



# SUSTAINABILITY REPORT 2013

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Yarn manufacturing in twisting division

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# LETTER FROM THE PRESIDENT



The yearly Sustainability Report gives us the opportunity of illustrating the operations carried out by the company by examining three well-defined fields which are closely related to one another: People, Planet and Profits.

Starting from the topic of "Profits", our Group has had positive results in terms of increase in value thus confirming the ability of the Group to grow, even in difficult economic situations like the one we are experiencing today. In fact, the company's success is further evidence of the close relationship between the three themes: Planet, People, Profit. I am, in fact, more and more convinced that the extraordinary patrimony represented by the partnership that Aquafil has developed with the best global customers, in both the carpeting and clothing sectors, is mostly due to the sharing of mutual objectives. A strong commitment has been made to safeguard the environment and also "people" (a term that not only refers to the employees but also to the whole social context in which the company operates), which is a characteristic shared by a growing number of companies with positive results concerning profits. The investments made in the polyamide recycling

project have enabled us to put a particular item at our customers' disposal, ECONYL® yarn, which has technical and qualitative characteristics that are identical to those of polyamide yarn made from traditional methods.

It is also important to note that the reduced environmental impact that ECONYL® yarn guarantees our customers' products has enabled us to come out on top of our competitors making the yarn a synonym of high-quality recycled polyamide.

This edition of our report will explain how the calculation and sustainability report concerning the impact of our production line have been adapted in order to integrate our data with those of our suppliers and customers. We all share the same goal in calculating and communicating the environmental impact of the products, an aspect to which more and more attention has been paid.

You will also find information regarding the social activities that have been planned and implemented in all nations in which we operate. The serious economic crisis which occurred in 2009 and the awareness of the cyclical nature of crises make it essential for companies to pay more attention to the social aspects (People) of sustainability.

This means that a strong commitment towards the environment (Planet) and the people that work in it (People) is required and Aquafil will make a concerted effort to focus on this objective over the next few years.

A handwritten signature in black ink, appearing to read 'A. Aquafil', located at the bottom center of the page.



Offices of the headquarters in Arco (Trento, Italy)

# THE AQUAFIL SUSTAINABILITY REPORT

The seventh edition of the Aquafil sustainability report expresses the sustainable culture of the Group which is based on the synergy of economic, environmental and social decisions from an integrated sustainability point of view. This is a technical summary of the operations and strategies carried out during the year and an opportunity to reflect on the progress made. It is a useful tool for informing stakeholders of the Group's sustainability performance with the aim of explaining aspects deemed essential for the continual improvement of the company.

In order to fully understand this year's report, it is important that readers realize the great changes Aquafil has made in respect to organization and production over the years. The company strategies have enabled the Group to play a leading role in the international production of carpet fibers. These operations have been characterized by a highly organizational vitality which has led to considerable variations and a new approach for reporting sustainability performance.

The first strategic changes were mentioned in the 2012 Sustainability Report (published in August 2013) with the aim of presenting the Group's sustainability. Changes that led to the launch of an important project at the end of 2013 aimed at reporting environmental data from 2014 onwards both at factory level and at Group level by improving the collection and analysis of data.

The interactive index facilitates the browsing and reading of the report in electronic format. The tables concerning the GRI index are reported in the appendix and contain information on the standards and indicators in respect to the guidelines used.

**We would like to thank all company employees who collaborated in the collection of data and the sustainability team for their valuable work of coordination and analysis which made it possible to publish the 2013 sustainability report.**

Please note: we are open to any suggestions concerning the sustainability balance sheet which can help us improve sustainability and our relationships with the stakeholders.

*Maria Giovanna Sandrini*

Communications Manager  
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SUSTAINABILITY REPORT 2013  
APPLICATION LEVEL C GRI

- The sustainability report is in compliance with the guidelines established by the global reporting initiative - GRI (version 3.1) level C
- Previous editions (annual) of the sustainability report can be seen on [www.aquafil.com](http://www.aquafil.com)

# 1. THE AQUAFIL GROUP

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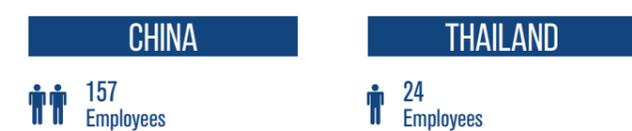
## EUROPE



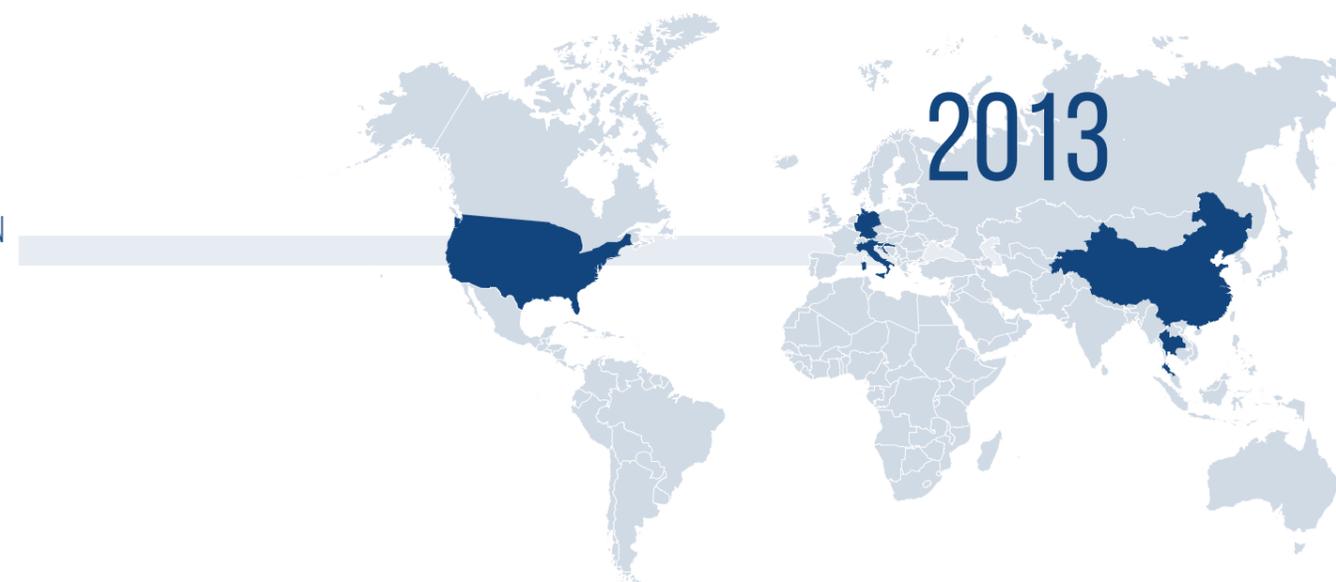
## NORTH AMERICA



## ASIA



THE AQUAFIL GROUP OPERATES WORLDWIDE ON 3 CONTINENTS WITH **14 PLANTS** AND AN ENGINEERING COMPANY IN BERLIN, GERMANY. AT THE END OF 2013 THE GROUP'S LABOR FORCE AMOUNTED TO **2,159 EMPLOYEES**



