With this new edition of the Sustainability Report, Coesia renews its commitment to communicate its sustainability initiatives and its economic, social and environmental results.

An ambitious development program that supports the Coesia strategy and outlines the guidelines and growth opportunities toward 2020 has always been deeply connected to our great care for our employees and the community at large, who represent the most important assets of the company.

2016 was a positive year for Coesia. The organization expanded, leading to an increased headcount: we are now more than 6,000 people coming from 55 different countries. We invested in mergers and acquisitions and research and development, with the aim of continued growth thanks to the ability to innovate in a sustainable way, particularly through digitalization, but also through our worldwide presence and the extensive experience we gained alongside our customers and suppliers.

This is a development path as well as a cultural journey that starts from who we are, from our founding Values, and that is embodied in our way of thinking, in our behavior, in a common culture.

That is why in 2016 we have promoted a program to spread and consolidate this culture among our employees around the world and thus support the Coesia development strategy over the years to come.

The attention to and promotion of people working in Coesia have also been expressed through important training and professional development programs that have been deployed within the Group.

We have also strengthened our initiatives and programs to protect the health and safety of our people with the goal of collecting data comprehensively, so they can be analyzed and adopted at a global level.

The journey we have undertaken with this new edition remains an annual engagement for Coesia that recognizes our responsibility for and our commitment to achieving the goals we have set, aimed at implementing a series of activities that focus on our employees, customers and suppliers.

Isabella Seràgnoli
President

Angelos Papadimitriou
CEO
COESIA WORLDWIDE

COESIA AT A GLANCE

REVENUE

2016

1,457

million euros

REVENUE BREAKDOWN BY SECTOR

Advanced Automated Machinery and Packaging Materials: 78%  
Industrial Process Solutions: 20%  
Precision Gears: 2%

REVENUE GEOGRAPHICAL BREAKDOWN

Europe: 34%  
North America: 17%  
Asia: 23%  
Other Countries: 26%

64.4 million euros

PEOPLE

6,170

OPERATING UNITS*

89

COUNTRIES*

32

PRODUCTION FACILITIES*

52

COMPANIES*

15

* As of June, 2017.
The topics covered in this Sustainability Report originate from our materiality analysis. This choice is aimed at determining which topics are considered important for the Group in order to continue to create value in the short, medium and long term.

For Coesia, material aspects are those that have a significant financial, environmental and social impact on the organization and could substantially influence stakeholders’ opinions and decisions.

Material issues have been grouped in three main areas:

- **Who we are:** the Group as well as the Values we believe in and our concept of ethics, which are shared at all organizational levels;
- **Our people:** a key asset for a Company like Coesia and the real strength of our Group;
- **Our future:** our focus on innovation and our relationships with suppliers and the community, with special attention paid to our environmental impact.

These issues have been analyzed and assigned a priority in terms of their impact on Coesia, in order to generate the following materiality representation and define the content of the 2016 Sustainability Report.

The market and the stakeholders’ needs change dynamically: for this reason, material topics have been updated to better represent the current Coesia reality and its ability to evolve over time.

Coesia confirms its efforts to continuously involve its stakeholders in order to develop a beneficial dialogue and a long-lasting and responsible partnership.

*During 2016, we acquired EMMECI and GF and rebranded ADMV under the FlexLink name.*
WHO WE ARE

Our choice is to follow simple but fundamental values such as respect, responsibility, knowledge and passion. The resulting commitment is always to combine financial achievements with attention to social and environmental issues.

MISSION

Creation of long-term sustainable economic, social and environmental value for our clients, employees, shareholder and the communities we operate in.
A HISTORY OF EXCELLENCE AND RESPONSIBILITY

Coesia is a private Group, a worldwide leader in innovation-based industrial and packaging solutions.

With companies founded over 100 years ago, Coesia is currently fully owned by Isabella Seràgnoli and has expanded globally over time thanks to internal growth and its ability to acquire companies specialized in different business sectors. Indeed, even though its headquarters are located in Bologna, Italy, Coesia now includes fifteen companies with 89 units in 32 countries on five continents.*

**Our history and our future:** ambitious choices and clear Values.

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**OUR HISTORY BEGAN AT THE DAWN OF THE 20th CENTURY**

**1923 - 1940**
G.D, a motorcycle production company founded in 1923, was taken over by Enzo Seràgnoli in the late 1930s.

**1940 - 1950**
The company shifted its focus to packaging, mainly for the confectionery and soap sectors. The first automatic wrapping machine was launched with the contribution of Ariosto Seràgnoli.

**1950 - 1960**
The G.D brand achieved global success, and the company became a worldwide leader in the highly automated industrial machinery sector.

**1960 - 1980**
Starting in the early 1980s, the company began to diversify its business by acquiring CIMA, ACMA, GDM and VOLPAK.

**1980 - 2000**
G.D entered the tobacco sector with the production of its revolutionary wrapping machine, the 4350/Pack, and the company became the unrivaled leader in the sector.

**2000 - 2015**
In 2002, Isabella Seràgnoli became the sole owner of the Group, which was renamed Coesia in 2005. In addition, the Group grew thanks to the acquisition of HAPA, LAETUS, ADMV, CITUS, KALIX, NORDEN and SACMO.

**2010 - 2015**
The Coesia expansion accelerated thanks to the acquisition of FLEXLINK, SASIB, R.A JONES and IPI. In 2012, the Coesia Engineering Center (CEC), staffed by a highly-skilled team, was created to carry out strategic innovation projects. Another important step for Coesia was the publication of its first Sustainability Report in 2015.

**2016**
Two other Companies, EMMECI and GF, joined the Group.

**2017**
*Coesia acquired the Instrumentation & Tobacco Machinery business from Molins PLC and the entire share capital of MGS Machine Corporation. These businesses have not been included in the scope of this report.*

**2018 - 2019**

**2020 - 2021**

**2022**

* *Coesia acquired the Instrumentation & Tobacco Machinery business from Molins PLC and the entire share capital of MGS Machine Corporation. These businesses have not been included in the scope of this report.*
THE COESIA WAY

The culture we would like to spread in order to achieve our ambitions and build a positive work environment.

OUR VALUES

RESPECT
Respect for people, rules, local communities, environmental and economic resources.

RESPONSIBILITY
Responsibility for the consequences of one’s decisions and actions, responsibility to lead by example, practice fair leadership, reward merit, nurture talent, achieve results and to be committed.

KNOWLEDGE
Knowledge as professional and personal growth. Knowledge comes from culture, education, training, research, experience and relationships.

PASSION
Passion for the product, innovation, excellence, beauty, work and performance.

CULTURAL TRAITS

The first Coesia survey on Culture was carried out in 2016. It enabled Coesia to identify the six cultural traits that we should spread, develop and improve to contribute to the 2020 strategy and achieve our ambitions.

ACCOUNTABLE
Foster accountability by granting trust through delegation.

LONG-TERM FOCUSED
Act to ensure business sustainability over time.

EXTERNALLY FOCUSED
Look outside to customers and external communities to adopt their points of view.

RESPECT
Respect implies rigor and integrity

Even collective responsibility starts with individual accountability

Sapere Aude: dare to know

Passion allows us to envision results even before achieving them

LEADERSHIP MODEL

The Coesia Leadership Model seeks to support the Group’s strategy in line with our Values. It is like a compass pointing to a common language that identifies the key behaviors that will lead to the success of the individual and the organization. As such, it

• helps increase communication and understanding of the expected results;
• raises awareness of what is required in the different stages of individual and professional growth;
• focuses on individual strengths and areas for improvement.

We invest in laying the foundations for a common culture starting from our diversity.

INNOVATE

BE CUSTOMER CENTRIC

MAKE DECISIONS

DELIVER RESULTS

INSPIRE OTHERS

COLLABORATE

MANAGE COMPLEXITY

We have committed to a five-year workshop plan involving close to 250 employees from all over the world every year. The goal is to ensure the widest diversity in terms of seniority, function, role, age, gender, and professional background.

THE COESIA CULTURE PROGRAM

In 2016, 200 participants took part in different workshops worldwide. We have committed to a five-year workshop plan involving close to 250 employees from all over the world every year. The goal is to ensure the widest diversity in terms of seniority, function, role, age, gender, and professional background.
**Coesia:** a sophisticated organization to support our businesses globally.

**GOVERNANCE**

Coesia’s Corporate Governance assigns management to the Board of Directors, the Board of Statutory Auditors and an external audit firm.

The Board of Directors, appointed on June 25, 2014 for a term of three years, promotes corporate interests, defines strategic orientation and fosters the Group’s sustainable growth.

