December 2015 extended the duration of the agreement until January 2017.

By contrast, at the <u>Mandello del Lario</u> production site, 2015 saw confirmation of a rising trend in sales volumes; in agreement with the trade unions, the increase in production was managed by using temporary employment contracts and flexible working time.

Membership of trade union organisations at Italian sites (2013 – 2015) is shown in the table below:

	2015			2014			2013		
	Pontedera	Noale and	Mandello	Pontedera	Noale and	Mandello	Pontedera	Noale and	Mandello
		Scorzé	del Lario		Scorzé	del Lario		Scorzé	del Lario
FIOM	321	134	43	373	145	42	363	153	44
UILM	326	1	2	330	1	2	318	1	2
FIM	334	137	21	354	128	24	352	135	24
UGL	13	0	0	19	0	0	66	0	0
CGIL/CISL/UIL	2	0	0	2	0	0	2	0	0
Total number of employeess who are members of a trade union	770	272 48.7%	66 65.3%	1,078 36.8%	274 48.3%	68 65.4%	1,101 37.1%	289 48.1%	70 68.0%

As regards industrial action, the trend of strikes in 2015 showed a clear fall in the number of hours lost for this reason; in particular, during the year there were no general/category-wide strikes (with the exception of one event at Mandello del Lario for the loss of 144 hours), while in terms of microdisputes at the company, the number of hours lost fell by more than 57% compared to 2014, to a very low level overall.

All micro-disputes at the company were at the Pontedera site.

		2015	2014
N° hour lost due to strikes	General/category	144	2,094
	Company	6,807	15,992
	Total	6,951	18,086
% Hour lost compared to Hour worked	General/category	0%	0.10%
	Company	0.34%	0.78%
	of which Pontedera compared to hour worked at Pontedera	0.41%	0.90%
	Total	0.34%	0.88%
	General/category	18	262
N° of days lost due to strikes	Company	851	1,999
	Total	869	2,261

The table below summarises hours lost due to strikes in 2014 and 2015 at company sites, with a focus on micro conflicts:

A structured company welfare system has been established in Italy, with services that aim to increase the well-being of employees and their families, in economic and social terms. In particular, the following have been put in place for employees at Pontedera:

- > a supplementary health scheme, with the chance for employees to extend insurance cover to their families by paying an additional contribution;
- > a childcare agreement between the Company and the Association of Valdera Communities.

A national trade union agreement at the end of 2011 established a private health insurance fund (Metasalute) for metal and steel processing workers in Italy; the Company started paying its portion of the fund in 2012. Participation in the scheme is voluntary and became operative in 2013.

The scheme also includes **health benefits/services** for employees:

- > at Pontedera, the company medical centre for employees has specialists (an optician, an orthopaedic specialist, a lung specialist, a dermatologist and an ENT specialist) for consultations during working hours;
- > at Noale/Scorzè and Mandello del Lario, all employees are entitled to paid time off for specialist consultations outside the company and for clinical analyses.

Finally all sites offer employees vaccinations free of charge.

# Vietnam

In Vietnam, trade union representatives at a company level (selected by a Company Trade Union Committee) are tasked with protecting employees, helping them to understand aspects concerning labour regulations and company policies, and providing economic support for some company initiatives benefiting employees.

In particular, the current Trade Union Committee, elected in February 2014 and comprising 15 members who will remain in office for 5 years, made an excellent contribution in 2015, having sponsored and assisted the Company in a number of events to bolster employee motivation. The main events are outlined below, following on from those organised last year:

> the "Nutrition Day" for employees' children: in June, paediatric doctors met with employees to provide advice on the nutrition and health of their children. The half-day event was attended by approximately 200 children, mainly the sons and daughters of blue-collar workers. In particular, the children, who were entertained with games, entertainers and small gifts, were examined by 20 national nutrition doctors;

- > the "**Piaggio Vietnam Summer Vacation**" lasting 3 days in August, when employees with their families were given a contribution to spend 3 days' holiday at a location selected by the Company and trade union representatives;
- > to mark International Women's Day (March), the "**Excellent Female Trade Union Member**" event was organised, to award 10 female employees that had particularly excelled for results achieved in the past year and for their commitment to and compliance with company policies and procedures.

No strikes were held in 2015.

#### India

In India, trade unions have a two-tier structure - at a company and local/area level; this structure is also replicated at the Indian subsidiary where the trade union system comprises a company trade union committee with Piaggio workers' representatives, and a central trade union committee, which is the highest hierarchical level, with members selected by the trade union. At present, the Company trade union committee (appointed in December 2015 and remaining in office for one year) has 8 members.

A collective company agreement is in place at the Indian subsidiary, signed in July 2013 and with a 4-year validity.

In 2015, main activities concerning industrial relations focussed on:

- > maintaining and achieving productivity levels of blue-collar workers as established in the July 2013 agreement. The agreement establishes labour levels based on productivity indicators linked to various production levels;
- > implementing a flexible, temporary labour model. The use of temporary blue-collar workers is related to production volumes based on pre-established ratios;
- > maintaining and improving positive and cooperative relations with workers and trade unions;
- > guaranteeing full compliance with labour laws, also in view of new government legislation (for example the Provident Fund Act, Minimum Wages Act, Apprentice Act, etc.);
- > involving workers to improve the Company climate and motivate them. In line with this approach, Piaggio carried out numerous employee-engagement activities, including family picnics, sports competitions, awards for children who have done particularly well at school and buying schoolbooks for the children of employees.

# Occupational health and safety

Safeguarding and improving the health and safety of workers is integral to the Piaggio Group's operations and strategic within the framework of its more general objectives. This principle is valid and adopted in all countries where the Piaggio Group operates. In particular, the Group has taken concrete actions for:

- > continual developments towards a safer working environment, based on assessing all aspects of safety at work and associated systems, beginning with planning new activities or reviewing existing ones;
- > safer conduct through training, information and raising awareness among all workers to enable them to carry out their work safely and take responsibility in terms of occupational health and safety.

Health prevention and protection for workers in such a complex industrial context as the Piaggio Group, both in Italy and abroad, can only take place through an adequately structured organisation which specifically aims to foster as far as possible a safety "culture" within the company. Therefore, the belief that safety must focus on conduct and daily operations is today disseminated at all levels. This approach has led the Piaggio Group to adopt safety management standards that are very

similar in all countries where it operates, regardless of whether legal constraints are not as strict as company standards. In this framework, the sites in Italy, India and Vietnam have an Occupational Health and Safety Management System certified to OHSAS 18001 by an accredited certification body.

In line with Health and Safety Management System requirements, the Group has identified safety training as the key driver for disseminating a culture and fostering a conduct focussed on safety leadership and for generating commitment and steering conduct.

Promoting health is another important aspect for Piaggio, and this is achieved based on two areas of action: free testing and information campaigns on healthy lifestyles. Each Group site has a health unit for prevention, surveillance and first aid, manned by specialist medical and paramedical staff.

## Italy

Starting in February 2015, an organisational change was initiated regarding the system for managing health and safety at work, which is based on the identification of different levels of responsibilities as summarised below, followed by the launch of a project to update the relevant procedural framework.

> Employers appointed by the BoD

- > Heads of macro-areas applicable to all Employers
- > Heads of macro-areas applicable to each Employer
- > Senior Management and Persons Responsible for safety identified by specific appointments.

From March 2015, a new method of investigating accidents was adopted to improve the process of identifying the causes and preventative/protective measures to be taken to avoid the recurrence of similar events.

During 2015, the close relationship between the "Training" department and the "Safety, Hygiene and Occupational Medicine" was further consolidated as regards analysing staff training needs on safety. This relationship led in July to a course for the company experts whom Piaggio entrusts with the responsibility of supervising external companies, ensuring their coordination and cooperation, and overseeing their operations.

Starting in March 2015, the "safety walk" was launched to strengthen the visibility and presence in the factory of the Safety, Hygiene and Occupational Medicine department. The "safety walks" involve unannounced site inspections on safety aspects. The remedial actions identified during the inspections are managed in the same ways and using the same reports as for Integrated Quality, Environment and Safety Audits.

Production sites	2015	2014	2013	2012	2011
Pontedera	2.4	2.5	3.0	3.3	3.0
Noale and Scorzè	1.4	0.6	0.2	0.9	1.7
Mandello del Lario	1.6	1.2	1.1	3.2	3.1

Frequency Index in Italy<sup>38</sup>

38) The Frequency Index is: IF = (No. of accidents \* 100,000) / Hours worked.

\*The number of accidents is calculated considering only accidents in the workplace, excluding accidents reported as of article 53 of Presidential Decree no. 1124/65. Accidents as of article 53 include both commuting accidents and accidents not considered reliable (due to the lack of a specific, short-term external cause of the injury or the lack of a causal link).

#### Severity index in Italy<sup>39</sup>

39) The severity index is calculated as Iq = (working days lost / hours worked) x 100,000. In calculating the Index, working days lost because of all events that resulted in absence from work were calculated; so accidents reported pursuant to article 53 of Presidential Decree no. 1124/65 (commuting accidents and accidents not considered reliable due to the lack of a specific. short-term external cause of the injury or the lack of a causal link) were also considered.

Production sites	2015	2014
Pontedera	73.1	130.8
Noale and Scorzè	65.5	22.4
Mandello del Lario	19.5	49.6

At the Pontedera production site, the Lost Day Rate in 2015 was almost half that of 2014. Also at the Mandello del Lario site, the rate fell despite the increase in workplace accidents. However, at the Noale and Scorzè sites, the rate rose compared to 2014 due to commuting accidents that resulted in relatively long periods of absence for the employees involved.

#### Vietnam

The main priority of **the company**, in compliance with local laws, international health and safety standards and Piaggio Group policies. In this framework, it guarantees that objectives to improve occupational health and safety are pursued through an Occupational Safety and Medicine unit.