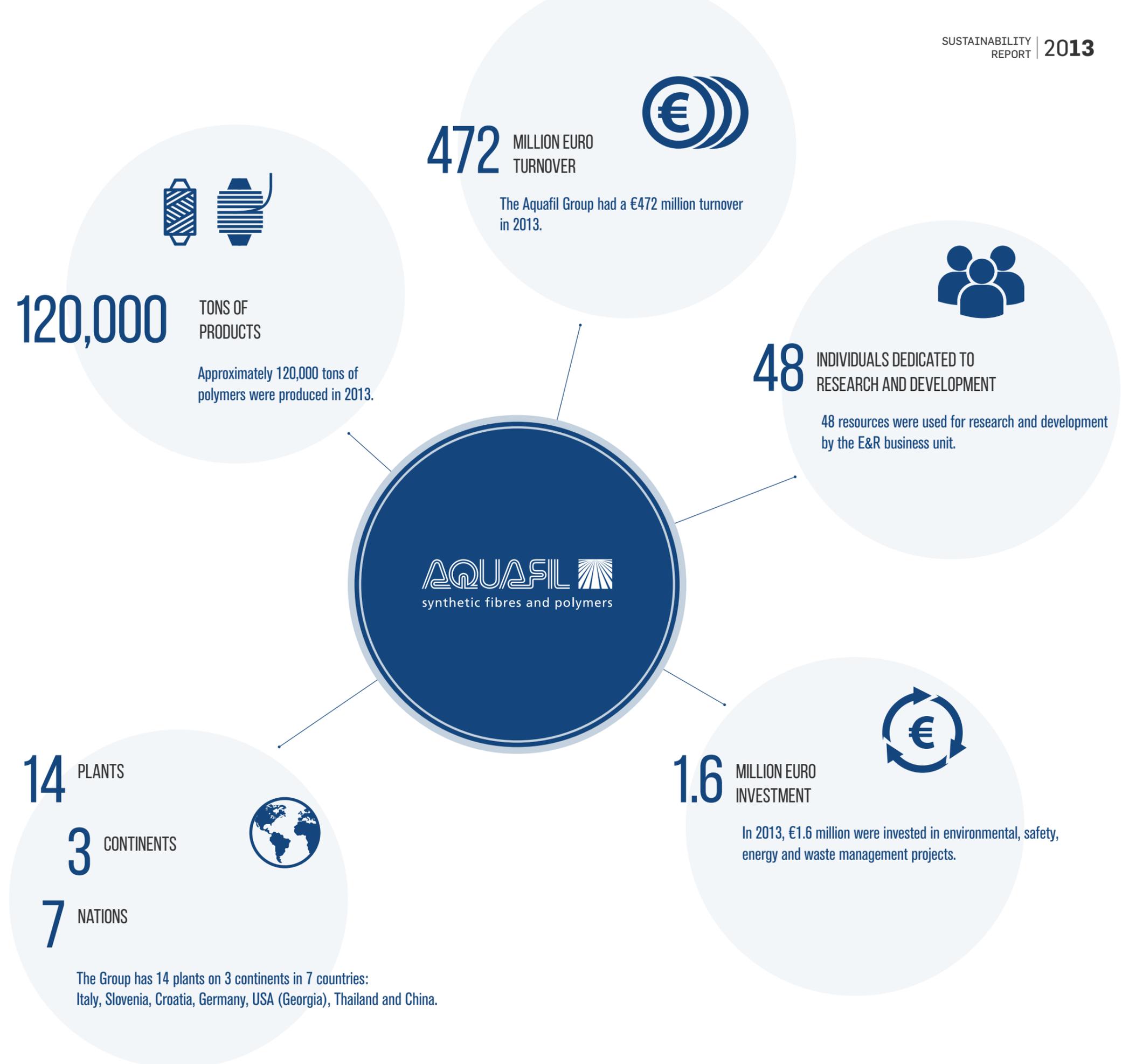
## 1.1 THE GROUP

The Aquafil Group was founded 1969 in Arco (TN), Italy and is now **one of the leading companies** in Italy and worldwide to manufacture and sell Polyamide 6 polymers and fibers. Aquafil products are mainly used for the **carpeting sector** and specific **fields of clothing** (underwear, hosiery, sportswear).

The Group's activities are divided into **two main production units**:

- **BCF** (Bulk Continuous Filament): manufacturing fibers for carpeting.
- **NTF** (Nylon Textile Filament): manufacturing fibers for the clothing sector.