The Board of Directors of Coesia consists of the following members:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>ISABELLA SERÀGNOLI</td>
</tr>
<tr>
<td>CEO</td>
<td>ANGELOS PAPADIMITRIOU</td>
</tr>
<tr>
<td></td>
<td>ROGER ABRAVANEL</td>
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<tr>
<td></td>
<td>LUCA CORDERO DI MONTEZEMOLO</td>
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<td></td>
<td>FABIO GALLIA</td>
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<td>LUCA GARAVOGLIA</td>
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<td>DAVID GOSSET</td>
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<td>LEONARDO GUERRA SERÀGNOLI</td>
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<td>LORENZA GUERRA SERÀGNOLI</td>
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<td>MAURIZIO PETTA</td>
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<td>ROBERTO POLI</td>
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<td>FRANCESCO TATÒ</td>
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The consolidated financial statements are annually submitted to a third-party audit company for an independent assurance process.
All the activities carried out at Coesia are managed by the President and the CEO. The Corporate Communication reports directly to them, while all other business-related activities are organized in a matrix structure.

On the one hand, the following Group Functions can be identified: Finance, Human Resources, the research and development center, the Coesia Engineering Center or CEC, and two newly created functions, Coesia Digital Strategy and Coesia Market Development Services, which includes Coesia Market Development, Coesia Customer Service and Global Key Account Management (GKAM).

On the other hand, there are three main business lines in which the fifteen Companies operate:

- Advanced Automated Machinery and Packaging Materials includes ten Companies that operate in the tobacco and fast-moving consumer goods industries;
- Industrial Process Solutions includes four Companies that provide automated solutions to enhance the efficiency of production systems;
- Precision Gears provides an integrated manufacturing process that meets the high standards required by the racing and aerospace industries.

The Coesia Group is also organized by geography: the Americas, Asia & Pacific and EMEA.

This organizational structure aims to grow and optimize our global footprint by tapping growth opportunities in emerging markets and improving the Group’s ability to localize its products to meet local market demands.

The fifteen Coesia Companies are mainly located in Europe.

In Bologna and surroundings: G.D, Sasib, Acma, Cima

In Italy: GDM, IPI, EMMECI and GF

In Spain: Volpak

In Switzerland: Hapa

In France: Citus Kalix and Sacmo

In Sweden: Norden and FlexLink

In the U.S.A.: R.A Jones.

Relationships between the Group Functions, Companies and Regions are particularly intense in order to develop synergies and unlock the full potential of the organization’s assets.
The Coesia Group offers a wide range of technologies developed by its Companies to meet the demands of customers operating in different sectors.

The Coesia Companies are structured according to customer needs by designing and assembling machines for what are known as “new generation products” or “reduced-risk products.” Moreover, Coesia is the only supplier that provides a comprehensive making-packing solution for the secondary tobacco sector.

CONSUMER GOODS MACHINERY

Different Coesia Companies operate in the sector of fast-moving consumer goods, the market in which Coesia faces the fiercest competition. The Coesia Companies offer a wide range of products, enabling the companies to supply different sectors and be key partners for large international corporations.

ASEPTIC FILLING MACHINERY AND PACKAGING MATERIALS

This field is the best example of how our most advanced technology can be transferred to another market to provide our customers with a better product.

INDUSTRIAL PROCESS SOLUTIONS

As a cross-sector business line, Industrial Process Solutions (IPS) is crucial for Coesia. It provides customers with solutions for the integration of process lines, automated flow systems, hardware and software monitoring systems as well as printing and labeling systems.

PRECISION GEARS

Coesia also serves the niche market of precision gears. By serving customers operating in different industries, including racing, automotive, and aerospace, the Company has steadily improved its performance over the last few years, consolidating its strong reputation for quality.

ADVANCED AUTOMATED MACHINERY AND PACKAGING MATERIALS

TOBACCO MACHINERY

Our cooperation with companies operating in the tobacco industry has progressively intensified over the years thanks to Coesia’s ability to promptly respond to customer needs by designing and assembling machines for what are known as “new generation products” or “reduced-risk products.”

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We aim to become a global leader in providing advanced industrial and packaging solutions to leading manufacturers. We want to develop a closer relationship with our stakeholders by providing them with user-friendly digital technologies starting with the ones we use ourselves.

One of those technologies is the new Coesia website*, which was developed in 2016 by teams from all the Coesia Companies.

The main innovation behind the website is the possibility for every user to browse all the solutions and services offered by our fifteen Companies in an integrated way simply by filtering them by technology or industry. This architecture relies on an internal digital tool, Compass, developed and maintained by the marketing and portfolio management departments.

More than 300 solutions are available online to satisfy any customer request. This powerful suite of solutions enables production of a huge variety of packages and products, all different in size, shape, material and intended use.

We can provide comprehensive package solutions for a wide variety of industries.

*For more information refer to coesia.com/solutions

COMPASS

Compass is an internal tool that gathers all information related to Coesia’s products and makes it available in an appealing and user-friendly database. Basic product knowledge is thus accessible anytime and anywhere.

Thanks to Compass, users can easily identify “linkable” and “related” products across the whole Coesia product portfolio. Linkable products are Coesia products that can be offered to complete the customers’ lines either upstream or downstream, enabling the creation of turn-key solutions. “Related” products are alternative Coesia products that customers might also be interested in for the same market application.

Compass enables users to save all product details in e-brochures that can be either printed or saved then sent via email, thereby reducing Coesia’s carbon footprint.
OUR SERVICES

Customer loyalty is the most fruitful investment for the future. This is why Coesia is committed to offering an excellent after-sales service, which is a key success factor for all the Companies of the Group.

Customer service means being present at global level, providing flexibility, simplicity, and continuous support.

Our customers demand much more than just spare parts or the availability of on-call technicians, which is why we are developing a comprehensive service portfolio to provide customers with a unique and valuable experience based on mutual trust and cooperation.

PARTS AND MATERIALS

All Coesia Companies ensure a reliable supply of high-quality spare parts and components, especially designed for all equipment types and generations to ensure a smooth, uninterrupted production process.

EQUIPMENT MODERNIZATION

Coesia offers a wide range of modernization services to enhance equipment’s productivity and reliability, improve the quality of products, reduce maintenance costs, meet new regulatory standards and add new functions. Our modernization services range from standard technical upgrades to complete machine rebuilds in cases in which the equipment has been disassembled or damaged or in which obsolete parts need to be replaced. In either case, performance is brought back to the original high-quality standards.

MAINTENANCE SERVICES

Our highly specialized field service technicians are equipped with all the tools they need to inspect the equipment and evaluate its condition, quantify the spare parts needed and determine the required level of support for maintenance and/or repair work. In close cooperation with our customers, they can perform regular and preventive maintenance to preserve the equipment’s performance and value over time.

TRAINING AND DOCUMENTATION

All Coesia Companies offer tailored training courses and specific documentation in various languages to help customers develop in-depth technical competence, which is required to sustain high levels of performance, quality and productivity. Training programs can take place either at our premises or at the customer’s facility.

CONSULTANCY SERVICES

Thanks to our wide experience in many applications, we can offer our customers our expertise in implementing good industrial practices to help them achieve world-class levels of productivity and generate added value through production.

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Coesia offers comprehensive and flexible service packages to support customers during their day-to-day production activities and extend the lifetime of their equipment, which also contributes to reducing their environmental impact.
Coesia acts as a strategic enabler to enhance individual Company brands. In other words, it provides a lean, effective infrastructure to help each Company grow.

At the heart of our business model is a Group Governance which has the task of coordinating and guiding a sophisticated organization comprised of fifteen Companies, several global Functions and ever-developing Regions.

The organization works as a whole to serve customers and share technologies and best practices.

Since the beginning of the new century, some global macro-trends have emerged, rapidly changing the way we live. Coesia wants to seize the key strategic opportunities this new scenario presents by playing the role of global leader in advanced industrial and packaging solutions. Our goal is to grow through customer-centric innovation of products and services, creating added value for customers and the Group itself.

Coesia 2020 Strategy

**Strategic Drivers**

**Objective**

- **Customer-Centric Innovation**
  - Leverage Coesia engineering heritage in high-end while improving fit-to-purpose mid-tier solutions.

- **Global Footprint**
  - Complete Global footprint with best-in-industry reach and service capabilities.

- **Growth Platforms**
  - Strengthen leadership in current portfolio and grow in promising adjacent segments.

- **Service**
  - Step change in customer service capabilities across all businesses.

- **Implementation Excellence**
  - Extract full impact from Company initiatives and ensure continuous efficiency improvement.