**Managers** of each department guarantee that the occupational health and safety programme is effectively developed and implemented, helping their co-workers perform activities in their remit.

**All managers and supervisors** are tasked with establishing and maintaining a safe working environment, that poses no risks to health; in this context, each supervisor adopts concrete measures to guarantee to ensure that employees receive training and information on health and safety.

At the same time, **all employees** cooperate in developing programmes that guarantee their own and colleagues' health and safety.

In accordance with Group guidelines, **suppliers and external companies** that perform works at the site are contractually bound to comply with occupational health and safety policies, respect Piaggio Vietnam procedures and programmes, and observe instructions given to them. Violating these instructions is considered as a breach of contract and sufficient grounds to terminate the contract.

In addition, a **Safety Committee** has been established involving all members of functions and chaired by the production manager. The Committee members are responsible for managing any safety-related problems within their functional area and the required corrective actions. They also conduct periodic audits of the entire site and report to the committee on all relevant aspects regarding safety, so that corrective actions may be promptly taken.

In order to effectively implement general health and safety regulations, a programme of activities is defined each year, based on operating plans, that are updated on an ongoing basis.

Again in 2015, extensive training on conduct and specialist training was provided, for a total of around 2,260 hours (801 hours for Piaggio employees and 1,460 for staff of external companies). Alongside the training and awareness-raising activities, a number of initiatives – introduced in 2014 to reward and reinforce exemplary behaviour – were used again in 2015. For example, at the 17th National Safety Week 2015, Piaggio Vietnam hosted an event to raise awareness and boost commitment to the health and safety of employees and employers.

There has been a company medical centre at the Vinh Phuc site in Vietnam since 2013, with nurses and a doctor who monitor general health problems, offer check-ups and provide medical assistance in first-aid situations.

During 2015, Piaggio Vietnam was awarded at "Certificate of Merit" by the Ministry for Labour and Social Affairs for its health and safety activities in 2014. In the province of Vinh Phuc, Piaggio Vietnam is one of the five companies to receive such an award.

				The social dimension	Staff Perso Meet Respo of the	loping human resources nnel management policies ing customer requirements onsible management e supply chain orting local communities
	2015	2014	2013	2012	2011	Frequency Index -
Vietnam	0.3	0.1	0.2	0.2	0.1	Vietnam

# India

In order to guarantee the highest occupational health and safety standards, the Indian subsidiary has an organisational structure that operatively involves the "Occupier" (employer), which is a single person for various production sites with responsibility for the health, safety and well-being of all employees in the work place, Factory Managers and a Safety Committee comprising 20 members that include executives, managers and white collars. The Safety Committee meets at regular intervals to plan, revise and discuss action plans necessary to establish and disseminate a safety culture in the work place among employees. The presence of a Health & Safety team guarantees that the entire system may operate effectively.

In particular, in accordance with the guidelines adopted by the Group, as part of this organisation, additional roles and responsibilities have been defined that apply to the entire company.

**Functional area managers** have primary responsibility for health and safety within their division and for managing safety policies and relative organisational procedures, supported by safety managers. **Managers and supervisors** have primary responsibility for guaranteeing that the company occupational health and safety policy and objectives are implemented and pursued. All managers and supervisors are responsible for the health and safety of their co-workers. This responsibility also covers the safety of equipment and assets within their areas of responsibility.

In line with the Group's approach, a great deal has been invested in training over the last few years as a main driver to increase each employee's accountability in relation to safety and, consequently, to promote their proactive approach and involvement in safety issues.

In 2015, training was provided on safety in the workplace for employees, suppliers and contractors working at the site for a total of about 7,600 hours, in order to increase the awareness of individuals about safe conduct and provide the necessary updates on changes in local legislation.

Alongside the training and awareness-raising activities, a number of initiatives were introduced to reward and reinforce exemplary behaviour. For example, again this year, as part of the safety week celebration held 4-11 March 2015, awards were handed out to the winners of various competitions.

	2015	2014	2013	2012	Frequency Index - India
Engine & Commercial Vehicles	0.08	0.3	0.2	0.4	
2W India	0.0	n/a	n/a	n/a	

# Meeting customer requirements

## Product quality and reliability

Quality and reliability are fundamental concepts when it comes to scooters, motorcycles and commercial vehicles, as they are the drivers behind customer satisfaction and safety.

Quality is the set of properties and characteristics of a product or service that give it the capacity to satisfy the express and implicit needs of the customer/user<sup>40</sup>. For manufactured products, these needs generally include conformity to regulations and specifications, reliability, ease of use and maintenance.

Reliability is the ability of an item to perform a required function in established conditions and for an established period of time<sup>41</sup>.

41) UNI ISO 8402 definition

40) UNI ISO 9000 definition

Pursuing continual improvement in the quality of our vehicles through a detailed, precise, robust and mandatory product development process, constant pursuit of excellence in the management of internal and external production processes, careful and scrupulous auditing of outgoing quality from the customer's perspective, all combined with an effective product and component traceability system, are essential for guaranteeing the reliability of the vehicles sold. The Company also has dedicated functions, which test the reliability of all new and existing products, from initial design to marketing. Tests are not limited to laboratory testing, but also to dynamic road testing based on different purposing profiles, based on the actual use of vehicles by customers.

# Quality systems certification

As regards Quality, the Piaggio Group is committed to continually improving the performance of its processes and (internal and external) customer satisfaction. The achievement and continuous retention of ISO 9001:2008 Quality Management System certification at global level is part of the Company's shared culture and belongs to all Group employees. The results obtained in terms of product reliability, improving process performance, increasing customer satisfaction (internal and external customers) stem from the fact that all employees pursue quality, customer focus, continual improvement and excellence as part of their everyday activities.

#### Supply verification/audits

The quality of Piaggio products also depends on the quality of its supplies. The Piaggio Group is very much involved in scouting and audits, in order to select new suppliers, constantly monitor quality levels and approve processes for the development of new components. Piaggio's auditors carry out these activities through scheduled supplier audits.

New suppliers only become part of Piaggio's "basket" after a detailed and positive assessment of their production processes, the products that derive from them and certification of the functions, dimensions and materials described in the project specifications.

Audits, requested by the Purchasing Department, evaluate a potential supplier's quality system and capacity to develop the product in question.

Suppliers successfully evaluated and included as qualified suppliers may also be subject to process audits in the event of:

- > the development of new products;
- > the resolution of problems identified during mass production;
- > problems reported during the vehicle warranty period.

Audits for new products are scheduled to evaluate the supplier's capacity to manage the processes necessary to manufacture the new product and provide technical support in defining and controlling these processes as and when deemed necessary or as requested.

Audits for consolidated products are performed to solve specific problems identified during production, verify the supplier's capacity to control processes involved in product manufacturing and periodically

monitor improvement in services in terms of output/complaints<sup>42</sup>, to resolve problems identified under warranty and, finally, to verify the effectiveness of corrective actions taken by suppliers to prevent these problems reoccurring.

#### Quality control of finished products

Piaggio has a comprehensive quality management system to monitor end product quality levels in the various phases of the production process and prior to dispatch to the client. Standard procedures adopted at all Piaggio Group sites followed to constantly monitor the quality level of all vehicles manufactured, ensuring product standards that consistently meet and comply with legal and regulatory requirements as well as the expectations of end customers. Each vehicle manufactured at Piaggio Group sites is subject to multiple quality controls throughout the assembly process and at the end of the line. In addition, scheduled controls and checks are carried out "offline" by highly qualified and well-trained personnel, according to procedures and standards drawn up with the customer in mind, i.e. they monitor vehicle design as well as functions, both statically and dynamically.

Staff select a sample of vehicles each day, from end products/identified products, prior to dispatch to the end client. These vehicles undergo rigorous testing and inspections on test benches and on the road, based on a standard check list. Any anomalies detected are classified with a score based on the severity of the defect and impact they could have on the end client.

The final quality status compared to the objective status is available for each model. A meeting is held each day between the Quality, Production, Design and Technologies departments, and other operating units involved. In the meeting, all anomalies detected the previous day are examined, and corrective actions, relative responsibilities and implementation times are determined for each anomaly.

If serious functional anomalies are detected, the dispatch of all vehicles from the same lot is immediately stopped, and a sample of vehicles from the previous lot is selected. These vehicles are then carefully retested and repaired, as necessary, before authorisation and subsequent dispatch.

#### Product traceability

The traceability of vehicles and their main components is essential and helps to identify and promptly separate out any production batches with presumed and/or actual defects, thereby either preventing the sale of potentially defective products or enabling the performance of corrective actions in the field.

Piaggio has adopted a system for efficient product traceability which identifies products, components and materials deemed to be significant all stages of the production cycle. In particular, all components manufactured internally and externally that have a direct impact on user health and safety, the environment and compliance with type approval are identified.

The system therefore traces all identified components, maintaining records of tests, controls and inspections, certifying product quality in view of the processes it has undergone in the various stages of the production cycle. This makes it possible to promptly and systematically trace any product anomalies/ defects identified and their causes, and adopt effective corrective actions, broadly and specifically identifying all vehicles with components from the faulty lot and, if necessary, promptly launching initiatives to protect customers.

#### New product development process

The New Product Development process is the set of cross-functional activities that, starting with the product concept, are geared towards the design and manufacturing of a new product, up until the start of production. To ensure consistent achievement of company targets in terms of quality, reliability, product cost, time-to-market and innovation, Piaggio has further improved its product development model by making major changes both in terms of the activities involved and the areas of responsibility.