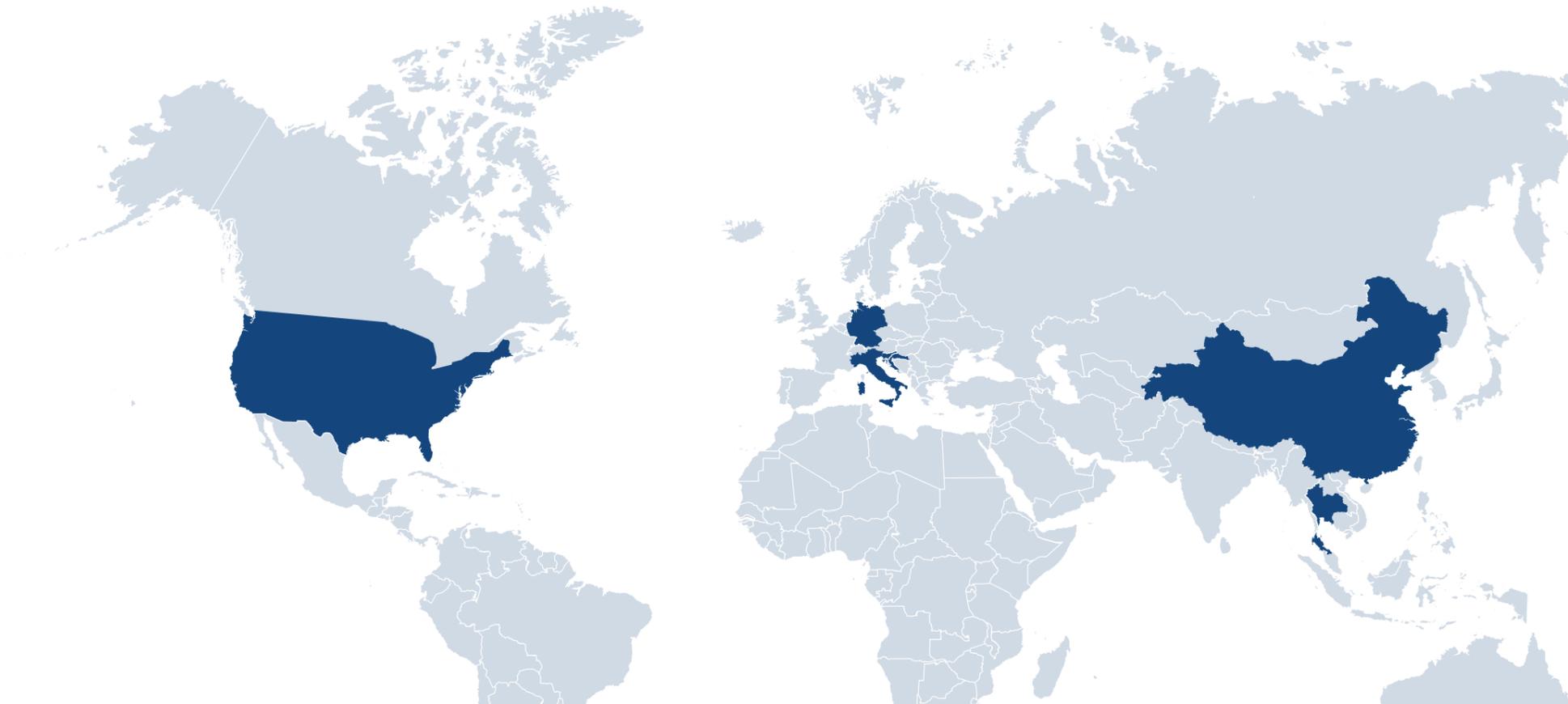
The **Energy & Recycling** business unit (E&R) has been operating since 2008 and deals with the skills, technology and planning for all production units. The main objective of the E&R unit is to implement **projects aimed at reducing the environmental impact of industrial processes**.



## 1.2 HISTORY



# 1.3 PLANTS



GEORGIA / USA	ITALY	SLOVENIA	CROATIA	CHINA	THAILAND
<b>CARTERSVILLE</b>	<b>ARCO / TN</b>	<b>LJUBIANA</b>	<b>OROSLAVJE</b>	<b>JIAXING</b>	<b>RAYONG / BANGKOK</b>
BCF Spinning Air entanglement Twisting Heat setting Masterbatch EP Compounds Masterbatch ***	BCF Polymerization Spinning Masterbatch  <b>ARCO / TN **</b> EP Compounds Masterbatch  <b>ROVERETO / TN</b> BCF Space dyeing Superba dyeing  <b>CARES / TN</b> BCF Air entanglement Twisting  <b>VARALLO POMBIA / NO</b> NTF Spinning	BCF Polymerization Spinning Twisting Heat setting NTF Spinning Warping Masterbatch ERS Depolymerization Purification CPL ECONYL®  <b>AJDOVSCINA</b> ERS Waste preparation of Polyamide 6  <b>SENOZECE</b> NTF Warping  <b>CELJE</b> BCF Twisting Heat setting	<b>GERMANY</b>  <b>LEUNA *</b> BCF Spinning Air entanglement Twisting Heat setting  BCF Synthetic yarns for carpeting EP Engineering plastics NTF Synthetic yarns for the clothing industry ERS ECONYL® Regeneration System	BCF Spinning Air entanglement Twisting Heat setting  EP Compounds ***	BCF Air entanglement Twisting

No joint ventures were activated at report level in 2013.

\* Not included in the 2013 report, the plant will be included in the 2014 report  
 \*\* Sites that exited the report in April 2013 due to the sale of the Engineering Plastics business unit  
 \*\*\* Business Unit exited the report (EP China December 2013, EP Georgia June 2013)