- **Best Global Talent**
  - Continue to strengthen Coesia management team to sustain growth ambition.
The Coesia Group believes that ethical behavior should be the foundation of any entrepreneurial activity and that corporate responsibility should play a cultural role in encouraging and enhancing social relationships. The Group’s Companies develop their social and environmental responsibility within the communities where they operate and contribute to improving the communities’ prosperity and quality of life.

To make our commitment clear, transparent and easy to promote, Coesia elaborated its Code of Ethics in 2016 and has recently introduced it on a global scale. Based on our Values and our Mission, the Code of Ethics offers all of us the opportunity to keep encouraging the promotion of our corporate social responsibility project in a shared, structured and continuous way across all the Group’s Companies.

Loyalty, fairness, transparency, honesty, and integrity are the way we do business; ethics is a cornerstone of our sustainable business activity and inspires us in our day-to-day conduct.

Additionally, as an international organization operating in different economic, institutional, social and cultural contexts, it is our responsibility to act in compliance with national and international laws and regulations.

Therefore, the Group has issued international Anti-Corruption Guidelines to promote the highest standards in all commercial relations throughout the organization. The guidelines have been translated into ten languages to make sure that everybody in the Group understands them fully.

We have also implemented an Anti-Corruption System that defines roles, responsibilities, and initiatives based on the principle that everyone needs to be fully aware of our anti-corruption guidelines. In addition, Coesia developed a management and control program to make sure that the Group is in compliance with the Italian legislative decree 231 issued on June 8, 2001.

In addition to Coesia’s Supervisory Body (in Italian, Organismo di Vigilanza), a specific body has been appointed to manage and control the above-mentioned system: the Anti-Corruption Committee.

A whistle-blowing platform has been put in place to protect the privacy of anyone who, in good faith, reports an actual or potential violation of the Anti-Corruption Guidelines. The platform expressly prohibits any form of retaliation.

Moreover, we have developed training and awareness-raising material and initiatives to continuously update the Anti-Corruption requirements, risks and expected conduct.

Throughout 2016, we reinforced our commitment to train all managers and other people who can play a key role in this field to ensure a cascade of communication to the whole Coesia population.
2
OUR PEOPLE, OUR STRENGTH

We believe that people are the best engineering work ever created, with two features that technology cannot replicate: imagination and passion.
People are the key to Coesia’s strength and success. It is thanks to their talent, dedication, passion and ambition to excel and to create sustainable value that the Group has been able to expand over time and establish itself as a leader in so many industries.

Thanks to its employees’ creativity and skills, Coesia has always been able to put forward innovative products to its customers and enjoy long-term success.

The Group wants to attract and retain the most talented people and develop them into the leaders of tomorrow by offering them the opportunity to work and live in a dynamic environment in which achievements are acknowledged and opportunities to expand their professional horizons are offered. On December 31, 2016, the Group’s internal community comprised 6,170 employees, an increase over 2015 that can be partly explained with the acquisition of Emmeci and GF.

The Coesia population is spread all over the world, though the Group’s Companies are mostly located in Western Europe. It is the area with the highest percentage of employees (about 69%), followed by the other two main areas, the Americas (about 15%) and Asia & Pacific (about 10%).

More than half of Coesia’s employees work in the operations area. Their activities, such as procurement, quality control, planning and testing, make it possible for the Group to implement the innovative ideas and projects conceived by the 1,204 people working in the R&D and engineering areas.

The remaining employees (about 29%) work in sales, marketing and customer service or in staff functions, including human resources, IT and finance.
OUR PEOPLE: DIVERSE, STRONG, VIBRANT

As a far-reaching international organization, Coesia seeks to respect and include every individual regardless of age, gender, religion, ethnicity or nationality. Indeed, diversity requires the availability of many different skills, ideas and points of view that make it possible for Coesia to meet the demands of different markets.

Like many other automated machinery companies, Coesia is facing the challenge of improving gender balance. The Group is committed to raising awareness of the positive impact of gender diversity in a global organization such as ours.

The learning processes for women and men joining the Group are the same, and the same opportunities for professional growth and career development are guaranteed.

Gender balance is only one of many important aspects Coesia is focusing on to make sure that its employees continue to enjoy an excellent work environment, which is the only way to establish strong, long-standing relationships with its people.

We also benefit from a balanced breakdown of employees by age. On the one hand, we rely on the solid knowledge base acquired by people during past working experiences, as shown by 62% of our population’s being over 40. On the other hand, we invest heavily in young people willing to grow professionally and contribute to the development of the Company.

We are convinced that constructive dialogue between generations is the only way they can learn from each other and strengthen Coesia’s leadership.

Speaking of young people, it is important to underline that, besides complying with all local and national laws and regulations in terms of age employment, we only employ people over 18 years of age, regardless of the country in which we are operating. The only exceptions are France and Brazil, where young students can be hired as apprentices to perform no-risk activities in compliance with the law.

A global self-assessment survey covering more than 99.8% of the Coesia population was carried out to make sure that human rights are preserved and guaranteed in all the countries where the Group operates. The aim was to collect information about different aspects related to human rights, such as child and forced labor, discrimination and freedom of association, from all the Group’s Companies and Regions.

Coesia’s population includes people of 55 different nationalities.
Coesia is committed to attracting, developing and retaining the best people at international level to ensure long term managerial continuity and economic performance by always keeping a keen eye on the market’s best practices.

Recruitment is coordinated centrally and involves not only the selection process but also employer branding activities that keep Coesia attractive and competitive on the labor market.

New employees are offered on-boarding programs so that they can seamlessly integrate into the Group and become familiar with our business.

Employees are then progressively offered training programs to develop their potential, skills and leadership in line with Coesia’s strategic focus as well as collective and individual needs.

Coesia has also introduced a Talent Management System aimed at enhancing the employees’ achievements, potential and skills. The goal is to guarantee opportunities for professional growth and promote motivation and engagement through the definition and monitoring of performance and individual development plans.

Furthermore, a system for remuneration, evaluation and the attribution of professional titles has been introduced at global scale to guarantee internal fairness and external competitiveness so that talented new employees can be attracted and retained.

In 2016, Coesia hired almost 580* new employees, of which 17%* are women.

Younger women are joining Coesia at even higher rates, with 24% of new hires under the age of 30 being female.

In the same period, the voluntary turnover rate within the Group was lower than 5%*. 

**These numbers do not include people from Emmeci or GF.**
BEGINNING THE JOURNEY

The **Global Recruiting** strategy focuses on different kinds of stakeholders, in particular students, graduates and professionals.

With regard to students and graduates, our goal is to provide them with an educational experience in the workplace for them to put their academic knowledge to the test in a real business environment. Examples include pre-graduation internships and collaboration on company-based dissertations.

On the other hand, professionals are offered the chance to discover opportunities in a very challenging and fast-growing global group like Coesia.

All candidates go through our Global Recruiting process so that their applications can be considered by the Group as a whole.

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**The main goal it is to identify and hire talent in line with Coesia’s Values and Leadership Model.**

In this way, all selections can be managed through the same recruiting channels and with the same tools, providing highly increased visibility throughout these steps:

1. Application
2. Research and recruitment process
3. Preliminary interview
4. Technical interview
5. Job proposal

Each step is fundamental for two reasons: first, it enables Coesia to use a common database of profiles and improve the candidate’s experience; and second, the human resources function can manage the selection process in a structured way in terms of communication, outcome and the like.

We also have global employer branding activities targeting businesses and students alike. They include recruitment days and meetings at universities for students and events organized in the framework of trade fairs for businesses and professionals.

In this way, it is possible for us to build a pool of “Best Global Talent” to support Coesia’s needs at international level.

In 2016, we received about **14,000 CVs** and around **900 selection processes** were activated. In 2015 we received an average of **1,000 CVs** and around **800 selections** were activated.
PEOPLE PERFORMANCE AND DEVELOPMENT

Performance management drives the organization to high performance by leveraging the contribution of each person at Coesia and by creating a link between performance, reward systems and development paths.

PEOPLE PERFORMANCE DIALOGUE (PPD)

The People Performance Dialogue is a business process that aims to strengthen the link between the performance of the business and the contribution by every individual. Through PPD, Coesia leads its employees toward the achievement of individual, team and Company results, while fostering people development.

Through PPD, Coesia also provides employees with an objective and structured process in which meritocracy and, consequently, internal equity are guaranteed.