42) Returns, reprocessed, selected, material accepted as an exception. The new process model – structured in several stages each with specific objectives, activities and outputs, is designed to:

- > consolidate robust and rigorous product development methodologies (innovation, concept, style, initiative management, product life-cycle management);
- > monitor Key Performance Indicators for each specific initiative;
- > encourage greater and more structured accountability, clarity of roles and decision-making speed;
- > make the best use of all the skills available in the company on a global level;

all based on the following guiding principles:

- Simultaneous and Concurrent Engineering by the various stakeholders involved in the process (Suppliers/Partners, Manufacturing, Technologies, After Sales, Accessories, etc.);
- > clearly identified stages and gates throughout the process;
- > rigorous control on achieving the project quality requirements for each gate;
- > monitoring the degree of maturity of the deliverables for each gate;
- > an asynchronous "Pre-Development" process that runs parallel to the product development process, to develop content/innovative solutions;
- > the use of digital mock-ups throughout the product development process.

# Product information

Due to the type of business it does, Piaggio Group is subject to numerous national and international regulations that govern information on its products, both in the field of advertising communication and in the field of manuals related to each individual vehicle. Piaggio's LUM's (user and maintenance booklets) provide information on how to use the vehicle correctly, while encouraging users to drive in a safe and responsible manner, for instance, by:

- > always complying with speed limits and the Highway Code;
- > using all precautions for safe driving and passive safety systems (e.g., wearing a helmet when riding motorcycles and scooters);
- > always being cautious and paying the utmost attention when driving, especially when road conditions are wet and slippery;
- > refraining from altering vehicle performance: it is forbidden by the law and dangerous for driving safety.

#### Dealer

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives
Improve and update support tools for the management of the relationship governed by the concession	<ul> <li>Introduction of the Dealer Portal completed on the main European markets.</li> </ul>	<ul> <li>Dealer Portal introduced in the main European markets as planned.</li> </ul>	<ul> <li>Implementation and development of the Motoplex Format in the main European markets.</li> </ul>	> Improvement of the service level offered to dealer and end customers.
contract.		Introduction of the		> Improvement of the
	<ul> <li>Constant improvement of relationship management</li> </ul>	Motoplex as a new format for the Retail channel.	> Improvement in identification and quality of the offering.	customer experience at sales point and gaining of customer loyalty.
	processes with the network.	<ul> <li>Dealer training and conventions organised in individual</li> </ul>	<ul> <li>Development of the digital sales point.</li> </ul>	
		markets.	<ul> <li>New Piaggio</li> <li>Commercial Vehicles website.</li> </ul>	

The Piaggio Group has always been customer-oriented and focused on their satisfaction. As such, Piaggio constantly analyses their needs and requirements against a global background of great change, directing increasing efforts to this task. Mobility, safety, efficiency and innovation are

the concepts that drive our actions, which must be transferred through the creation of strong relationships with the commercial network – a key aspect in ensuring customer satisfaction.

Dealer management is based on trust, honesty in business dealings, transparency in contractual commitments, courtesy and cooperation. Furthermore to ensure that the customer-centric approach is present at all stages of the commercial process, the network is guided in two directions: on the one hand towards respecting the principles set out in company procedures, the Piaggio Code of Ethics and Guidelines for Conduct published on the website www.piaggiogroup.com, and on the other towards keeping up-to-date with, understanding and learning new information provided by the Group in terms of customer approach as well as content, whether regulatory in nature or strictly relating to the product.

The main commitment consists in overseeing the quality of the distribution to guarantee reliability, transparency and continuity of service throughout the life-cycle of the customer. Innovation is one of the key levers in this process, which translates into optimising operating activities but above all into implementing new services for dealers and end customers, made possible by technological innovation and constant review of relationship-building processes with a view towards simplification and transparency.

Dealers and their personnel represent the main communication channel for managing customers and activating the company's brand, assisted by the Group's Customer Service activities. Product quality and customer service in general are the Company's top priorities.

Against this background comes the introduction of the new Retail format concept, called Motoplex, developed by Piaggio, which aims to create a new and unique language for the sales network so as to bring individual dealerships up to date in visual and service terms.

Our commercial partnership is therefore based on a combination of company tools including the Dealer Portal and the Marketing Portal, designed to keep the flow of information from the Piaggio Group to the grass roots fast and consistent. It is also worth noting the activities to improve the knowledge and expertise of dealerships through periodic meetings, such as Road Shows, Dealer Meetings to discuss individual products and technical training.

#### New Retail Format: Motoplex

Each Piaggio Group brand needs the right location to best express its own values and enable customers to truly experience it. For this reason, Piaggio has created two new and revolutionary "concept stores" first in Mantua and then in Milan, to act as forerunners in developing the dealer network to ensure that customers receive a superior service while also strengthening the ability to transmit the brand's values through the sales point.

Motoplex was designed for this very purpose: building exclusive, well-defined spaces focused on each Piaggio Group brand, connecting the physical and digital environments and creating a true motorcycling experience in a high quality space to inform and engage customers like never before. Thanks to creative and highly interactive presentation content, the judicious use of technology greatly facilitates the sales process; the comfortable lounge areas create spaces to meet and share experiences.

The Motoplex complex revolves around the idea of using "brand islands" that allow the customer to truly experience the brand in question through presentations of the vehicle, accessories and communications.

By producing a book specifically for the dealer network, Piaggio has given its individual local sales entities guidelines for the proper adaptation of the Motoplex approach. At the same time, it has begun to develop and implement the new sales format in major city centres both in Italy and abroad, with the aim of broader expansion over the next two years.

#### Dealer Portal

The Dealer Portal is the daily interface between the Company and the dealership, guaranteeing a continuity that goes beyond physical presence or phone calls.

For years the Group has invested to make the communication channel that is the Dealer Portal more modern and oriented toward a reciprocal exchange of information, ensuring access to applications, information and technical and commercial documents, which can be used to management relations

with the market according to standards and rules that can be shared in real time. As in previous years, access is personalised according to the profile assigned to the dealer by the dealership contract. Specifically, the Dealer Portal enables dealerships to:

> get informed on promotions and product sales tools;

- > access technical and administrative documents and sales literature in real-time;
- > learn and train their own staff on product maintenance and customer management techniques;
- > share corporate information, press releases, activities under way.

# Marketing Portal

The Marketing Portal ensures Dealers are kept up-to-date in terms of marketing tools and activities, ensuring the uniform presentation of the brand at local level.

The Portal is connected to the Dealer through a single-authentication system, giving it personalised access depending on the brands it deals with and allowing it to:

- > access promotional communication campaigns provided by the Group in line with company policy;
- customise these campaigns according to local requirements, while being consistent with corporate guidelines;
- > access content about point of sale material, product brochures and stationery materials (letterhead/ business cards, etc.), directly managing orders of the quantities required for its activities;
- > access product information, in terms of photos of the available range, sales manuals, institutional and editorial videos.

In addition, the Marketing Portal allows the company to monitor the use of these materials by dealers through easy access to statistics and breakdowns calculated in real time on the platform.

# Dealer meetings and training

Training and meetings with sales networks are a constant part of Group activities. Examples include the local dealer conventions (Road Shows), workshops on specific topics, the pilot tests on panels of dealers for new projects and, last but not least, technical training. The aim of all these activities is to ensure that Group and dealer initiatives are effectively translated into ways to manage customers that build customer loyalty and consolidate the Group's reputation on the market.

The Group also promotes responsible sales techniques, based on information that is transparent, complete and conforming, given to customers during all stages of the sales process.

# Customers

The Piaggio Group has always seen the needs of customers and their satisfaction as its priority. In this customer-centric approach, the entire organisation is geared towards ensuring that innovation and the Group's history and tradition are translated into providing end-users with the best possible product experience and service. Customer Opinion Surveys and Customer Service comprise the customer engagement tools for building enduring customer relationships based on trust.

The Group pursues continuous innovation in its customer relationship management tools, alongside its Executive and Dealer Dashboard, which are designed to ensure that shared quality and service standards for managing sales processes are taken up across the organisation (company front-end). Listen to the customers, bringing their needs into the organisation and orienting it to satisfy them is the role of the "Customer experience" function.

## Customer Experience

Over time, Piaggio has created and established a customer engagement platform in the main markets where the Group's products are sold, to understand the changing expectations of customers and assess the effectiveness of its initiatives.

The main items studied and monitored, also based on benchmarking with leading competitors are:

- > the motivations for choosing a brand and the fundamental features of products and services;
- > the adaptation of sales and assistance structures to satisfy specific needs;
- > brand awareness and loyalty.

In Europe, the research and analysis methods used in previous years to measure product and service experience were continued in 2015 (phone interviews on new products and web surveys on the overall range). In addition, the results of specific research on the decision-making process in purchasing two-wheeler vehicles were presented. This survey made it possible to segment the market on the basis of customers' buying habits, identify the main touch-points that influence decisions, and identify knowledge and perception of the Group's various brands in its main markets (Italy, France, Germany and UK). All strategic and tactical marketing activities have therefore been designed and realised in light of this information.

Product reliability and perceived quality are still the key factors for customer retention: all comments received from customers were used to provide product innovation and development teams with information to supplement data from defects under warranty and technical tests and trials.

In terms of the Vietnam market, the traditional product and service experience telephone surveys were flanked with "welcome calls" made by Piaggio Vietnam personnel a few days after purchases for 100% of customers, to evaluate the effectiveness of the sales network in transferring the Brand values to end customers. In addition, as in Europe, specific research was carried out on the decision-making process involved in buying a scooter, which identified the customer segments and touch-points to focus on in Vietnam to build market share.

In the Indian market, Product and Service experience measurement began in 2015 in the main states where Vespas are sold. The research results allowed us to find out customers' opinions on products and services and identify strengths and weaknesses to work on in order to increase positive word of mouth – the real engine of growth in market share, especially in Asia.

In total, in the whole world, about 66,000 two-wheeler owners were contacted in 2015.