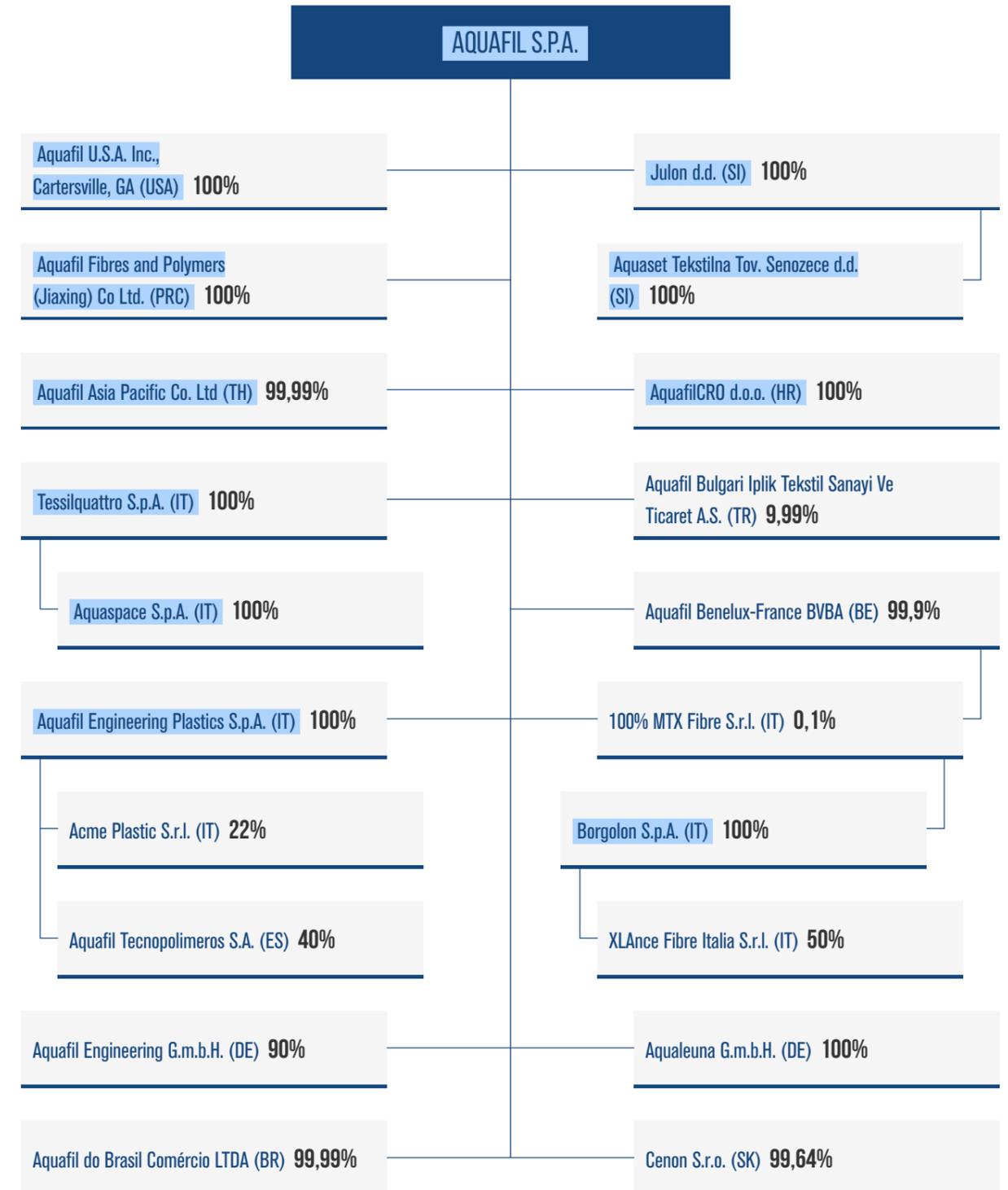
## 1.4 THE ORGANIZATION

Aquafil S.p.A. is a privately owned company, the majority of which is owned by the **Bonazzi family**. The H&C Romeo Management Company has been part of the corporation since 2009. It has invested €45 million in Aquafil and is financed with funds managed by Hutton & Collins. There are also **minority shareholders** in the Group who serve as members of the board of directors.

Aquafil's corporate headquarters, located in Arco, Italy, is responsible for implementing strategies, coordination and control of the Group's development policies.



## > THE CORPORATE STRUCTURE OF THE GROUP



Companies included in the sustainability report.

## 1.5 CORPORATE GOVERNANCE

The Aquafil Group is led by the **board of directors** and **executive management committee**.

### > BOARD OF DIRECTORS

The board of directors directs the company's activities by developing global strategies through **development** initiatives, setting up **companies** operating in various fields, planning **investments** and monitoring and evaluating the **results**.

The limited allocation of shares enables all shareholders to participate in corporate governance.

For this reason, institutionalized instruments which allow for communication between minority shareholders and the board of directors are not required.

CHAIRMAN AND CEO  
GIULIO BONAZZI

HONORARY CHAIRMAN  
CARLO BONAZZI

EXECUTIVE DIRECTOR  
FABRIZIO CALENTI

EXECUTIVE DIRECTOR  
ADRIANO VIVALDI

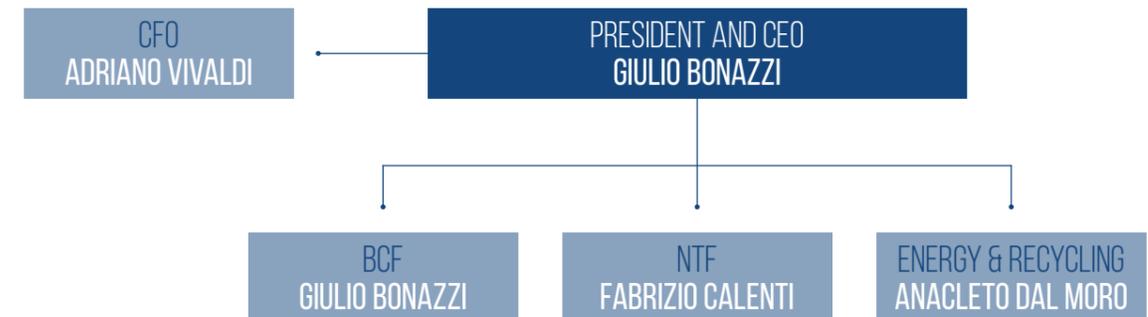
DIRECTOR  
EDI KRAUS

DIRECTOR  
MAURO MORETTI

DIRECTOR  
RAFAEL BOULET TORRES

DIRECTOR  
STEFANO MELONI

### > THE EXECUTIVE MANAGEMENT COMMITTEE



Additional members of the executive management committee include:

GENERAL MANAGER, JULON D.D.  
EDI KRAUS

PRESIDENT, AQUAFIL U.S.A.  
FRANCO ROSSI

The executive management committee supports the board of directors in **defining strategies**. This body is entrusted with operations concerning **industrial, commercial** and **logistical matters**. The executive management committee is also responsible for **monitoring** the progress of the Group's projects and policies related to sustainability, occupational safety and vocational training.

## 1.6 THE GROUP'S ACTIVITIES

Aquafil's products and activities are divided into **two business units** which produce materials used for manufacturing carpeting and clothing.



This business unit deals with the production, re-processing and sale of **carpet** fibers to be used for **contract work** and **tenders, automotive** and **residential sectors**.

The BCF business unit focuses on the research and development of new products. Products are reviewed each year and select pieces of the collection are updated. Thanks to the Aquafil Carpet Center, the Group is able to assist its customers in the realization of specific designs according to the requirements and trend of the market.



This business unit handles the production, re-processing and marketing of synthetic Polyamide 6 and 6,6 fibers which are mainly used for manufacturing fabrics for **underwear, hosiery, sportswear** and **clothing**.

Aquafil collaborates closely with its customers in order to improve the **aesthetics** and **general characteristics**, particularly concerning **technical sportswear**.

“Aquafil is the leading European manufacturer of BCF yarn with a 40% market share and is the second leading supplier in the world.

“The Aquafil Group is one of the main suppliers to some of the largest Italian and European brands in the clothing, underwear and sportswear sectors.