The very name of the process sums up its three main objectives:

**PEOPLE**  
Leading people in their professional growth within the organization;

**PERFORMANCE**  
Aligning individual goals with the corporate strategy, so that overall performance incorporates clear and measurable goals;

**DIALOGUE**  
Facilitating and promoting dialogue between employees and supervisors.

PPD is focused on both quantitative and qualitative objectives in line with the business needs and behaviors that reflect the Coesia Leadership Model. The entire process is characterized by a continuous dialogue between supervisors and employees and includes a feedback session at the end of the year aimed at increasing individual self-awareness and defining a suitable development plan.

The coverage of PPD is gradually increasing. At the beginning, in 2013, it involved more than 900 people, whereas in 2016 around 4,100 employees took part in the process.

In 2016, we invested heavily in communication and the involvement of employees and supervisors to further support the process.

The percentage of employees participating in PPD is as follows:

- **34%** in 2014
- **60%** in 2015
- **66%** in 2016

Around 270 people from more than 20 countries were involved in these strategic development initiatives in 2016.

Development Initiatives

With the goal of supporting the creation of and strengthening a one-group approach in terms of systems and processes, several development initiatives were carried out in order to develop and retain our people.

The focus of these programs is the increase of self-awareness, knowledge and skills within the Group through the involvement of people in strategic initiatives such as the Leadership Lab and the Leadership Sandbox.

In 2017, other programs have been introduced to better support the people’s development within the organization by offering activities aimed at fostering an innovation mindset and supporting cross-pollination (e.g., Innovation Days and mentoring and coaching programs).

LEADERSHIP SANDBOX

Leadership Sandbox is an initiative seeking to foster long-term development of Coesia’s junior population. It involves participants in different activities in specific focus areas, including creativity and innovation, managing relationships through diversity, coaching and team building. Like the Leadership Lab, it provides visibility to Senior Management.

LEADERSHIP LAB

Every year, Coesia organizes an international Leadership Lab involving a number of people to mobilize the participants’ collective intelligence to address issues that are relevant to the Group.

The program is structured to develop strategic out-of-the-box thinking, support teamwork in a multicultural environment and self-leadership in order to make sure that people become effective agents of change. It includes opportunities to get visibility with the Coesia’s Top Management.
The Coesia Learning Center manages and oversees the training initiatives with a global approach in order to:

- Make sure that the Group’s learning needs are satisfied by supporting the development of role competencies, which enables employees to grow professionally and work at their best to reach Coesia’s business goals.

- Map the Group’s learning activity at global level, by ensuring quality, effectiveness and efficiency and by promoting innovative methodologies and tools.

The Coesia Learning Center is supported by a training needs analysis, a process that involves key people from each organizational unit with the aim of fully understanding their learning needs and having a comprehensive and integrated overview of the information needed to finalize training plans and programs.

During the year, the Coesia Learning Center guarantees coordination and support in designing learning solutions, organizing targeted programs held by internal or external trainers and sharing the best practices within the Group.

The Coesia Learning Center provides corporate and local offer. The local offer includes IT, languages and technical training and is designed to fully respond to the specific needs of the organizational units.

In 2016, the Coesia Learning Center expanded its offer, which is now structured as follows:

**JOB FAMILY PROGRAMS**
Coesia supports the development of key job families to enable employees to work at their best in contributing to Coesia’s business goals.

Our programs are customized and focus on skills and capabilities that are consistent with the requirements of specific roles.

Together with the best training suppliers worldwide, we constantly implement the most effective tools and methodologies in line with the challenges faced by our business.

**COESIA PILLARS**
Coesia designs and delivers learning initiatives to ensure its people are effective professionally.

All training contents, tools and methodologies are identified considering our Leadership Model, culture and Values as well as the main challenges and scenarios our Companies face. We spread cross-skills, capabilities, information and competencies with the goal of enabling our people to “live” their roles in the best possible way and to grow professionally within the Group.

**COESIA MANAGEMENT SUITE**
The Coesia Management Suite offers diversified learning programs targeting all the managers of the Group, from Top Managers to supervisors.

The training programs focus on the connection between internal and external contexts so that participants always keep in mind the complexity, matrix organization, diversity and the managerial and leadership challenges deriving from them.

**LEARNING PROGRAMS AND TRAINING PLANS ARE STRATEGIC ASSETS FOR COESIA’S SUCCESS.**

**22 HOURS OF TRAINING PER EMPLOYEE**

As evidence of our commitment to the development of our employees, in 2016, we provided 135,712 hours of training. This means that we provided on average almost 22 hours of training per employee.*

* These hours include training on managerial, technical and professional skills, safety, IT, anti-corruption and languages. They do not comprise the training hours offered in the framework of the Engineering Graduate Program.

All-round training: this is how Coesia guarantees its excellence and market leadership in the long run.

The total training hours provided in 2016 include both corporate and local programs and involve activities linked to the different competencies shown in the graphic below.

Indeed, in a world where scientific and technical research and innovation evolve so quickly, it is essential to keep pace with the new technologies. However, we also invest heavily in non-technical training, being aware of the importance of cross-functional skills, including soft skills and languages.
We take care of our employees and their wellbeing by promoting initiatives at all our different sites with the aim of maintaining a good state of health and a balance between work and private life.

The initiatives provided by Coesia differ from country to country to respond to the specific needs of each. They are addressed to all employees and include social healthcare services and prevention plans, insurance (to be intended as the refund of medical fees) and mandatory visits by an in-house doctor.

To encourage a proactive approach to wellness, some Group Companies offer access to gyms or leisure centers and provide canteens or restaurant vouchers.

The promotion of equal opportunity in maternity, paternity and adoption matters shows the Group’s commitment to encouraging both female and male employees to find a balance between work and family. Coesia provides parental leave to all its employees in compliance with local regulations.

For Coesia, employee welfare is provided for the comfort and improvement of employees by going beyond the requirements of local legislation and with the goal of leading among our peers.

**WELFARE**

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**Coesia Summer Camp**

The Coesia Summer Camp is a pilot initiative for the children of employees working in the Bologna area. It was launched in 2016 in cooperation with the MAST Foundation and LGI SportLab. Activities include sport events and creative workshops to support the emotional and social development of children.

**A COMMITMENT TO THE WELLBEING OF PEOPLE: MAST.**

Coesia’s commitment to the wellbeing of its employees is exemplified by welfare services provided by the MAST Foundation*. MAST is an international cultural and philanthropic institution that focuses on art, technology and innovation. It coordinates a multifunctional center adjacent to the G.D and Coesia headquarters in Bologna.

The Foundation, in addition to several projects and activities for the community, provides corporate welfare services for Coesia employees, creating synergy between the Group and the city. Among other services, the Company’s Restaurant and its Wellness Center are designed as part of a unified project in which nutrition and physical activity are deeply connected.

The Academy is a training center for the development of a technical and managerial culture. For example, the Company’s employees contribute to the Academy’s external training project for young people attending schools in the community, thereby taking technological and managerial know-how beyond the Company.

The Daycare Center includes several nursery sections that welcome the employees’ and other children from a very early age until they are six.

The Restaurant for Coesia employees goes beyond simply providing meals by offering a place where the foods’ quality, a free-flow service, the ingredients used and the culinary process comply with the latest guidelines and quality indicators developed in cooperation with nutritionists of the Gruber Center in Bologna.

The Wellness Center is supplied and managed by Technogym, a world leader in fitness equipment, and offers a wide range of services based on a model of integrated and holistic wellbeing.

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*www.mast.org*

**Coesia for me**

“Coesia Welfare and Engagement” is a program launched in 2014 with the purpose of mapping the status of Coesia’s corporate welfare worldwide by collecting employees’ opinions and feedback.

During the first two years of the program, a global survey showed overall positive results but also noted some areas for improvement.

Our employees highlighted Coesia’s strengths in the areas of people engagement, strategy and values, diversity and meritocracy and contributed to the definition of an action plan in the areas of communication, welfare and people development.

The implementation of the action plan, comprising 300 improving actions based on suggestions by our employees, started in 2015 and was completed in 2016.

“Coesia for me” is a two-year survey. Its second edition was launched at the beginning of 2017.
Health, Safety and Environment (HSE) programs are essential expressions of the Coesia Values not only for employees, but also for contractors, customers and stakeholders.

To show the Group’s commitment to these Values, a Group HSE Policy was developed in 2016 to adopt a common approach to HSE management based on the specific requirements of each Company and unit of the Coesia Group.

The policy, based on a continuous improvement approach, is structured so as to ensure:

- Safe and healthful workplaces in comfortable buildings
- Safe plants and equipment, selected according to the highest safety standards and used and maintained correctly
- Safe work systems, based on safe practices, in all the activities performed by the Group’s employees
- Safe people who are trained and competent in what they do.

SAFETY

SAFETY IS A KEY DRIVER.