All the information on customer experience is shown and managed on a "Let's Keep in touch with our customers" portal which has been completely overhauled with the addition of simple dashboards, updated in real time, used to monitor customers' opinions and feedback. The portal contains results from the past 4 years and can be used for trend analyses.

The portal contains a specific section for downloading customer experience documents, as well as a "web discussion" section where it is possible to share ideas, tips and read other viewpoints.



Home page dedicated to Customer Experience

The platform shared with all in-house players offers monitoring of the perceived value of innovations adopted not only at a product level, but also in services.

Types of indicators used by Piaggio to monitor Customer Experience

	Analysis scope		
	Brand/Product	Service	
Net Promoter Score Index	Х	Х	
Loyalty - commitment to repurchase	Х	Х	
Customer Satisfaction Score	Х	Х	
Level of satisfaction on specific aspects and their relevance	Х	Х	
Defect rate perceived by the customer	Х		
Defect severity	Х		

In 2015, specific surveys were also carried out in Europe on the accessories market, which allowed us to find out about the degree of loyalty of the sales network in this highly competitive business, to understand the popularity of the current range, and to identify in detail the needs of customers in terms of customisations.

Finally, for the development of the merchandising business, exploratory research was carried out in some strategic markets in which the Group does not currently have a direct sales network, in order to discover any future business potential.

#### Web Presence

Increasing use of technology and digital media has significantly changed the way that customers search for the information they need during the purchase process.

Today about 80% of target buyers go to a dealership with a clear idea of the models they are interested in, having already carried out online research, and 34% expect an integrated experience between physical and digital channels.

In recognition of the fact that every customer is a digital customer, but that not all customers are equal, in 2015 Piaggio initiated a major digital transformation process with two objectives. On the one hand Piaggio wanted to redesign its customer experience, using digital media to help target buyers with the purchasing process, by providing an integrated experience between physical and digital channels that is consistent and increasingly customised to the actual characteristics and needs of each customer. On the other hand the project is designed to increase the amount of data relative to all phases of the purchase process and manage it, bringing great benefits for the company: better knowledge of the habits, needs and interests of its clients for personalised management of services, offers and communications.

The Digital Transformation will see the Piaggio Group become a true "customer-centric" organisation. It is thought that the project will result in an increase in preference for the Group's brands and improved satisfaction and customer loyalty, which are undoubtedly linked to outcomes including market share and turnover.

In 2015, the digital presence of the Group's main brands was also further consolidated by the creation of new digital assets at global level. In particular, to promote the line of accessories for Moto Guzzi customisation, a new digital shop window was launched at www.motoguzzigarage.com together with a series of documentaries on Moto Guzzi customisers.

Finally, the group continues to strengthen its social media presence with daily posting of content and interaction with fans on Facebook, Twitter, Instagram and Pinterest.

#### Customer service

Customer service, together with the dealer network, represents the most important channel for our relationship with customers.

The Group's Contact Center Project operates in a multichannel environment, by contact and customer

targets, and has a virtual on-line space on the SAP CRM platform for all main European markets - Italy, France, Spain, Germany, Benelux and Great Britain, as well as for the USA, Indonesia and Vietnam. In India, another management tool specifically developed for this market, was implemented. There were 65,400 managed contacts in Europe and more than 3,500 in USA, Vietnam and Indonesia in 2015; problems with products and/or services accounted for 20% of calls for assistance.

The Group's level of service on the main market was up to par with outstanding standards for the sector: indeed, 85% of the calls are managed within 30 seconds and the average time for solving the requests barely goes over 24 hours.

The platforms are all characterised by standardised management of customer reports that help set Group-wide response standards, while allowing real-time management of all the markets and functions involved in customer management.

# Vespa World Club

Since 1946 Vespa has been attracting the attention of its users, initially spontaneously and later organised and assisted by the Parent Company, they started to lay the foundations for Vespa Clubs which we still have. In 2006, the Piaggio Group and the Piaggio Foundation established the Vespa World Club (VWC), a non-profit association, created to oversee the management of Vespa Clubs, to preserve the fleet of vintage Vespas still in circulation and help collectors find and restore vintage scooters and continue to organise rallies and great races in Europe and all over the world, guaranteeing Vespa owners outstanding-quality events.

In particular the Vespa World Club:

- > promotes initiatives and coordinates social, tourist, sports and competitive events;
- > establishes bodies representing national Vespa Clubs vis-à-vis all national and international organisations;
- > holds trophy events, rallies, competitions, shows, exhibitions, congresses, conferences and meetings;
- > deals with and acts in the interests of members;
- > promotes and provides training on road safety and awareness;
- > promotes studies and historical research work on relations between Vespa and the community;
- > provides a channel for the Company to reach fans.

# 2015 Activities

The Vespa World Club continues to grow and expand. The membership trend and the number of Vespa Clubs in the world and Italy continue to rise. The Vespa Club Italia alone has more than 62,000 Vespa owners. In 2015, the VWC organised the following events:

- > Vespa World Days (global tourist rally) held in Bjograd na Moru (Croatia), with more than 4,000 registrations. Held in June, this was the biggest event celebrated by the Vespa Club in 2015;
- > The Tourism Vespa Trophy which, as usual, required the support of the entire European Dealer sales network who handled certifying the number of Vespa riders of the various participating Vespa Club teams, certifying that they passed by the shop;
- > Vespa Rally European Championship which this year involved 3 stages of racing: Mannheim (Germany), Vienna (Austria) and Pontedera;
- > Vespa Raid European Championship, held in Jesolo;
- > The Vespa International Historical Register was held in Belgium for the first time;
- > EUROAPE, held in Trevi (Perugia).

#### Moto Guzzi World Club

The Moto Guzzi World Club was established in 2002 with a view to:

- > promoting interest, awareness and the historic value of the Moto Guzzi brand and motorcycles;
- > creating and developing bonds between the owners of Moto Guzzi motorcycles;
- > organising events, meeting, conferences and competitions;
- > promoting national and international motorcycle tourism and rediscovering and promoting local

- touring opportunities thanks to club activities and the exchange of information between members;
- > creating and developing ties with non-profit organisations and other charities and sports and nonsports associations with a social, humanitarian or environmental mission, etc., which can benefit from the initiatives promoted by the Club in the motorcycling world and other sectors;
- > promoting relations with the parent company and co-ordinating its own activities and those of its members with the work of other national and international brand-related clubs.

Today, after 13 years of activity, Moto Guzzi World Club boasts direct members and 82 recognised clubs in Italy plus:

- > 6 clubs recognised in America, Asia and Australia, representing approximately 7,500 members;
- > 20 clubs recognised in Europe, representing approximately 5,000 members.

# 2015 Activities

Over the course of 2015 the Moto Guzzi World Club:

- > organised a national rally in Chieti;
- > organised a product-specific event (V7 Day);
- > supported various rallies organised by recognised clubs;
- > promoted and developed the "Moto Guzzi Trophy", safe economy run, on 6 Italian circuits (Varano dè Melegari, Imola, Magione, Franciacorta, Vallelunga, Misano) and dedicated to vintage motorcycles;
- > offered organisational and logistic support to the inventors of the Aprilia Cup, an equivalent competition to the Moto Guzzi Trophy, which took place on the same dates.

The rally of the "Mediterranean Area" was also held in Sicily, where the Guzzi clubs from Greece, Malta and Albania get together with the Moto Guzzi Club Aquile dell'Etna, Moto Guzzi Club Aquile e Rose di Calitri and Moto Guzzi Club Capo di Leuca.

This last club finished the calendar of official events with the "Christmas Guzziata" (December) stopping at various locations around Salento.

# Responsible management of the supply chain

Piaggio Group produces vehicles that are sold under its brand on the various markets around the world. The only exception is the vehicles purchased by the Chinese subsidiary Zongshen Piaggio Foshan and supplier Jincheng Group (about 35,000 pieces in 2015, equivalent to 6.8% of the vehicles sold).

Piaggio is a leader in engine technology and produces engines at its plans both for internal production and to meet the demand of other manufacturers.

All the other components that constitute a vehicle are purchased externally and assembled incompany.

# <u>Italian plants</u>

In 2015 Italian plants purchased raw materials, merchandise and spare parts for an overall value of 324 million euros (excluding complete vehicles) from about 800 suppliers.

The first ten suppliers made up 20% of the total purchases.

Geographic localisation of the suppliers of Italian plants

<b>2015</b> 71%	<b>2014</b> 69%	<b>2013</b> 76%
	69%	76%
18%	18%	15%
2%	4%	1%
7%	7%	6%
1%	1%	1%
1%	1%	1%
	7% 1%	2%         4%           7%         7%           1%         1%

In 2015 payments were made to suppliers for about  $\in$  664 million.

Indian plants

In 2015 plants in India purchased raw materials, merchandise and spare parts for an overall value of 246 million euros from about 900 suppliers.

The first ten suppliers made up 41.2% of the total purchases.

Geographic segment	2015	2014	2013	Geographic localisation
India	99%	99%	99%	of the suppliers of Indian
Other	1%	1%	1%	plants

In 2015 payments were made to suppliers for about € 356 million.

<u>Vietnamese plants</u>

In 2015 plants in Vietnam purchased raw materials, merchandise and spare parts for an overall value of 100 million euros from about 210 suppliers.

The first ten suppliers made up 37% of the total purchases.

Area Geografica	2015	2014	2013
Vietnam	56%	55%	55%
China+Taiwan	27%	25%	27%
EMEA	11%	12%	12%
India	2%	3%	4%
Other	4%	6%	3%

Geographic localisation of the suppliers of Vietnamese plants

In 2015 payments were made to suppliers for about € 356 million.

Group relations with suppliers are based on loyalty, impartiality and respect of equal opportunities of all parties concerned.