This business unit develops the skills, technology and projects supporting the Group's **sustainability policies**. The Energy & Recycling unit focuses on three main issue:

- **Energy:** implementation of technological projects in order to produce electricity and heat from renewable or low-environmental impact sources and to increase the efficiency of production processes with the aim of reducing emissions thus safeguarding the territory and local communities.
- **Recycling:** to promote the use of raw materials deriving from recycling and to support, develop and encourage the design of products that are fully recyclable at the end of their product life.
- **Culture:** to develop and promote the culture of sustainability in Aquafil's relationship with all stakeholders by implementing regular training programs and establishing partnerships with customers and suppliers.

In April 2013 the Engineering Plastic business unit, which produced technopolymers for manufacturing plastic products with injection moulding machinery, was sold.

This allowed Aquafil to focus its business production on carpet and clothing yarn.

## 1.7 THE FIELDS OF APPLICATION OF AQUAFIL PRODUCTS

### > NEW LIVING SPACES



#### INTERIOR DESIGN, BUILDING & CONSTRUCTION

Aquafil contributes to the interior design and construction field by manufacturing fibers for synthetic textile carpeting (BCF) which is used for carpeting in the residential, hospitality and contract sectors.

Aquafil helps to spread **the culture of the "quality of living"** with its products, which is now a popular trend for more and more people worldwide.

### > COMFORT, SAFETY AND TECHNOLOGY



#### AUTOMOTIVE

The BCF synthetic fibers are used for making carpets and upholstery in the automotive industry. Aquafil contributes to the **quality of the vehicles made by the most recognizable brand names in the industry.**

### > COMFORT AND TECHNICAL PERFORMANCE



#### SPORTS, FASHION AND FREE TIME

Aquafil produces fibers (NTF) for male and female hosiery, knitwear, run resist fabric, underwear, sportswear and special technical applications for the **underwear, swimwear and sportswear sectors.**

Thanks to the high quality of its products, Aquafil meets the needs of the market in sectors where the evolution of clothing is essential for achieving the best possible performance at competitive levels with more sustainable products.

## 1.8 STAKEHOLDER RELATIONS

Aquafil's relationships with its stakeholders are based on mutual **respect**, **social dialogue** and an **efficient management** of the production chain.

### EMPLOYEES AND COLLABORATORS

**Human resources** are Aquafil's **main asset**. The strategic management of human resources is aimed at enhancing employees' skills in order **to ensure** international competitiveness and successfully tackle new challenges of the market.

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An essential element of the company's strategy consists of identifying and sensitizing the main stakeholders with whom Aquafil undertakes in actions to promote and improve corporate sustainability. The stakeholders identification is derived from an internal analysis of "Stakeholder Engagement" that took into account the company's business strategies and the issues that have greater influence and interest on the Group and on its activities.  
Main actions of stakeholder involvement: direct relationships, specific events and projects and creation of partnerships.

### SUPPLIERS

Aquafil's relationships with its suppliers are based on policies inspired by **transparency, cooperation and fairplay**. Integrating the Group's development policies with those of its suppliers plays an important role in maintaining a high level of efficiency in projects aimed at sustainability and the development of new products.

The **ECONYL® Reclaiming Program**, is an example of Aquafil's customer-supplier relationship. This is made possible thanks to the international network created by Aquafil that deals with Polyamide 6 waste products which are required to power the recovery and recycling system in order to produce 100% regenerated caprolactam.

### LOCAL COMMUNITIES

Aquafil has factories **in 7 countries on 3 continents** with various cultural and territorial differences. Relationships with the local communities are important for the Aquafil Group and are strengthened by the implementation of projects designed to **support** and **protect the population** as well as **safeguard the environment** for the benefit of the region.

### CUSTOMERS

The Group's development policies are aimed at understanding and orientating the demand of the market by developing new products that meet consumer needs with **high standards of quality and sustainability**. Aquafil motivates its customers by activating low-impact, sustainable production chains that adopt new systems for the recovery of pre- and post-consumer waste; new methods for manufacturing products made from recycled and recyclable components.

- **BCF**, the company has established an active partnership with leading international companies that produce synthetic carpeting, thus becoming a reference point for carpet manufacturers who supply contractors.

- The main stakeholders in the **NTF** sector are the leading manufacturers of fabrics used for making underwear, hosiery, sportswear, fashion and swimwear.

# 2. THE FACTS IN 2013

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MARCH

THE LAUNCH OF "HEALTHY SEAS, A JOURNEY FROM WASTE TO WEAR"



APRIL

THE ENGINEERING PLASTICS BUSINESS UNIT IS SOLD



AUGUST

AQUAFIL JOINS THE ELLEN MCARTHUR FOUNDATION'S CIRCULAR ECONOMY 100 PROGRAM



NOVEMBER

ACQUISITION OF THE XENTRYS COMPANY BASED IN LEUNA: AQUALEUNA IS FOUNDED



DECEMBER

THE EPD<sup>®</sup> IS PUBLISHED FOR THE ECONYL<sup>®</sup> POLYMER



## 2.1 2013 MILESTONES

### MARCH 2013

The “Healthy Seas, a Journey from Waste to Wear” initiative was launched internationally with the aim of **reducing the amount of solid waste in the seas**, particularly fishing nets. **Recovering and recycling these materials** allows waste to be converted into regenerated caprolactam to produce ECONYL® fibers. These fibers have the same technical characteristics of those made from raw fossil materials.

[www.healthyseas.org](http://www.healthyseas.org)

[www.facebook.com/healthyseas](https://www.facebook.com/healthyseas)

[twitter.com/healthyseas\\_org](https://twitter.com/healthyseas_org)

[www.youtube.com/user/HealthySeas](https://www.youtube.com/user/HealthySeas)

### APRIL 2013

Aquafil sold the Engineering Plastics (EP) business unit to Domo Chemicals with the aim of consolidating the Group's leading position in the BCF market while maintaining its **production of masterbatches for dyeing fibers**. Engineering Plastics (EP)\* is specialized in manufacturing and selling polymers and polyamide compounds in its factory based in Arco di Trento, Italy.

### AUGUST 2013

Aquafil joined the Ellen MacArthur Foundation by participating in Circular Economy 100, a project aimed at **promoting innovation** by **applying recycling and renewable energy principles to production processes**.

### NOVEMBER 2013

Aquafil purchased German company Leuna Xen-trys from Domo Chemicals. Renamed as Aqua-leuna, the company specializes in **twisting** and **eat setting processes**, enabling Aquafil to increase its commercial position in the BCF sector.

### DECEMBER 2013

The Environmental Product Declaration\*\* is published for ECONYL® polymer according to the international EPD® standard. The Aquafil Group made all the relevant, **verified information** concerning the **environmental impact** of the polymer available to all the stakeholders.