In line with our Values, Coesia states its commitment to the implementation of the HSE policy to improve systems, safety, environment and programs*:

- General facility design and operation
- Life safety
- Fire prevention and protection
- Workplace safety
- Ergonomics
- Physical hazards
- Chemical substances and dangerous materials
- Asbestos
- Radiological hazards
- Personal protective equipment
- Safe storage and handling of materials and substances
- Work equipment safety
- Electrical safety
- Confined space entry
- Lock-out / Tag-out
- Occupational hygiene, medical surveillance and first aid

SYSTEMS

- HSE responsibilities, resources and organization
- Legal compliance
- Risk evaluation and management
- Management of change
- Competency and training
- Improvement programs
- Monitoring and measurement
- Incident management and root cause analysis
- Emergency Preparedness and response
- Communication and consultation
- Self audit

ENVIRONMENT

- Waste management
- Air emissions management
- Waste water management
- Fresh water management
- Management of energy and natural resources

PROGRAMS

- Management of contractors
- Acquisition and divestiture of assets and business
- Car fleet safety
- HSE corporate system review

THE HSE POLICY STRUCTURE

*The section dedicated to the environment is dealt with at the end of Chapter 3.
THE GROUP’S HSE MANAGEMENT

With the Group HSE Policy, a number of projects have been initiated with the purpose of strengthening the HSE structure of the Group and its Companies.

Tools to increase the effectiveness of safety management were developed in 2016 and will be spread throughout the organization in 2017.

SAFE WORK PLACES

Thanks to the Policy, Coesia also sets out the requirements for workplaces, making sure that all its facilities and buildings are safe and comfortable, thereby ensuring the employees’ health and welfare.

Particular attention is paid to the design and maintenance of workplaces and workstations.

SAFE PLANTS AND EQUIPMENT

As a designer and manufacturer of high-tech machines, Coesia pays considerable attention to the use of safe equipment in its Companies.

Safety is a key driver for the Group, which is why specific measures complying with the HSE Policy and international and national regulations are applied to the entire lifetime of equipment.

SAFE WORK SYSTEM

The Group’s Companies have developed their own procedures to ensure safe ways to work based on risk assessment and legal requirements. The programs connected with the HSE policy focus on the continuous improvement of such methods.

The Group encourages the application of international standards. Indeed, as of end of 2016, OHSAS* 18001 Safety Management systems covered more than 40% of the total population of the Group.

SAFE PEOPLE

Trained and competent workers are the key to effective safety management within the Group.

Training about safety is a key activity that ensures good understanding of risks and hazards, safe work practices and adequate commitment on safety management.

Coesia devotes time and resources to increase the safety know-how and the skills of its workforce.

SUPERVISING BODY

In order to provide an effective link between safety management and the requirements of the Italian Legislative Decree 231/01, a Supervisory Body (in Italian, Organismo di Vigilanza) has been established in each Italian Company.

The activity of each Supervisory Body focuses on third-party surveillance of safety management, performance and compliance with applicable laws. The results are periodically reported to the Board of Directors and the Statutory Board.

SAFETY PERFORMANCE

Coesia has developed a specific set of indicators to measure its safety performance, monitor the effectiveness of the actions implemented so far and plan future improvement actions.

The key indicators are:

- **Frequency index**: the number of injuries on worked hours normalized over 1 million worked hours
- **Severity index**: the number of lost days on worked hours normalized over 1,000 worked hours

Structured tools to monitor, manage and plan corrective actions were implemented in 2016.

SAFETY PERFORMANCES

Number of injuries

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>33</td>
</tr>
<tr>
<td>2015</td>
<td>25</td>
</tr>
<tr>
<td>2016</td>
<td>46</td>
</tr>
</tbody>
</table>

METHODOLOGICAL NOTE

The scope of research has been broadened compared to the previous year’s Report: the data concerning safety performance now cover 69% of Coesia’s employee population. The data concerning 2015 and 2014 have been updated accordingly.

*Occupational Health and Safety Assessment Series (OHSAS)
The security function is committed to reducing the risks for the Group’s most valuable assets.

Its goal is to protect the Group’s people, infrastructure, products, information and reputation by providing specific support in the event of threats and risks of different types.

It is also required to make sure that the necessary measures have been adopted at strategic, operational and tactical levels. These measures include attack prevention, system protection and monitoring as well as measures enabling us to respond to and recover from an accident and mitigate the damage. The policies, procedures and standards aimed at protecting the Company combine different countermeasures that are either currently available or yet to be implemented in or extended to the whole Group.

At Coesia, the countermeasures include physical, cyber and human resources initiatives.

**Physical Security**

Protecting the workplace from external threats is very important and is achieved by countermeasures against physical intrusions. Indeed, unauthorized access to and thefts of internal resources are examples of issues in which physical security makes the difference.

At Coesia, the goal of physical security is to protect our people, products, equipment, systems and company assets.

It ideally starts with the site design and the layout of new buildings, but it also takes into consideration the potential need to overhaul existing plants.

This comprehensive understanding of physical security ensures a reasonable return on investment within a certain time.

**Cyber Security**

In response to the remarkable shift towards digitalization, the protection of know-how, data and information has become a key element for Coesia.

Moreover, in 2016 Coesia started to track the global cyber performance of the Group’s infrastructure to create compelling metrics and KPIs for security.

Coesia has been translating complex technical parameters into an intelligible context through security ratings that are calculated and updated regularly to identify and assess vulnerabilities as well as to analyze security trends.

All updates take into account data breaches, botnets, spam, malware, unsolicited communication, user behavior and other parameters that can have an impact on security.

Evaluating security performance is key for both internal and external stakeholders.

At Coesia, the duty of care is an important matter that cannot be overlooked.

For this reason, in 2016 travel was embedded into the Group’s security protocol. The goal is to offer trip solutions including protection. This coverage is to be extended to the whole Coesia population in the next years.

A comprehensive program has been delivered through a system that is able to evaluate, monitor, protect and respond to any external threats. Internal skills and competencies are focused on mitigating risks to employees, Coesia’s most important asset.

Effective internal processes have been put in place to deal with specific exposures and are daily reviewed in line with the business needs.

In 2016, we delivered 53 security travel bulletins, 22 individual vademecums and 10 security warnings, provided specific training to people traveling to risk areas and organized 111 instances of protective services for our travelers.

Thanks to all these preventive measures, we were able to respond promptly to all issues and to solve six critical situations that occurred in 2016.
3 BUILDING OUR FUTURE

We believe that the future belongs to those who can look at the world with a broader vision that goes beyond pure technology.

COESIA’S AMBITION

is to continually improve technologies, products, solutions and processes to be always able to exceed expectations of both stakeholders and customers.

Our Group has approximately 6,000 SUPPLIERS ALL AROUND THE WORLD, all different in size and nature.

Coesia’s ambition is to continually improve technologies, products, solutions and processes to be always able to exceed expectations of both stakeholders and customers.

WE INVESTED 4.5% of our revenue in R&D.

LEAN SIX SIGMA PROGRAM

Coesia launched the LEAN SIX SIGMA PROGRAM in order to adopt a common platform for operational excellence: up to 2016, A TOTAL OF 284 BELTS have been involved.

QUALITY AND SAFETY

A precise and complex process leads to ensure that each machine is built according to the desired quality and safety standards.

WE PROMOTE THE WELLBEING OF THE COMMUNITIES WHERE WE OPERATE

91% of our waste production is non-hazardous, with around 71% going into recycling.

Water consumption reduced by 11% vs. 2015.

Reduction of CO2eq emissions 6% vs. 2015.
Innovation: our way of thinking, our way of making the difference.

KEEPING UP WITH THE TIMES

Industrial research and innovation have always been the beating heart of Coesia and its Companies. Indeed, the aim of the Group is to continually improve technologies, products, solutions and processes to be always able to exceed the expectations of both stakeholders and customers.

The way innovation is created has significantly changed over the last decades.

Now, the market is driven by both customers’ and consumers’ needs, and innovation relies on sustainability and digitalization.

Coesia is strongly committed to integrating sustainability into each stage of design and production to deliver increasingly efficient solutions. This multi-disciplinary environment is a valuable asset for Coesia and an important catalyst for the effective use of resources.

For Coesia, sustainable innovation brings many advantages: less waste, less scrap, a lower specific energy consumption, a smaller footprint, an improved work environment, more environmentally-friendly packaging materials, new packaging shapes to minimize both material consumption and logistic costs, novel technical solutions for production and packaging processes, and more flexibility in format and brand changeover to optimize time and consumption at production plants.

SUSTAINABLE INNOVATION

Coesia DIGITAL

More efficient and reliable solutions can be also achieved by taking advantage of the newest digital technologies.