The Piaggio Group is convinced that responsibility is a commitment which goes beyond the boundaries of the Company and must positively involve everyone in the Company-supplier chain; this is why suppliers worldwide that wish to do business with Piaggio have to sign the general conditions of supply of the Piaggio Group which include the "Code of Ethics and Guidelines for doing business"; audits are regularly conducted on the Group's direct material suppliers to ensure their effective compliance.

In keeping with the Group's Policy, every year the Purchasing Unit tries to improve the procurement process by promoting the technical skills of buyers and focussing the process on management of the various goods' categories.

Over the last few years, Piaggio Group Management has started a process of common development with its suppliers by setting up a specific department called "Vendor Assessment" as well as assigning the "Finance" Function to define and monitor activities of possible risks areas involving financial and corporate issues, to protect and guarantee the complete independence between corporate areas involved in the procurement processes, as well as to place priority on meeting the needs of all stakeholders.

#### Corporate Finance Area

Activities related to monitoring economic, financial, corporate and organisational reliability of Strategic Suppliers are the responsibility of the Corporate Finance Area.

The mapping of the Piaggio Group's Strategic Suppliers continued in 2015. In 2016 a verification of

principal partners will begin, also concerning Compliance with opportune tools (database). In addition, the Financial Assessment activity of the Aprilia Racing Strategic Suppliers will continue along with an analysis of the reliability of the main Sponsor Companies of the Team Aprilia Racing.

Dialogue and interaction with suppliers is continually improved in terms of quality and tools used; the purpose is to monitor the financial performance and rating of suppliers, in advance and on an ongoing basis. All possible company variations that may affect perceived risk are presented to a Suppliers Committee (comprising the Managers of Materials and Components Purchasing, Tools and Services Purchasing, the Finance Manager, the General Finance Manager, the Product Development and Technologies Department and Manufacturing and Production Technologies Department) during periodic meetings in order to identify corrective and performance improvement actions, if critical issues are identified.

# Vendor Assesment

The purpose of the Vendor Assessment department within the Piaggio Group is to forge a long-lasting, mutually satisfying relationship with a network of highly qualified partners. In addition to managing the Supplier Qualification Process, the function has the task of doing an evaluation of the purchasing performance through Vendor Rating Campaigns.

Supplier relations are defined by specific Company processes comprising two fundamental stages: new supplier qualification and supplier monitoring.

New supplier qualification is an inter-functional process based on specific standards that lead to a Company being included as a Potential Supplier in the Supplier List, for its chosen goods' category; after an initial documentary pre-qualification stage, a multidisciplinary, supplier qualification team is involved, with specific positions giving a technical, economic/financial and business rating on goods' categories.

Supplier monitoring takes place during at least two annual vendor rating sessions (Vendor Rating Campaigns). Performance is rated based on the quality of business relations, technical/scientific cooperation, compliance with delivery plans and the quality of supplied products. This provides a reference framework for procurement strategies and actions concerning suppliers.

The process concluded during the year had the following outcomes:

- > assignment of a Vendor Rating Index, which measures the performance of the vendor using a weighted average of the assessments made by corporate functions (for direct materials, the relevant functions are Purchasing, R&D, Quality, Manufacturing and Spare Parts);
- > assignment of a Criticality Rating that takes into account both the reliability of the supplier in economic and financial terms and the Quality function's assessment, to decide whether a supplier is "critical" for the purposes of granting them new supply agreements.

At present, Criticality Ratings have been assigned to most Group suppliers of European production sites only. In 2015 supplier ratings covered over 99% of expenditure on purchasing of direct materials and 55% of equipment and services.

The assessment process has also been performed in Vietnam, with an initial document-based preassessment stage and a technical assessment stage. Assessment of economic and financial reliability has been performed at corporate level by the Finance Area.

Plans have been made to combine the Supplier Assessment with CSR information, such as the existence of a code of ethics and Sustainability Report, in the future.

# Suppliers portal

The Suppliers Portal, based on the SRM-SAP system, has been designed and implemented to continually improve the effectiveness and efficiency of Company processes.

In particular, the Portal enabled the following targets to be reached:

- > forge an important partnership with suppliers, using self-service tools, connectivity and sharing documents and information;
- > make purchasing processes more efficient, by implementing automatic tools and ensuring greater compliance with purchasing procedures.

The "SRM – Suppliers Portal" system is a computer tool to exchange information and documents on purchasing materials, components, equipment and services in real time between all Company functions and suppliers, so as to guarantee the proper and transparent management of all purchasing process stages: purchase requests to purchase orders, price lists and supply programmes, incoming goods, invoices and information on payments.

The Suppliers Portal has a number of benefits for both Piaggio and Suppliers. These include fewer manual activities, better quality, more accurate information, shorter Company process processing and communication times, less use of paper (including digital signatures) considerably fewer invoicing anomalies and visibility of the entire authorisation process from purchase requests to orders.

The Suppliers Portal is active in Italy, India and Vietnam. Substantially, the website is a standard tool for management of direct materials suppliers in all three countries, and the larger part of those who supply vehicles and services in Italy and Vietnam.

# Supporting local communities

Commitment	2015 Objectives	2015 Results	2016 Objectives	Mid-term objectives
Development of relations with local communities where the Group operates.	Organisation of cultural events at the Piaggio Museum.	<ul> <li>Organisation of many exhibitions, conferences and cultural events at the Piaggio Museum.</li> </ul>	<ul> <li>Development of collaborations to promote and build the value of Piaggio and its local area.</li> </ul>	<ul> <li>Development of relations with local institutions to raise the competitiveness and attractiveness of the local areas in which the Piaggio Group operates.</li> <li>Foundation and Museum: completion of cataloguing, conservation and restoration work on</li> </ul>
				ana restoration work on historical vehicles which belong to the various Group brands.

Piaggio Group recognises the social importance of communication and develops relations with associations (UPA), public entities (Confindustria [Italian manufacturers' association]), Ancma [the National Association of Manufacturers of Motorcycles and Accessories], Anfia [National Association of Automotive Manufacturers]), to promote eco-compatible mobility and spread the values of technological innovation in favour of the end-user and to save the environment.

The Group is also part of an international network of laboratories, university-run and private research centres at the cutting edge in their fields of specialisation.

# Foundation, museum and historical archive

The Piaggio Foundation, a non-profit institution, carries out the function of meeting place and cultural reference for the territory.

In 2015 the Piaggio Foundation continued to concentrate its activities on building the value of Piaggio's history, its local area and its products. Ample space was also dedicated to educational

activities for young people and children and the promotion of creativity in all its forms.

In 2015 the project "Museo e dintorni" [The Museum and its Surrounds] was launched. Thanks to the development of relationships with scientific, cultural and tourism partners, the project has helped to create a network of beneficial partnerships across an increasingly wide area.

The Piaggio Museum also joined Piccoli Grandi Musei Toscana '900. Musei e percorsi d'arte [Little Big Museums. 20th Century Tuscany. Museums and Art Itineraries] – an initiative promoted by the Tuscany Region and the Association of Bank Foundations of Tuscany.

The Piaggio Museum was also an institutional partner of Valdera Expo 2015, staging two events in Milan at the Chiostri dell'Umanitaria: Friday 11 September "Memoria Notturna. Un viaggio in Vespa attraverso Milano, Roma e Palermo" [Nocturnal Memoir. A journey by Vespa through Milan, Rome and Palermo] – a short film by Corrado Fortuna, part of the visual project by the photographer Paolo Belletti, and, on Saturday 12 September "Una passione per sempre: la Vespa racconta l'Italia" [An enduring passion: Italy from a Vespa] – an event with the cinema expert Alfredo Baldi and presentation of his short film that uses scenes from cult films to tell the nearly 70-year history of the Vespa.

The cultural programme this year again included exhibitions, conferences, shows, concerts, guided tours and educational projects and was, as usual, busy and varied, bringing in a number of attendees in line with last year at approximately 44,000.

# Exhibitions

Exhibition programming during 2015 focused on innovation, design, technology and Italian excellence. Among the exhibitions we would highlight:

- > Giovanni Campus. Mostra Antologica 1965 2014 [Retrospective, 1965-2014]: sculptor, painter and poet, this exhibition celebrated half a century of Campus's work.
- Andrea Gnocchi. Iconico [Iconic]: this exhibition looked at some of the subjects that have been a perennial feature of his art: cityscapes, sporting legends, Vespas and Fiat 500s-of course-and his brand new "banknotes".
- Street-art with OZMO: an event sponsored by the Pontedera Municipality and the Piaggio Foundation, representing the conclusion of Educational Workshop offered by Ozmo from January to May for highschool students in Pontedera.
- Memoria Notturna, un viaggio in Vespa attraverso Milano, Roma e Palermo [Nocturnal Memoir. A journey by Vespa through Milan, Rome and Palermo]: the idea behind this exhibition came from a project by the photographer Paolo Belletti that aims to recount – including through a short film by Corrado Fortuna – something that few of us often see: the city at night.
- > Gaber se fosse Gaber [If Gaber was Gaber]: exhibition dedicated to the great singer-songwriter and cultural figure.
- > La Vespa e la farfalla. Un secolo di Butterfly al Museo Piaggio [The Vespa and the Butterfly: A Century of the Butterfly at Piaggio Museum]: a little over 100 years since Madame Butterfly's first performance in 1904, this exhibition celebrates one of the best-loved works of Giacomo Puccini and creates a connection between three of the most famous icons of Italy: opera, fashion and the Vespa.
- > Giuseppe Viviani Mostra antologica. Opere uniche, dipinti e altre tecniche [Retrospective: unique works, paintings and other techniques]: the exhibition presented the paintings and unique works made using various techniques of one of the most important artists from the local area.
- > Schizzi di luce [Rays of Light]: photo exhibition organised to celebrate the International Year of Light. The photographer and environmental engineer Maurizio Bacci exhibited his photos of the effects of light on and in water.
- > inVIAGGIO. Plurale 34. LXV MOSTRA DEL GRUPPO LABRONICO [65th exhibition of the Gruppo Labronico]: the 65th exhibition of the Gruppo Labronico, the venerable association of artists and art lovers founded in Livorno in 1920.