\* The Engineering Plastics Business Unit is included in the 2013 report for its commercial activity in the early months of 2013..

\*\* registration number S-P-00500 of 17/12/2013.

## 2.2 EARLY 2014 EVENTS

“Aquafil has decided to adopt a Code of Conduct and an Organizational, Management and Control Model.

- **The expansion of Aquafil USA** was initiated with the aim of increasing the productivity of the plant by 30%.

- **A web tool was adopted for collecting and reporting environmental data** from the various Aquafil plants.

- A **project** was launched concerning the use of an organizational, management and monitoring model Leg. 231/2001 **aimed at preventing crimes**, illustrating the areas of risk monitored by the company the establishment of organization and management models including the code of conduct based on the principles of sustainable development, respect for the territory, fairplay and transparency.

The Code of Conduct and The Organizational, Management and Control Model can be seen in the financial sector of the website.



# 3. SUSTAINABILITY

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## FIELDS OF ACTION



### PROCESSES

INCREASE OF  
PROCESS EFFICIENCY



### PRODUCTS

USE OF REGENERATED  
RAW MATERIALS



### PROJECTS

COOPERATION IN  
INTERNATIONAL  
PROJECTS



### SOCIAL

CARE FOR EMPLOYEES  
AND LOCAL COMMUNITIES

### 3.1 SUSTAINABILITY

“To be sustainable means to create values for stakeholders by using resources efficiently and respecting people and the environment without endangering the needs of future generation.

Sustainability in Aquafil is inspired by the **"Triple Bottom Line" approach** which is interpreted as the balance between the three essential aspects which regulate the management of an efficient organization: PEOPLE, PLANET AND PROFIT.

**PEOPLE - social sustainability**

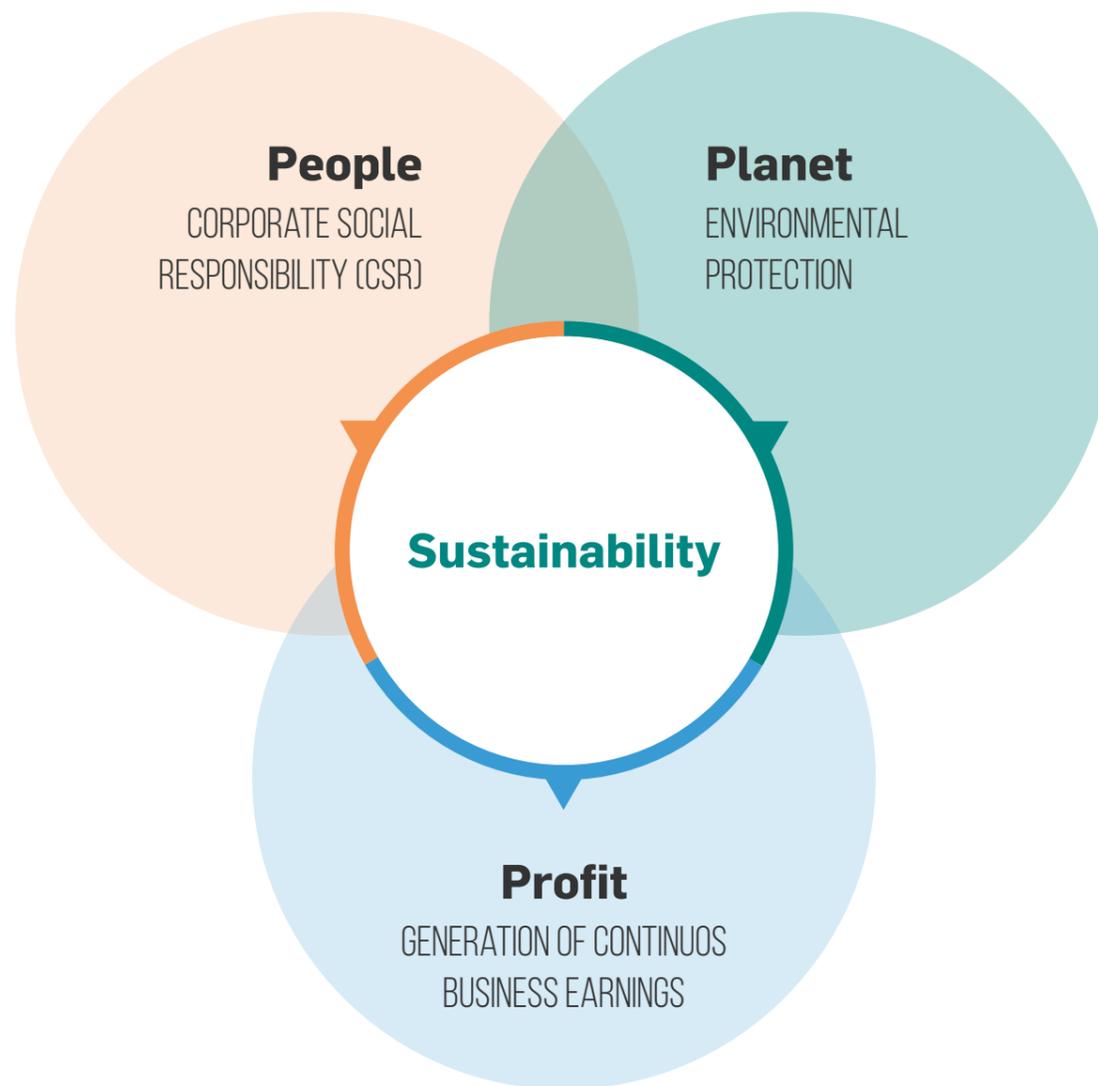
The ability to create and guarantee the conditions which ensure well-being regarding the cultural differences and human rights of workers and local communities where the Group is present.

**PLANET - environmental sustainability**

The ability to safeguard and respect the natural resources and the environment to develop and promote environmental-friendly products and processes.

**PROFIT - economic and financial sustainability**

The ability to create jobs and make profits.



The purpose of the report is to present to all stakeholders the most relevant aspects of sustainability of the organization (derived from an analysis of materiality internal) in line with the GRI, C-level  
 Priority topics dealt with in the Sustainability Report include:  
 - The Group's activities and products  
 - assessment of the environmental impacts of products and production processes  
 - involvement of the stakeholders  
 Main stakeholders involved: employees, collaborators, suppliers, local communities and customers.