We want to keep offering our customers cutting-edge products and services. That is why we are exploring the fields of connectivity, big data analytics, line and machine intelligence, digital-to-physical conversion, robotics and artificial intelligence, while prioritizing cybersecurity.

In order to fast-track our digital transformation plan and develop stronger partnerships with customers and suppliers, we have set up a multi-functional team to leverage internal strengths and synergies.

LESS WASTE
LESS SCRAP
LESS ENERGY CONSUMPTION
NEW TECHNICAL SOLUTION
NEW PACKAGING MATERIALS
NEW FLEXIBILITY

IMPROVED WORK ENVIRONMENT
LOWER FOOTPRINT
NEW MATERIALS
NEW SHAPES

COESIA DIGITAL
Innovation at Coesia means a really creative and interactive mechanism that involves many players: customers, marketing, engineering and R&D. It is an integrated process embracing all the activities from concept development and the design process to the supply of the finished product or service. This process is applied to all New Product Development (NPD) projects that may include, among other things:

- **Disruptive innovations** that create a new market
- **New product lines** that enable Coesia to enter an established market for the first time
- **Line extensions** that supplement an established product line
- **Product improvements** that improve the performance of and replace existing products
- **Cost reductions** that provide similar performance at a lower cost
- **Repositioning**, in which existing products are targeted to new markets or segments.

### OUR IDEA OF INNOVATION

**CUSTOMER NEEDS**

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### OUR R&D CENTERS

At Coesia, each Company has its own R&D center with industry-specific competencies. The centers customize machines and processes, which encourages personal development and our employees’ commitment.

Projects classified as NPD are reviewed by the central functions to reinforce synergies and optimize costs. In this way, all Companies interact and cooperate constantly, enabling development of common approaches and sharing of specific technological know-how.

### COESIA ENGINEERING CENTER (CEC)

The corporate Coesia Engineering Center plays a specific strategic role in supporting Coesia’s companies and fostering synergies and cross-pollination of R&D among them.

If a technology transfer is required, the project workload exceeds the local availability of resources or the Company itself requests technical support and consultation, the central CEC team carries out feasibility analyses on technical solutions, timelines, resources and costs to identify long-term trends and developments.

Moreover, the CEC supports sustainable packaging solutions to meet the needs of our most ambitious and environmentally-oriented international customers.

In 2016, the team was composed of almost 50 highly skilled people, including executive and project managers, mechanical and electrical designers as well as testing technicians from different Group Companies.

### FROM THEORY TO PRACTICE

#### PRODUCT INNOVATION CENTER (PIC)

Over the last decade, Coesia Companies have gradually reinforced their partnership with customers by responding to their needs by developing innovative packaging solutions in a creative and proactive way. The Product Innovation Center has played a key role in this process. It is a research and development team that combines mechanical and chemical engineering with graphic design to improve the usability and ergonomics of packages.

**Innovation numbers in 2016**

- 1,204 people in R&D and engineering departments
- 17 NPDs completed*
- 64.4 million euros spent for R&D

*This number refers to Companies producing Consumer Goods Machinery.

It is there to provide support to the engineering departments, responsible for designing the machines, by carrying out preliminary technical analyses and feasibility studies and developing new packaging solutions to fulfill customers’ requests. Thanks to its integrated approach, Coesia can provide its customers with innovative packaging solutions that can be easily put into production.

- Disruptive innovations that create a new market
- New product lines that enable Coesia to enter an established market for the first time
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EXPLORING NEW MARKETS: FRESH PASTA

This example of technological spillover was developed by ACMA with the support of the CEC and through direct collaboration with one of our customers.

We started some years ago with the tortellini maker. In a very short time, we were able to provide an innovative solution with increased productivity (more than double the speed of traditional machines) and efficiency (with a resulting significant decrease in waste) and lower energy consumption.

Beyond any expectation, in 2016 this new market also enabled Coesia to develop and successfully test machines for the production of challenging new pasta formats.

THE INVERTED POUCH STYLE

In 2016, Volpak launched an innovative pouch, the standcap pouch, on the market in collaboration with one of its customers located in North America.

Normal pouches use 70% less plastic compared to traditional bottles, which means that waste is dramatically reduced. Thanks to this new pouch shape, it is also possible to dose the product more easily and to empty the pouch completely, which contributes to decreasing food waste.

This new inverted-packaging format provides excellent features and convenience to both our customers and consumers and is becoming very attractive for other market applications.

THE GDM AWARD FOR MACHINERY INNOVATION

EDANA’s INDEX Awards* are the highest recognition for excellence in the non-wovens industry, highlighting the creativity and innovation shown by hygiene businesses.

In 2016, GDM’s “Rear wings zero waste with linear motion technology” was nominated for the INDEX Award in the category “Innovation in machinery.”

The equipment has been designed to carry out the application of symmetric zero waste rear wings to baby diapers minimizing size-change time and responding to clear market demands for production flexibility.

GDM won the award thanks to the relevance of the application to the non-wovens industry.

*www.edana.org
The main steps are:

packaging film.

originate from a single reel of aseptic standcap pouches that machine forms, fills and seals the Volpak SMA260 similar steps.

All our machines are built following then at the customer's premises to technicians, first in our plants, and each machine is performed by our Every step in the testing process of desired quality and safety, required a certain timeframe, as agreed with step needs to be performed within and complex process in which each Building each machine is a precise at Coesia. Quality and safety go hand in hand but also for the safety of our clients'.

We feel responsible for the safety of our technicians, who test our equipment, but also for the safety of our clients' employees who operate our machines on a daily basis.

Quality and safety go hand in hand at Coesia.

Building each machine is a precise and complex process in which each step needs to be performed within a certain timeframe, as agreed with the customer, while ensuring the desired quality and safety, required by the sector-relevant regulations at local and international level.

Every step in the testing process of each machine is performed by our technicians, first in our plants, and then at the customer's premises to start regular production.

All our machines are built following similar steps.

For example, the Volpak SMA260 machine forms, fills and seals aseptic standcap pouches that originate from a single reel of packaging film.

The main steps are:

**EMPTY RUNNING**

The machine is tested without materials to ensure that all mechanisms work properly. The functioning of all the units is tested without input materials (film, filling product, caps, fitments, etc.) at low speed to avoid foreseeable breakage, failures and jams.

**INSTALLATION AND CONNECTION**

The machine is brought to life. The sterilization system is assembled and connected to the machine in the last phase. All electrical and pneumatic components are assembled in parallel with mechanical systems. Software is installed on the machine, which is then connected to the power supply and turned on.

**MACHINE ASSEMBLY**

In this stage, the sub-assemblies and other components are put together to build up the entire machine.

The above-mentioned stations are built-up as “stand-alone” units. They are then put together and linked to all the other hidden electrical and mechanical components that enable the motion of the entire machine by a main cam and a drive unit located inside the machine.

In addition, for this specific packaging, customized fitment and cap feeder stations are added as ancillary equipment.

**SUB-ASSEMBLY**

The sub-assembly of all the parts of the machine builds bigger assemblies.

The SMA260 is made up of more than 4,500 different components needed to build its core functioning stations: the unwinder, cap feeder, pouch folding and forming assemblies as well as cutting, sterilization, filling and final sealing assemblies.

In contrast to other Volpak machines, the cap is applied at a very early stage.

**QUALITY TEST**

Quality devices are tested to achieve the highest quality standards.

A specific procedure is followed according to the customer’s requirements and specifications. All the systems are set and adjusted in order to achieve the perfect package. So, for example, the right sealing temperature and pressure are set to avoid leaks and to guarantee an excellent visual quality. In general, repeatability, reliability, and process control are the main characteristics of the Volpak machines.

**SAFETY TEST**

Safety devices are tested to make sure that the proper safety measures are in place both for the machine and the final product in compliance with all applicable regulations. A specific procedure for safety is run whereby all safety mechanisms including cases, safety alarms, emergency stops and filling product controls are verified individually to ensure the safety of operators working on and near the machine.

**RAMP-UP**

All systems are tested at the same time by speeding up the machine to check its actual performance.

The SMA260 can reach a speed of up to 100 pouches per minute (ppm). All possible variables are simulated as if the machine were running a regular production.

**DISASSEMBLING**

The entire machine is disassembled, packed and shipped to its final destination.

We disassemble the machine into three main parts, the unwinder, pouch-forming and pouch-filling stations. In this way, we have the units with most critical functions assembled.

The same holds true for the ancillary equipments, which are packed separately but are already assembled.

**SERVICE**

Coesia provides a wide range of services in order to guarantee a high level of performance during the whole lifetime of our equipment.