# Side events to the exhibitions hosted

A packed programme of cultural events was organised to accompany the exhibition La Vespa e la farfalla. Un secolo di Butterfly al Museo Piaggio:

- > Three operatic concerts: musical interlude on Giacomo Puccini with the soprano Maria Luigia Borsi; the opera recital "Omaggio a Puccini" [Tribute to Puccini] in collaboration with the fifth "Livorno Music Festival" organised by Associazione Amici della Musica di Livorno; the musical event "La madama Butterfly e l'esotismo in musica" [Madame Butterfly and Exoticism in Music] organised by mezzo-soprano Laura Brioli.
- A conference on the excellence of Made in Italy products, entitled "Bruna Niccoli racconta La Vespa e la Farfalla" [Bruna Niccoli on the Vespa and the Butterfly]. Professor Bruna Niccoli, an expert on the history of culture, examined the relationship between opera and fashion – without forgetting the legendary Vespa.

Events organised for other exhibitions:

Giovanni Campus Creative Workshop: two assistants from the non-profit Handling Onlus accompanied children to the Giovanni Campus exhibition, placing particular emphasis on his creativity and its free spirit.

# Concerts and shows

2015 was an landmark year for music, led by the major exhibition devoted to Puccini's Madame Butterfly. As well as the aforementioned concerts accompanying this exhibition, the other musical and theatrical events staged with the support of local music schools and the Municipality of Pontedera are listed below.

- > Concert by the Tuscan duo I Gatti Mézzi in collaboration with Musiche Metropolitane.
- > Concert by the Accademia della Chitarra.
- > Concert by the up-and-coming girl band The Peppermint.
- > Piano concert by the Schiavo-Marchegiano duo.
- > Show by the comic actor Paolo Hendel for a charity project.
- > Theatre production Gaber se fosse Gaber [If Gaber was Gaber], by Andrea Scanzi, to mark the exhibition mentioned above.
- > Cantina Jazz verso Expo [Jazz Kitchen on the Expo Trail]. Presentation evening of the Valdera Expo 2015 events, with music and tasting of typical products from the local area.
- > Theatre production for schools Storie migranti. Come sopravvivere nell'epoca dei destini incrociati [Migrant Stories - How to Survive in the Age of Crossed Destinies] organised with Unicoop Firenze.
- > A day with the famous guitarist *Phil Palmer* and a concert.
- > Fashion Show Modartech.
- > Concert by the pianist Maurizio Moretta.

In order to reach an increasing audience, various initiatives were sponsored in 2015 aimed at promoting culture, the territory and highlighting its best features.

#### Conferences

- > Design and Technology: ideare, progettare, comunicare e vendere [Design & Technology: Create, Design, Communicate and Sell]: the aim of the conference was to promote dialogue between industry professionals and students from secondary schools in Central Italy, looking at technology and its possible applications throughout the fashion supply chain, from design to sale.
- > Luce tra arte e scienza [The Art and Science of Light]: conference organised to celebrate the International Year of Light, with talks by lecturers from the University of Pisa and the National Research Council-CNR, looking at various physiochemical aspects of light.
- > Giovanni Gronchi e la politica estera italiana. 1955 1962 [Giovanni Gronchi and Italian Foreign Policy 1955 – 1962]: conference co-organised with the Municipality of Pontedera (birthplace of Giovanni Gronchi) and the "Giovanni Gronchi Centre for the Study of the Catholic Movement".

# Book launches

- > Launch of the memoirs of Pasqualino Sassetti "Con la Piaggio nel mondo" [Around the World with Piaggio].
- > Launch of "Effetto Werther" [The Werther Effect], a crime novel set in the Piaggio Museum.

#### Other hosted and sponsored events

Numerous events sponsored by the Piaggio Foundation were hosted in the Auditorium of the Museum. These included:

- > Tavola della Pace [Roundtable on Peace].
- > Rotary Forum on young people.
- > Conference on international cooperation.
- > Regional assembly of Cesvot voluntary associations.
- > Acem international assembly.
- > Conference entitled Giornata di idee sulla famiglia di oggi [Day of Ideas on the Family of Today] organised by the non-profit Handling Onlus.
- > Meeting/theatre production with Valdera high schools Adopt a Grandparent organised by the Lions Club.
- > Vegan Fest Pontedera: culture, conferences, music and theatre.

> La nutrizione Artificiale nei reparti Medici [Artificial Nutrition in Medical Practices]: guidelines, methodologies and opinions.

### Events and programmes dedicated to young people and students

- > Crea@tivity 10. An event that provides a bridge between creativity, technology, research, innovation and training. An opportunity to stimulate lateral thinking and knowledge transfer. The topics covered this year were: product design, communication design, mobility design, fashion design.
- > Awarding of the students who won the classical literature contest Certamen in Ponticulo Herae.
- > Awarding of the students who won the Math Games Contest.
- > Awarding of students who graduated with full marks from the High Schools of Valdera.
- > Lastly, the Educational Programme carried out by the Piaggio Foundation for young people, from preschool to university, on historical, artistic and economic topics.

#### Events organised in association with vespa clubs or other motorcycle clubs

- > Vespa in Costume Rally organised by the Vespa Club di Pontedera.
- > Porsche 356 Rally.
- > Vespa Rally in Pontedera.

# Publications

- > The second volume of the Tommaso Fanfani book series is currently being prepared, containing the papers from the conference dedicated to Giovanni Gronchi.
- > The first children's book published by the Piaggio Foundation has been produced, entitled Teseo e la Vespa parlante [Teseo and the Talking Vespa].
- > Preparation of the new catalogue of the Piaggio Museum continue, organised by the Piaggio Foundation.

#### Initiatives outside the museum

Like every year, the Museum's vintage vehicles and exhibitions with images and material from the Piaggio Historical Archive have been used for prestigious events.

The following is a list of the initiatives that involved a loan of vintage vehicles:

Event	Place	vehicle
Officine Farneto di Roma, in collaboration with "Le Cool Roma", hosted the first event in the capital to celebrate the world of the legendary Ape.	Roma	Ape Cassone conservato (1953)
	ROME	Restored Ape Cassone (1953)
Pisa-Walking in the City	PISA	Vespa 125 from Roman Holiday (1951), replaced in August with a Vespa 125 (1949)
Goodwood Festival of Speed	WEST SUSSEX	Vespa GS (1957)
Corporate Art - L'azienda come oggetto d'arte	ROME	Vespa Nespolo (2010)
Creativa Produzione. La Toscana e il design italiano 1950-1990.	LUCCA	Vespa 150 (1959)
International Gilera Rally	ARCORE	Gilera 4-cylinder with supercharger (1939), Gilera 500 VT with 3 valves (1933)
La Valdera at Fuori Expo	MILAN	Vespa GS 150 (1957)
The shape of things to come. Event organised by Piaggio Fast Forward	MILAN	Vespa 98 (1946)
Eicma – 73rd Global Exhibition of Bikes and Motorbikes	MILAN	Vespa 98 (1946)

Regarding collaborations in terms of loans of archive materials, we highlight *II grande gioco dell'industria - 50 + 1 oggetti che hanno fatto la storia dell'impresa italiana* [The Great Game of Industry – 50+1 objects that have made the history of Italian business], an exhibition promoted by Museimpresa and II Sole 24 Ore Milano, which enjoyed great public success and received high levels of media attention.

# Historical Archive

Over the course of 2015, as usual the historic archive made a crucial contribution to many of the Piaggio Foundation's activities. It continued its valuable role in helping with research and the management of requests from academics and researchers, as well as supporting the educational activities of the Museum and iconographic and document research for use in books and publications and for decorating internal and external exhibitions and events.

In addition, cooperation with Piaggio has also continued in activities of historical consulting and the selection and supply of images used at international exhibitions and in publications, particularly with regard to the search for imagery for the monograph dedicated to 130 years of Piaggio.

The relationship with the agency responsible for Piaggio's social media channels has developed significantly, often using images from the Historic Archives. Finally, as in every year, the support provided for the selection of historic images to use at the Vespa World Days (Croatia) and Eicma 2015.

# Charity activities and sponsorships

Piaggio continued the Vespa for Children project in 2015, a humanitarian initiative for charity which, by involving the Group's companies, intends to create charitable projects aimed at social solidarity in the fields of health and social care for children in developing countries.

In particular, during 2015 Piaggio Vietnam donated around €100 thousand to the Bambino Gesù Children's Hospital (OPBG) in Rome, which has been working for several years with the National Hospital for Pediatrics in Hanoi (Vietnam) to build a specialised urology centre for children at the Vietnamese hospital. The initiative comes from the need to develop care for children afflicted with complex urology pathologies - such as genital-urinary system malformations and kidney failure - and thus needing elective surgery, dialysis and kidney transplants. The project objectives have a dual aim: clinical and financial assistance, to provide specialised urology care for 2,000 children and training for Vietnamese medical personnel to learn the scientific knowledge and expertise for urology and urology-related surgery and kidney transplants from living donors.

The Indian subsidiary has also supported a number of local initiatives for non-profit organisations that work in the fields of health and education.

In 2015 – also under the aegis of the Vespa for Children project – Piaggio participated in various events to help the community by donating vehicles for charity auctions.

The Group also took part in some very important cultural events, like for example the Mantua Literature Festival, not to mention other events organised by the Vespa World Club.