The sustainability report is the Group's **main instrument** for informing stakeholders of integrated sustainability performance of social, environmental and financial matters by offering a **transparent overview** of policies, investments, assets, results achieved and the main issues related to the Group's activities:

- Workforce safety
- Energy and water consumption
- Reducing emissions
- Waste management
- The economic performance of the organization



BCF yarn

## > GUIDELINES

- Take action to ensure the sustainability policy is **spread** and put into **practice**.
- To be ready to **interact with customers and suppliers** in order to improve sustainability and innovation throughout the entire production chain of the chemical-textile sector.
- To build and maintain **relationships with local communities** wherever the Group is present or has the potential to develop in the future.
- To establish strong **local roots in territories** where the Group operates by paying constant attention to **internal resources** and the community's well-being.

## > STRATEGY

- To develop activities concerning **closed-loop products** which preserve natural resources and contribute to the protection of the environment.
- To reduce the **impact of manufacturing** processes by constantly improving our performance in four areas: energy, emissions, water and waste.
- **To involve suppliers**, employees and local communities in sustainability strategies.

## > THE FUNDAMENTAL VALUES

- **The importance of people**, suppliers, employees or simply citizens of the Earth.
- Innovative research as a **constant requirement** to be carried out with all available and appropriate means.
- Entrepreneurial spirit which expresses the desire **to always be a pioneer**, accepting all related obligations and risks.

## > MIDTERM OBJECTIVES

By combining business strategies with sustainability concepts at the beginning of the integration process (2007), Aquafil's aim is to **reduce greenhouse gas emissions** generated by production by 50% before 2020. At the end of five years a 30% reduction was observed. Thanks to the improvement activities and projects implemented in 2013, the reduction of **greenhouse gas emissions exceeded the threshold of 40%**.

The concept of Life Cycle Thinking and Analysis (LCA Life Cycle Assessment) has made us focus on the issues regarding raw materials **by setting up the ECONYL®** Regeneration System for which the company's goal is to use more recycled materials with high post-consumer rates.

## 3.2 PLAN OF ACTION

Aquafil aims at promoting integrated sustainability in the following ways:



### IMPROVEMENT OF INDUSTRIAL PROCESSES

Industrial processes will be orientated towards a more sustainable production by increasing the efficiency of manufacturing processes, using more energy from renewable sources, optimizing waste management, saving water resources, limiting GHG emissions and increasing safety.

*To maximize energy and resource efficiency, promote recycling and apply the best available techniques.*



### PRODUCT DEVELOPMENT

Design, develop and promote products and applications with better sustainability characteristics throughout the supply chain which help to save non-renewable raw materials, reduce emissions and recover and regenerate pre-and post-consumer waste.

*Develop and promote products that make consumption and the market more sustainable .*



### IMPLEMENTATION OF PROJECTS

The promotion of support and international projects which help to spread the principles of sustainability and the safeguarding of the environment by implementing targeted initiatives.

*The ECONYL® Reclaiming Program deals with the recovery of Nylon 6 waste in the United States, Egypt, Pakistan, Thailand, Turkey and Norway.*



### SOCIAL INITIATIVES

Aquafil pays great attention to the cultural and social differences of the local communities in which it operates. In addition to the constant commitment to comply with the local regulations, numerous activities and training programs are organized which focus on spreading information concerning integrated sustainability and safety in the workplace.

*"Zero Infortuni (Zero Tolerance)" experimental project was launched at the Arco Plant plant in the second half of 2013.*

## 3.3 PROJECTS

### > ENERGY SAVING: THE TESSIL 4 CASE STUDY

Optimization project aimed at reducing energy consumption.

Aquafil's Tessil 4 plant in Cares (TN), Italy reprocesses Nylon 6 fibers for the carpet industry. The main process is air entanglement which is carried out by joining various types of fibers together with a special machine that blows jets of compressed air into them in order to create equally-spaced "knots," creating a particular visual according to the blend of the colors and the number of "knots" created.

In 2013 the Tessil 4 plant took part in an optimization project aimed at reducing energy consumption focused on the air entanglement process. The main activities concern:

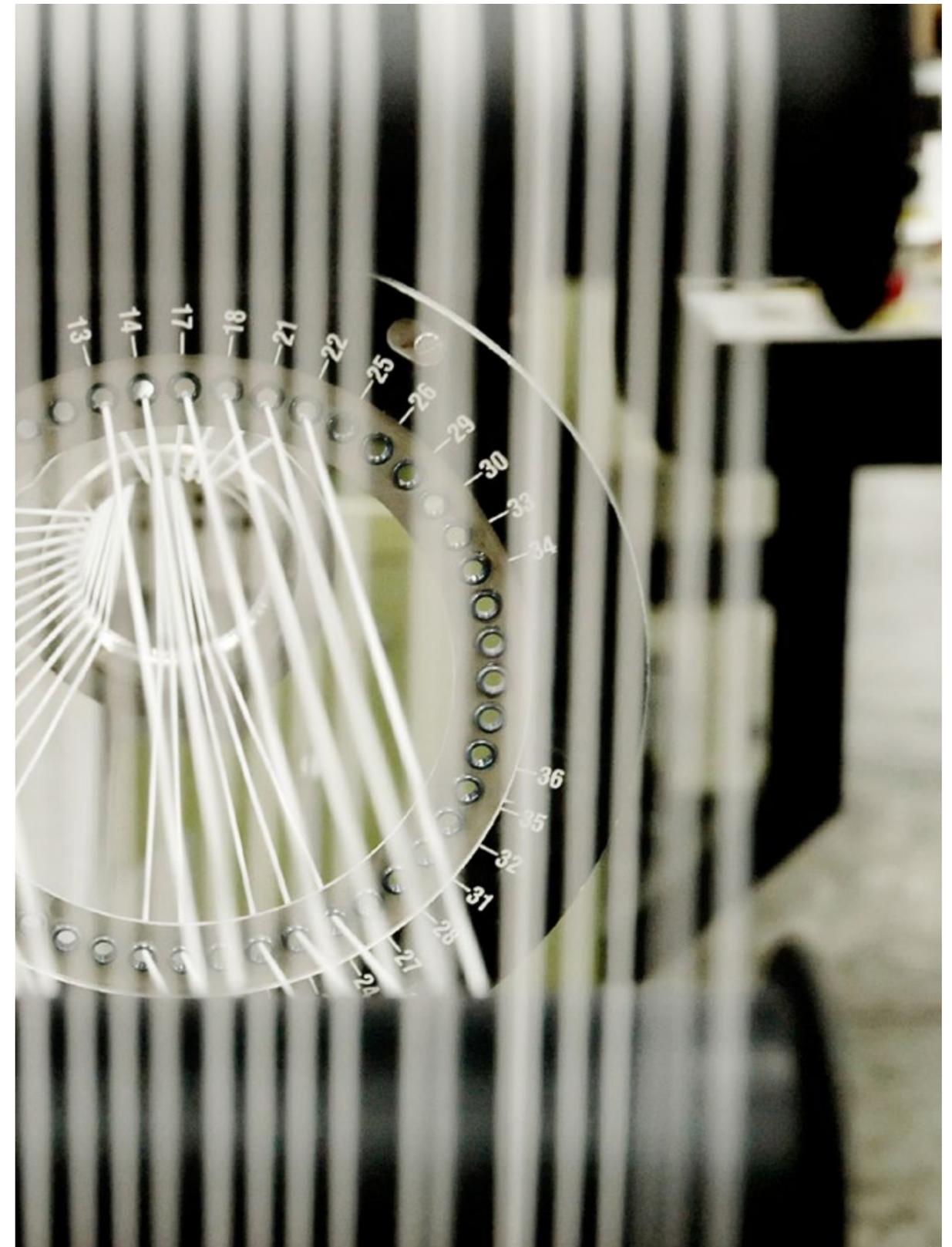
- the improvement and optimization of equipment
- regulation and adjustment of fluctuations of energy requirement
- optimization of compressed air pressure
- recovery and recycling of water used for cooling oil in the compressors
- optimization of insulation and division into compartments of the workplace