For example, all Volpak machines are equipped with an ARA box, a special tool that enables us to remotely assist the customers by connecting directly to their machine and software.

**DELIVERY**

At the customer’s location, the shipped sub-assemblies are put together and the machine is installed and connected again.

Finally, the equipment is tested with the actual filling product. The correct functioning of the units is tested again and all settings are adjusted to achieve precise filling amount, consistent dosing accuracy, correct behavior of the product as it enters the pouch and excellent package quality.
In 2016, the Operational Excellence programs contributed to reaching Coesia’s targets, further strengthening the focus and impact on the Coesia 2020 strategic drivers.

THE COESIA WAY TO EXCELLENCE

A systematic and structured approach to continuous improvement is fundamental to guarantee business sustainability and high-quality standards over time. For this reason, Coesia launched a multi-generation program under the umbrella of Operational Excellence.

LEAN SIX SIGMA (LSS)

In 2014, Coesia launched a Lean Six Sigma program, which has been implemented globally and which provides a common platform and language for operational excellence in all businesses, functions and processes.

The deployment strategy of the LSS project is reviewed by the LSS Executive Council, which includes program Champions. Said Champions have to define an organizational development plan and identify both the improvement initiatives to be launched and the right resources to be involved as project leaders (the Belts).

The implementation of the LSS projects is led by the sponsors, or process owners, who are responsible for their success and are called upon to act as agents of change within their organization by supporting the Belts. The number of Belts has steadily grown as result of the increasing program deployment within the organization and also thanks to the internalization of the LSS Academy, which has managed all LSS training sessions delivered by our MBBs and BBs since the beginning of 2016.

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By the end of 2016, a total of 284 Belts has been involved: 2 Master Black Belts, 18 Black Belts, 141 Green Belts and 123 Yellow Belts. A total of 512 training hours has also been provided leading to the successful completion of 126 projects and the launch of 142 new ones.

For all projects, progress and results are tracked and shared with all the LSS community through the new LSS portal launched in 2016 as a result of a Green Belt project.

THE COESIA LSS COMMUNITY

- Master Black Belts (MBB)
- Black Belts (BB)
- Green Belts (GB)
- Yellow Belts (YB)

GBs

GBs are selected employees who take up the implementation of LSS along with their job responsibilities and mostly operate under the guidance of BBs.

BBs

BBs, in turn, focus on the correct application of LSS methodologies to breakthrough projects and support the GBs of their organization in the framework of two- to three-year assignments.

YBs contribute to the implementation of LSS by carrying out smaller projects.

THE COESIA LSS COMMUNITY

INDIRECT COSTS (INCO)

In 2014, Coesia launched a global program, InCo, focused on indirect costs to sustain the growth of its business. The aim of this initiative is to free up resources to be re-invested in innovative projects and activities across the Coesia Group by identifying and eliminating non-value-adding activities, reducing waste and spreading a sustainable, cost-efficient culture.

Core processes are key to reaching the ambitious growth objectives of Coesia 2020 and make it sustainable over time. The launch of the Coesia CBPR is aimed at redesigning these processes and breaking the existing paradigms through simplification and innovation.

In 2016, the Operational Excellence programs contributed to reaching Coesia’s targets, further strengthening the focus and impact on the Coesia 2020 strategic drivers.

THE COESIA WAY TO EXCELLENCE

A systematic and structured approach to continuous improvement is fundamental to guarantee business sustainability and high-quality standards over time. For this reason, Coesia launched a multi-generation program under the umbrella of Operational Excellence.

LEAN SIX SIGMA (LSS)

In 2014, Coesia launched a Lean Six Sigma program, which has been implemented globally and which provides a common platform and language for operational excellence in all businesses, functions and processes.

The deployment strategy of the LSS program is reviewed by the LSS Executive Council, which includes program Champions. Said Champions have to define an organizational development plan and identify both the improvement initiatives to be launched and the right resources to be involved as project leaders (the Belts).

The number of Belts has steadily grown as result of the increasing program deployment within the organization and also thanks to the internalization of the LSS Academy, which has managed all LSS training sessions delivered by our MBBs and BBs since the beginning of 2016.

By the end of 2016, a total of 284 Belts has been involved: 2 Master Black Belts, 18 Black Belts, 141 Green Belts and 123 Yellow Belts. A total of 512 training hours has also been provided leading to the successful completion of 126 projects and the launch of 142 new ones.

For all projects, progress and results are tracked and shared with all the LSS community through the new LSS portal launched in 2016 as a result of a Green Belt project.

THE COESIA LSS COMMUNITY

- Master Black Belts (MBB)
- Black Belts (BB)
- Green Belts (GB)
- Yellow Belts (YB)

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A strong and qualified supply chain is an important strategic factor in Coesia’s growth and development. The Group has always preferred to develop a long-standing partnership with its suppliers and to generate a higher level of quality through a targeted improvement process.

Our commitment to suppliers, especially local ones, is to support their skills and improve their performance and economic stability. Indeed, a highly-connected supply chain helps us detect and respond quickly to challenges, while enabling enhanced mutual collaboration.

Coesia purchases goods and services either directly or indirectly, depending on their connection with production.

Direct purchasing involves two categories of goods, commercial parts, both mechanical and electrical, and raw materials and machined parts. Each has a direct connection to Coesia’s production.

Commercial parts are the beating heart of our machines, enabling the motion of the entire system. For this reason, suppliers must ensure the highest quality and safety standards.

Raw materials and machined parts form our know-how. Indeed, the machined parts designed by our engineering departments and the raw materials we purchase for internal manufacturing guarantee the high performance and reliability of our machines.

Our Group has approximately 6,000 global suppliers, all different in size and nature. A strong and qualified supply chain is an important strategic factor in Coesia’s growth and development. The Group has always preferred to develop a long-standing partnership with its suppliers and to generate a higher level of quality through a targeted improvement process.

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As the charts show, in 2016, 75% of the total purchasing turnover was connected to production (that is, direct purchasing). Seventy-two percent of direct purchasing includes raw materials as well as machined and custom parts.
Supporting local suppliers: the pilot case of G.D

Purchases by G.D account for more than 40% of the total purchases of the Group.

In 2016, more than 93% of direct purchasing was made locally.

Since G.D’s network of suppliers is particularly wide, many pilot projects along the value chain originate with this Company and are extended to other Companies at a later stage.

In 2016, for example, an LSS project was implemented in some G.D suppliers with the aim of improving their performance. LSS tools and methodologies were used to define a specific supporting plan, including on-site support from Coesia and its external technical experts, the analysis of production processes and process re-organization.

The goal of the supporting program was to enhance quality, lead time and the suppliers’ production capacity.

In 2016, G.D also launched a program on the stability of suppliers to identify and support those with potential financial problems to guarantee long-term continuity in its supply chain.

For Coesia, sustainability in the value chain means looking beyond corporate boundaries to promote strategic, shared responsibility for social and environmental issues.

The challenges we face are increasingly complex and require collaboration with our partners to create added value. Our commitment to sustainability is one of these challenges.

In 2016, we started spreading our Suppliers’ Code of Ethics among our European suppliers to strengthen our relationship with them and to share with them the same high ethical standards we have set for ourselves in areas like labor practices and human rights, health, safety, and environmental protection.
CARING FOR OUR FUTURE
Education and training of younger generations

EXPEDITIONS AND THE SUMMER SCHOOL

Expeditions and the Summer School are two projects promoted by the MAST Academy that involve employees from Coesia’s Companies.

Expeditions is a project that teaches young students about packaging design and industrial automation. It provides them with a unique learning experience in technological innovation and entrepreneurship. Between December, 2015 and May, 2016, the project involved 230 students from four Bologna-area schools and about 40 of our employees acting as trainers.

In 2017, the project was further extended to involve more schools and students.

Launched in July, 2016, the Summer School for high school students is a pilot project featuring 3D printing and rapid prototyping workshops, classes and working groups as well as recreational activities. The first edition involved 31 students from different schools in Bologna.

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ITS MAKER

ITS MAKER is a corporate project in collaboration with the Italian government, the regional government of Emilia Romagna and other companies and training foundations.

Operating on behalf of Coesia, G.D is a founding member of the Foundation ITS MAKER, the higher Institute for Mechanical Engineering, Mechatronics, Mechanics and Packaging for “Made in Italy” solutions. The Institute provides cutting edge technical and scientific post-high school courses to train highly-skilled young technicians to work in strategic sectors in the companies of the territory.

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OUR ENVIRONMENTAL IMPACT

We work to prevent and mitigate our environmental impact by relying on continuous improvement of process performance and the development of new technologies.