Lastly, for some years now - for the end of the year holidays - together with the entire Immsi Group, Piaggio Group fosters educational and rehabilitative activities for disabled children affected by brain damage by making a donation to the "Casa del Sole Onlus" association, in the name of all the employees of the Immsi and Piaggio groups. In forty years of activities, the non-profit making organisation Casa del Sole Onlus has assisted over five thousand children affected by brain damage and been a valuable source of help for their families.

# Ape Way Ethiopia 2015: Mission accomplished

ApeWay Ethiopia 2015 is an original initiative focusing on Ape: three Taurinorum Team crews travelled for 18 days using three Piaggio Ape City Passenger vehicles, covering 2,500 km through the south of Ethiopia. ApeWay started as a promotional road show to build the Piaggio brand – and in particular the Ape brand – by promoting a business that is socially and ethically integrated with the local area and communities. The tour started on 6 November 2015 and passed through a number of cities, including Addis Ababa, Bishoftu, Hosaena, Arba Minch, Konso, Jinka, Shashmene and Ziway.

The Ape was the star of an incredible "slow journey" through the local areas to promote integration, by adopting a multicultural and inclusive approach. ApeWay also had a social purpose: to highlight some of the projects carried out by Italian NGOs (CVM, Community Volunteers for the World, and CIAI, Italian Centre for Children Aid) which have been operating in the country for a long time.

The three ApeWay crews also worked with a number of initiatives, to try to bring them to a wider audience, including projects related to water development, health information, education and the protection of children.

The aim of the tour was also to show Ethiopia the utility, versatility and robustness of the Ape as a way to transport goods, by introducing the three-wheeler truck to agricultural and urban communities where NGOs work for the development of the territory. Ape can play an extremely valuable role in the mobility of people and goods; specifically, it can meet the needs of small communities that need to transport agricultural products, timber, water and materials from place to place, from the countryside to the city market, from a water well to a village. In Ethiopia, the Ape can therefore act as a key driver of local economic development and provide an opportunity for young people who want to start their own businesses.

ApeWay went all the way down to the Omo Valley, in the far south of Ethiopia, crossing countryside and cities, often on rough roads and in all weather conditions: an event was held at each stop to explain how the Ape is an accessible vehicle that can make a significant contribution to improving quality of life.

The ApeWay project also involved a major promotional campaign on road safety. In fact, Ethiopia suffers a high number of road traffic accidents, often between pedestrians and vehicles and especially at night. The issue has attracted the attention of institutions both at national level (through the National Road Safety Action Plan) and internationally through the WHO (World Health Organization) and the FIA (Fédération Internationale de l'Automobile), which are behind the Action for Road Safety campaign. The three ApeWay teams distributed over 5,000 bracelets and hundreds of high-visibility jackets to the Ethiopian people: a small contribution that could save lives.

# TABLE OF GRI-G4 INDICATORS

# Table of GRI-G4 indicators

	G4 Content Index for "In accordance"			
GENERAL STANDARD DISCLOSURES Reference				
1. STRATE	GY AND ANALYSIS			
G4.1	Statement from the most senior decision-maker of the organization.	Letter from the Chairman		
2. ORGAN	NIZATIONAL PROFILE			
G4.3	Report the name of the organization.	The commitment of the Piaggio Group		
G4.4	Report the primary brands, products, and services.	Group profile – Brands		
34.5	Report the location of the organization's headquarters.	Group profile		
G4.6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	Group profile		
G4.7	Report the nature of ownership and legal form.	Corporate Governance		
G4.8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	Group profile		
G4.9	Report the scale of the organization.	Group Profile - Piaggio - facts and figures		
G4.10	Report the total number of employees by employment contract and gender. Report the total number of permanent employees by employment type and gender. Report the total workforce by employees and supervised workers and by gender. Report the total workforce by region and gender. Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	Developing human resources - Staff		
G4.11	Report the percentage of total employees covered by collective bargaining agreements.	Developing human resources - Industrial relations		
G4.12	Describe the organization's supply chain.	Responsible management of the supply chain		
G4.13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.	Environmental Sustainability Developing human resources - Competitive organisation		
G4.14	Report whether and how the precautionary approach or principle is addressed by the organization.	The environmental dimension The product dimension		
G4.15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	The product dimension - Funded national and Europear projects		
G4.16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: • Holds a position on the governance body • Participates in projects or committees • Provides substantive funding beyond routine membership dues • Views membership as strategic This refers primarily to memberships maintained at the organizational level.	The product dimension - Funded national and Europear projects Supporting local communities		

GENERAL	STANDARD DISCLOSURES	Reference
3. IDENTII	FIED MATERIAL ASPECTS AND BOUNDARIES	
G4.17	List all entities included in the organization's consolidated financial statements or equivalent documents. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report. The organization can report on this Standard Disclosure by referencing the information in publicly available consolidated financial statements or equivalent documents.	Methodological note - Report boundary
G4.18	Explain the process for defining the report content and the Aspect Boundaries. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	Methodological note
G4.19	List all the material Aspects identified in the process for defining report content.	The commitment of the Piaggio Group - Sustainability strategy Methodological note - Materiality analysis, Report content
G4.20	For each material Aspect, report the Aspect Boundary within the organization.	Methodological note
G4.21	For each material Aspect, report the Aspect Boundary outside the organization.	Methodological note
G4.22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	Methodological note
G4.23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	Methodological note Developing human resources - Organisational developmen
4. STAKEH	IOLDER ENGAGEMENT	
G4.24	Provide a list of stakeholder groups engaged by the organization.	The commitment of the Piaggio Group - Stakeholders' involvement
G4.25	Report the basis for identification and selection of stakeholders with whom to engage.	The commitment of the Piaggio Group - Stakeholders' involvement
G4.26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	The commitment of the Piaggio Group - Stakeholders' involvement
G4.27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	The commitment of the Piaggio Group - Stakeholders' involvement

GENERAL	STANDARD DISCLOSURES	Reference	
5. REPORT	PROFILE		
G4.28	Reporting period (such as fiscal or calendar year) for information provided.	Corporate Social Responsibility Report Methodological note	
G4.29	Date of most recent previous report (if any).	Corporate Social Responsibility Report Methodological note	
G4.30	Reporting cycle (such as annual, biennial).	Corporate Social Responsibility Report Methodological note	
G4.31	Provide the contact point for questions regarding the report or its contents.	Corporate Social Responsibility Report	
G4.32	Report the 'in accordance' option the organization has chosen. Report the GRI Content Index for the chosen option. Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.	Corporate Social Responsibility Report Methodological pote	
G4.33	Report the organization's policy and current practice with regard to seeking external assurance for the report.	Methodological note Report on the limited audit of the Corporate Social Responsibility Report	
6. GOVERI	NANCE		
G4.34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	Corporate Governance	
7. ETHICS	AND INTEGRITY		
G4.56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	Corporate Governance - Code of Ethics The commitment of the Piaggio Group	
MATERIAL	ASPECTS	Reference Omissions	
ECONOMI	c		
Aspect: Ec	onomic performance		
G4.DMA	Disclosure on management approach	Economic dimension - Determination and distribution of Added Value	
G4.EC1	Direct economic value generated and distributed	Economic dimension - Determination and distribution of Added Value	
G4.EC4	Financial assistance received from government	Economic dimension - Public grants and tax benefits	

MATERIAL	ASPECTS	Reference	Omissions
ECONOMIC	;		
Aspect: Ma	rket presence		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies	
G4.EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	Developing human resources - Reward policies	
G4.EC6	Proportion of senior management hired from the local community at significant locations of operation	Developing human resources - Diversity and equal opportunity	
Aspect: Ind	irect economic impacts		
G4.DMA	Disclosure on management approach	Responsible management of the supply chain Supporting local communities	
G4.EC7	Development and impact of infrastructure investments and services supported	Responsible management of the supply chain Supporting local communities	
G4.EC8	Significant indirect economic impacts, including the extent of impacts	Responsible management of the supply chain Supporting local communities	
Aspect: Pro	curement practices		
G4.DMA	Disclosure on management approach	Responsible management of the supply chain	
G4.EC9	Proportion of spending on local suppliers at significant locations of operation	Responsible management of the supply chain	
ENVIRONM	ENTAL		
Aspect: Ma	terials		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications The product dimension - Environmental compatibility of the product and the process	
G4.EN2	Percentage of materials used that are recycled input materials	The product dimension - Environmental compatibility of the product and the process	Only part of the components are reported (plastic)

MATERIAL	ASPECTS	Reference	Omissions
ENVIRON	/ENTAL		
Aspect: En	ergy		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications Environmental sustainability - Reduction of energy consumption	
G4.EN3	Energy consumption within the organization	The environmental dimension - Reduction of energy consumption	
G4.EN6	Reduction of energy consumption	The environmental dimension - Reduction of energy consumption	
G4.EN7	Reductions in energy requirements of products and services	The product dimension - Environmental compatibility of the product and the process	
Aspect: Wo	iter		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications The environmental dimension - Conserving water resources	
G4.EN8	Total water withdrawal by source	The environmental dimension - Conserving water resources	
G4.EN9	Water sources significantly affected by withdrawal of water	The environmental dimension - Conserving water resources	
G4.EN10	Percentage and total volume of water recycled and reused	The environmental dimension - Conserving water resources	
Aspect: Bio	odiversity		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications The environmental dimension - Biodiversity The environmental dimension - Conserving water resources	
G4.EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	The environmental dimension - Biodiversity	

MATERIAL	ASPECTS	Reference	Omissions
ENVIRONN	IENTAL		
Aspect: Em	issions		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications Dimension environmental - Reducing emissions of CO <sub>2</sub> and other pollutants	
G4.EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	The environmental dimension - Reducing emissions of CO <sub>2</sub> and other pollutants	
G4.EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	The environmental dimension - Reducing emissions of CO <sub>2</sub> and other pollutants	
G4.EN19	Reduction of greenhouse gas (GHG) emissions	The environmental dimension - Reducing emissions of CO <sub>2</sub> and other pollutants	
G4.EN20	Emissions of ozone-depleting substances (ODS)	The environmental dimension - Reducing emissions of CO <sub>2</sub> and other pollutants	
G4.EN21	NOX, SOX, and other significant air emissions	The environmental dimension - Reducing emissions of CO <sub>2</sub> and other The VOC pollutants	is reported
Aspect: Eff	luents and waste		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications The environmental dimension - Conserving water resources The environmental dimension - Waste handling and recovery	
G4.EN22	Total water discharge by quality and destination	The environmental dimension - Conserving water resources	
G4.EN23	Total weight of waste by type and disposal method	The environmental dimension - Waste handling and recovery	
G4.EN24	Total number and volume of significant spills	The environmental dimension - Soil contamination	

MATERIAL	ASPECTS	Reference	Omissions
ENVIRONM	IENTAL		
Aspect: Pro	ducts and services		
G4.DMA	Disclosure on management approach	The product dimension	
G4.EN27	Extent of impact mitigation of environmental impacts of products and services	The product dimension	
G4.EN28	Percentage of products sold and their packaging materials that are reclaimed by category	The product dimension - Environmental compatibility of the product and the process	
Aspect: Co	mpliance		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications Corporate Governance - Compliance with laws and regulations	
G4.EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Corporate Governance - Compliance with laws and regulations	
Aspect: Tra	nsport		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications The environmental dimension - Logistics	
G4.EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	The environmental dimension - Logistics	
Aspect: Ov	erall		
G4.DMA	Disclosure on management approach	The environmental dimension - Environmental certifications The environmental dimension - Environmental spending and investments	
G4.EN31	Total environmental protection expenditures and investments by type	The environmental dimension - Environmental spending and investments	

MATERIAL	ASPECTS	Reference	Omissions
SOCIAL LABOUR P	RACTICES AND DECENT WORK		
Aspect: Err	ployment		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies	
G4.LA1	Total number and rates of new employee hires and employee turnover by age group, gender, and region	Developing human resources - Staff	The report relate only to Italy
G4.LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Developing human resources - Reward policies	
G4.LA3	Return to work and retention rates after parental leave, by gender	Developing human resources - Diversity and equal opportunity	
Aspect: Lal	bour/management relations		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies Developing human resources - Industrial relations	
G4.LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	Developing human resources - Industrial relations	
Aspect: Oc	cupational health and safety		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies Developing human resources - Occupational health and safety	
G4.LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of workrelated fatalities, by region and by gender	Developing human resources - Occupational health and safety	The frequence index is reported for all production sites and lost da rate is reported fo Italy onl
Aspect: Tro	ining and education		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies Developing human resources - Developing human capital	
G4.LA9	Average hours of training per year per employee by gender, and by employee category	Developing human resources - Training	
G4.LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Developing human resources - Developing human capital	
G4.LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Developing human resources - Reviews	

MATERIAL	ASPECTS	Reference	Omissions
SOCIAL LABOUR P	RACTICES AND DECENT WORK		
Aspect: Di	versity and equal opportunity		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies	
G4.LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Developing human resources - Diversity and equal opportunity	
Aspect: Eq	ual remuneration for women and men		
G4.DMA	Disclosure on management approach	Developing human resources - Personnel management policies Developing human resources - Reward policies	
G4.LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	Developing human resources - Reward policies	
SOCIAL HUMAN R	IGHTS		
Aspect: Inv	restment		
G4.DMA	Disclosure on management approach	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
G4.HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
Aspect: No	on discrimination		
G4.DMA	Disclosure on management approach	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
G4.HR3	Total number of incidents of discrimination and corrective actions taken	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
Aspect: Fre	eedom of association and collective bargaining		
G4.DMA	Disclosure on management approach	Developing human resources - Industrial relations	
G4.HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	Developing human resources - Industrial relations	

MATERIAL	ASPECTS	Reference	Omissions
SOCIAL HUMAN RI	GHTS		
Aspect: Ch	ild labour		
G4.DMA	Disclosure on management approach	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
G4.HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
Aspect: For	ced or compulsory labour		
G4.DMA	Disclosure on management approach	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
G4.HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
Aspect: Hu	man rights grievance mechanisms		
SOCIAL SOCIETY			
Aspect: Loc	cal communities		
G4.DMA	Disclosure on management approach	Supporting local communities	
G4.SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Supporting local communities	
Aspect: An	ti corruption		
G4.DMA	Disclosure on management approach	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
G4.SO5	Confirmed incidents of corruption and actions taken	Corporate Governance - Code of Ethics Corporate Governance - Compliance with laws and regulations	
Aspect: Pul	blic policy		
G4.DMA	Disclosure on management approach	Corporate Governance - Code of Ethics	
G4.SO6	Total value of political contributions by country and recipient/beneficiary	Corporate Governance - Code of Ethics	

MATERIAL	ASPECTS	Reference	Omissions
SOCIAL SOCIETY			
Aspect: An	ti-competitive behaviour		
G4.DMA	Disclosure on management approach	Corporate Governance - Compliance with laws and regulations	
G4.SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	Corporate Governance - Compliance with laws and regulations	
Aspect: Co	mpliance		
G4.DMA	Disclosure on management approach	Corporate Governance - Compliance with laws and regulations	
G4.SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Corporate Governance - Compliance with laws and regulations	
SOCIAL PRODUCT	RESPONSIBILITY		
Aspect: Cu	stomer health and safety		
G4.DMA	Disclosure on management approach	The product dimension - Research guidelines; Applications Meeting customer requirements - Product quality and reliability	
G4.PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	The product dimension - Research guidelines; Applications Meeting customer requirements - Product quality and reliability	
Aspect: Pro	oduct and service labeling		
G4.DMA	Disclosure on management approach	Meeting customer requirements - Product quality and reliability	
G4.PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	Meeting customer requirements - Product quality and reliability	
G4.PR5	Results of surveys measuring customer satisfaction	Meeting customer requirements - Customers	

MATERIAL	ASPECTS	Reference	Omissions
SOCIAL PRODUCT	RESPONSIBILITY		
Aspect: Mo	irketing communications		
G4.DMA	Disclosure on management approach	Corporate Governance - Compliance with laws and regulations	
G4.PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	Corporate Governance - Compliance with laws and regulations	
Aspect: Cu	stomer privacy		
G4.DMA	Disclosure on management approach	Corporate Governance - Compliance with laws and regulations	
G4.PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Corporate Governance - Compliance with laws and regulations	
Aspect: Co	mpliance		
G4.DMA	Disclosure on management approach	Corporate Governance - Compliance with laws and regulations	
G4.PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Corporate Governance - Compliance with laws and regulations	



# Report on the limited auditing of the Corporate Social Responsibility Report





The procedures we performed on the Report consisted in verifying its compliance with the principles for defining the content and the quality of a sustainability report set out in the "G4 Sustainability Reporting Guidelines", and are summarised as follows:

- comparing the financial information reported in chapter "The Economic Dimension" of the Report
  with the information included in the Group's consolidated financial statements as of 31 December
  2015 on which we issued our audit opinion, in accordance with articles 14 and 16 of legislative
  decree n° 39 of 27 January 2010, on 21 March 2016;
- analysing, through inquiries, the governance system and the process for managing the sustainability issues relating to the Group's strategy and operations;
- analysing the process aimed at defining the significant reporting areas to be disclosed in the Report, with regard to the methods for their identification, in terms of priority for the various stakeholders, as well as the internal validation of the process findings;
- analysing the processes underlying the generation, recording and management of quantitative data
  included in the Report. In detail, we carried out:
  - meetings and interviews with management of Piaggio & C. SpA to achieve a general understanding of the information, accounting and reporting systems in use to prepare the Report, as well as of the internal control processes and procedures supporting the collection, aggregation, processing and submission of the information to the function responsible for the Report preparation;
  - a sample-based analysis of the documents supporting the preparation of the Report, in order to obtain evidence of the reliability of processes in place and of the internal control system underlying the treatment of the information relating to the objectives disclosed in the Report;
- analysing the internal consistency of the qualitative information described in the Report and its compliance with the guidelines identified in the preceding paragraph "Responsibility of the Directors for the Report";
- obtaining a representation letter, signed by the legal representative of Piaggio & C. SpA, on the compliance of the Report with the guidelines identified in the paragraph "Responsibility of the Directors for the Report", as well as the reliability and completeness of the disclosed information.

Our limited assurance work was less in scope than a reasonable assurance engagement performed in accordance with ISAE 3000 ("reasonable assurance engagement") and, consequently, it does not provide us with a sufficient level of assurance necessary to became aware of all significant facts and circumstances that might be identified in a reasonable assurance engagement.

3 di 4



#### Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the Corporate Social Responsibility Report of Piaggio Group as of 31 December 2015 has not been prepared, in all material respects, in compliance with the "G4 Sustainability Reporting Guidelines" defined in 2013 by the GRI - Global Reporting Initiative as disclosed in the paragraph "Methodological note" of the Report.

Turin, 24 March 2016

PricewaterhouseCoopers Advisory SpA

Signed by

Paolo Bersani (Partner)

This report has been translated from the original, which was issued in Italian, solely for the convenience of international readers.



We would like to thank all colleagues who helped in preparing this document.

This report is available on the Internet at: www.piaggiogroup.com



Management and Coordination IMMSI S.p.A. Share capital € 207,613,944.37, fully paid up Registered office: Viale R. Piaggio 25, Pontedera (Pisa) Pisa Register of Companies and Tax Code 04773200011 Pisa Economic and Administrative Index no. 134077