The environmental sustainability of Coesia’s operations covers several business initiatives, such as energy saving programs and related investments, car fleet management, company mobility, requalification interventions and waste management.

To verify its environmental progress, Coesia monitors its impact by collecting data related to energy consumption, emissions, water consumption and waste production. Thanks to these systems, Coesia can define priorities and ways to intervene to guarantee its environmental sustainability over time.

Coesia seeks to maintain the high environmental efficiency of its sites around the world while improving the wellbeing and quality of life of its employees.

HSE POLICY STRUCTURE

As discussed in Chapter 2, in 2016 Coesia developed the Group’s Health, Safety and Environment (HSE) policy.

In addition to health and safety requirements, it includes a specific section on environmental concerns such as waste management, air emissions, wastewater and fresh water, energy and natural resources.

The most significant environmental data for Coesia are provided in the following sections.

METHODOLOGICAL NOTE

The current monitoring system involves all sites with surface larger than 100 square meters. All data are collected as absolute values; however, since Coesia is characterized by the sites’ heterogeneity, the indicators were normalized to allow comparison of “equivalent conditions” and evaluation of the environmental performance trends. This normalization was made on the production level (revenue).

*The reporting scope changed during 2016 following the acquisition of Emmeci and GF, and other minor refinements have been made in the footprint mapping.

Coesia’s sophisticated nature is reflected in a heterogeneous system of small and medium-sized sites located in different countries around the world, though mostly in Western Europe.

Moreover, the ISO 14001 environmental management system covered more than 40% of Coesia’s population in 2016. Other site certifications are expected.
ENERGY

Energy consumption is one of the most significant environmental impacts generated by Coesia. For this reason, over the last few years, the Group has worked to find innovative ways and best practices to improve the energy performance of its buildings. In some cases, architectural renovations were made on the external structure using new high-performing materials (e.g., for roofing, glass walls, exterior insulation and finishing systems); in other cases, new solutions such as photovoltaic panels, LED lighting systems and solar thermal panels were installed in our plants. Another strategy focused on sustainable transportation options for employees. In 2016, a specific mobility analysis was carried out in Bologna, where four Coesia Companies are based. It included a discussion with the municipality to identify solutions facilitating sustainable mobility for employees and an agreement with local public transport supplier Tper to offer discounted bus tickets. Coesia’s energy management strategy also deals with the implementation of auditing processes and the analysis of required mandatory interventions or opportunities for investment to make sure they are in compliance with all legal requirements at national and local level.

MAJOR INITIATIVES

Coordination at European level of the energy audits according to the European Directive 2012/27/EU.

Implementation of a “Total Infrastructure and Facilities Management (TIFM)” system to map, supervise, manage and control all plants and maintenance activities, from the request for intervention to the execution.

Introduction of a mobility plan for employees working at Coesia headquarters. A survey realized in 2016 was recently launched to analyze mobility habits and employees’ needs.

Development of a new global Car Policy to promote the use of hybrid models.

Execution of various interventions in Italian canteens to improve the employees’ wellbeing and achieve energy benefits at the same time.

Three-year trends of “total energy demand” and “energy normalized by revenue” are shown below. All the data have been converted in MWh (Megawatt hour) thanks to appropriate national converting factors (Lower Heating Value, LHV).

Total energy consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (MWh)</th>
<th>Fuel for heat (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>89,442.00</td>
<td>31,014.69</td>
</tr>
<tr>
<td>2015</td>
<td>85,241.02</td>
<td>31,014.69</td>
</tr>
<tr>
<td>2016</td>
<td>81,926.78</td>
<td>31,014.69</td>
</tr>
</tbody>
</table>

Energy normalized by revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity (MWh/M€)</th>
<th>Fuel for heat (MWh/M€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>35,226.60</td>
<td>32,594.73</td>
</tr>
<tr>
<td>2015</td>
<td>34,940.40</td>
<td>32,594.73</td>
</tr>
<tr>
<td>2016</td>
<td>31,014.69</td>
<td>31,014.69</td>
</tr>
</tbody>
</table>

Electricity geographical breakdown in 2016

As shown in the figure, electricity consumption is mainly due to sites located in Western Europe (71%).

- Western Europe: 71%
- Rest of the world: 29%
EMISSIONS

Coesia annually monitors greenhouse gas emissions, splitting them into:

**SCOPE 1:**
GHG emissions from sources that are owned or controlled by an organization. For Coesia, this category includes emissions from fuel consumption for heating purposes, refrigerant refilling and owned diesel, gasoline and hybrid-powered vehicles.

**SCOPE 2:**
GHG emissions that result from the generation of purchased or acquired electricity, heating and cooling and steam consumed by an organization.

**Total emissions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Scope 1 (t CO₂eq)</th>
<th>Scope 2 (t CO₂eq)</th>
<th>Total emissions (t CO₂eq)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>8,338</td>
<td>20,980</td>
<td>29,318</td>
</tr>
<tr>
<td>2015</td>
<td>8,960</td>
<td>18,782</td>
<td>27,742</td>
</tr>
<tr>
<td>2016</td>
<td>8,032</td>
<td>17,803</td>
<td>25,835</td>
</tr>
</tbody>
</table>

While Scope 1 emissions have remained almost constant in the last three years, the Scope 2 ones have undergone a slight reduction (almost 18 ton CO₂eq in 2016). The consequence is a decrease in the total emissions.

**Emissions normalized by revenue**

Considering emissions normalized by revenue, the result is again a slight drop. Indeed, starting from an overall value of 20.52 ton CO₂eq/ME in 2014, Coesia reached 17.73 ton CO₂eq/ME in 2016.

**Emissions geographical breakdown in 2016**

The overall distribution of CO₂eq emissions in the Group is as follows:

Geographical breakdown is in line with energy demand, as shown by 62% of emissions (scope 1 + scope 2) being linked to Western European sites.

The GHG protocol (www.ghgprotocol.org) was used to report Scope 1 and Scope 2 emissions. In addition, Coesia is improving the process of quantifying scope 3 emissions (all indirect emissions not included in scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions).
Coesia considers waste management activities as integrated into the production process of the facilities because they are strictly related to efficiency optimization.

Waste is classified and divided into hazardous and non-hazardous waste after a specific technical and chemical analysis and consequently disposed in accordance with national legislation. Every year, the total quantity of hazardous waste is consistently lower than that of non-hazardous waste, e.g., in 2016 hazardous waste was about 3% of the total waste.

From 2014 to 2016, both total waste and total waste normalized by revenue increased, reaching 8,869 tons and 6.08 ton/M€ respectively. This increase can be partially linked to the inclusion of Emmec and GF in the report scope.

Over the years, Coesia has invested in the improvement of production processes and in the recycling of materials in order to minimize the impact of waste. In 2016, about 71% of waste was sent to recycling.

Waste category breakdown
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Waste geographical breakdown in 2016
Considering a geographical breakdown, about 89% of total waste was produced by Western Europe sites in 2016.

This slightly higher result with respect to the other environmental figures is due to the nature of the business of the production facilities located in Europe.
Water consumption has a less significant impact for Coesia compared to other environmental aspects. Nonetheless, we regularly monitor water consumption and work to reduce our impact on this fundamental natural resource. Water consumption at Coesia is mainly connected to production, building hydraulic and thermal plants and, to a lesser extent, to canteens and irrigation.

Wastewater deriving from all the activities is managed and sent to a dedicated treatment plant, as required by national law.

Total water consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Total water consumption (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>143,501</td>
</tr>
<tr>
<td>2015</td>
<td>137,847</td>
</tr>
<tr>
<td>2016</td>
<td>121,850</td>
</tr>
</tbody>
</table>

As shown in the chart, water consumption and water consumption normalized by revenue decreased in 2016 compared to 2015 for two main reasons:

- In 2015, two structures experienced water loss events;
- Better water management was introduced in some locations, for example in Brazil, where more attention was paid to the use of water to clean the factory.

Water geographical breakdown in 2016

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe</td>
<td>64%</td>
</tr>
<tr>
<td>Rest of the world</td>
<td>36%</td>
</tr>
</tbody>
</table>

In line with the other environmental parameters discussed above, water consumption is strongly concentrated in Western Europe, which accounts for about 64% of the total consumption.
This Sustainability Report is the outcome of the contribution of our employees. All information and data have been centrally collected, managed and integrated.

Feedback from readers is extremely welcome in the continuous improvement of our commitment to sustainability.

For additional information: sustainability@coesia.com

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Graphic design

Le Balene

In line with our internal policy on environmental sustainability, this document will only be available in digital format. Printed copies can be provided upon request.