The projects expected launch in 2014 will enable:

- reduction of energy consumption > for the interlacing process a saving of about 320 TEP/year is expected
- reduction in the consumption of GPL > a saving of about 60 TEP/year is expected
- reduction of CO<sub>2</sub> GHG > an overall saving of about 1,200 ton/year of CO<sub>2</sub> is expected



IMPROVEMENT OF INDUSTRIAL PROCESS



Processing on Superba machine

## > ECOMETEX PROJECT



PRODUCT  
DEVELOPMENT

“The recycling of pre- and post-consumer Nylon 6 waste products is one of the most important aspects of Aquafil’s development, in which the company has decided to direct its activities and products.

Aquafil participates in the EcoMeTex European Project (2012-2015) which is directly financed by a specific committee of the European Commission and by the European Carpet and Rug Association (ECRA).

The goal of EcoMeTex is to promote recycling and, above all, develop a method aimed at recycling used carpeting in Europe for the construction and transportation industries.

Some of the most important European companies in the field are partners in the EcoMetex project including: carpet fiber manufacturers, carpet backing manufacturers, carpet manufacturers, research organizations, universities and experts who study the environmental impacts of various products.

Due to the knowledge and experience gained in developing the ECONYL® Regeneration System, Aquafil S.p.A. takes part in the EcoMeTex project as a manufacturer of Nylon 6 fibers for producing carpets designed with the aim of optimizing the recovery and recycling of the materials and an expert enterprise for recycling Nylon 6 capable of determining the best way of recycling new types of carpet.

## > THE CE100 PROGRAM



IMPLEMENTATION OF  
PROJECTS

“Designing and manufacturing products so their materials can be recycled.

Aquafil partners with Desso, Tarkett, H&M and M&S in the CIRCULAR ECONOMY CE100 program.

Based on the principle of "Circular Economy" introduced by the Ellen MacArthur Foundation, 100 companies will take part in the 1000-day program with the aim of encouraging companies to apply the principles of recycling and use energy deriving from renewable sources for their production processes. The objective of the CE100 program is to build a global platform that will accelerate and lead market development towards a circular economy in order to create an efficient method for using the resources based on a natural cycle, i.e. a system in which the initial materials and the final products are related to each other following a cyclic pattern.

The principles of the CE100 program are:

- To create a mechanism which solves a common problem
- To define good techniques in order to support the companies
- To provide a mechanism for establishing "Circular Economy" within the companies

Aquafil 's case study - the ECONYL® Regeneration System - enables pre-consumer waste generated by industrial production or post-consumer waste generated by end-of-life products to be transformed into new Nylon 6 by recycling the materials without affecting their quality.



SOCIAL INITIATIVE

# LET'S INCREASE WORKPLACE SAFETY



IT'S A PRIMARY VALUE



IT IS AS IMPORTANT AS PRODUCTIVITY,  
QUALITY OR THE ENVIRONMENT



IT IS EVERYONE'S RESPONSABILITY TO  
APPLY AND CONTROL IT



IT IS A SIGN OF RESPECT FOR ONESELF  
AND OTHERS



IT IS OUR TARGET



**"Zero Infortuni" is only possible  
with everyone's participation**

AQUAFIL Group  
**Zero**  
INFORTUNI

## > "ZERO INFORTUNI" PROJECT



**"Zero Infortuni" aims for successful  
changes in policy to effectively  
increase workplace safety.**

Safety in the workplace is of great importance to Aquafil. It is because of the development of safety procedures and compliance of health and safety regulations that we have greatly reduced the number of workplace accidents and injuries.

As a further demonstration of this commitment, the "ZERO INFORTUNI" project was launched in 2013 with the goal of changing safety policies and procedures at all levels of the organization by:

- involving people
- getting a clear picture of the changing process
- supporting the changes
- accurate planning of the phases of the project

The aim is to place employees at the center of the project in order to create awareness of the risks related to production and modify their behavior accordingly so they are able to assist the company in reducing risks as much as possible.

The "Zero Infortuni" experimental project was launched at the Arco plant in the second half of 2013



2012

# 4. THE ECONYL<sup>®</sup> PROJECT

4.1 THE PRODUCTION MODEL: 6 STEPS FOR CLOSING THE LOOP	54
4.2 THE ADVANTAGES	56
4.3 ECONYL <sup>®</sup> AND HEALTHY SEAS	58

## PROGRESSION THROUGH THE YEARS TO ACHIEVE 100% REGENERATED NYLON

1998

INTERNAL PA6 RECOVERY

INTERNAL PROCESS WASTE CONTRIBUTES TO THE PRODUCTION OF ENGINEERING PLASTICS WITH RECYCLED CONTENT

2007

70% PRE-CONSUMER  
30% VIRGIN RAW MATERIAL

PRODUCTION OF ECONYL70 BCF RECYCLED YARN BEGINS

2011

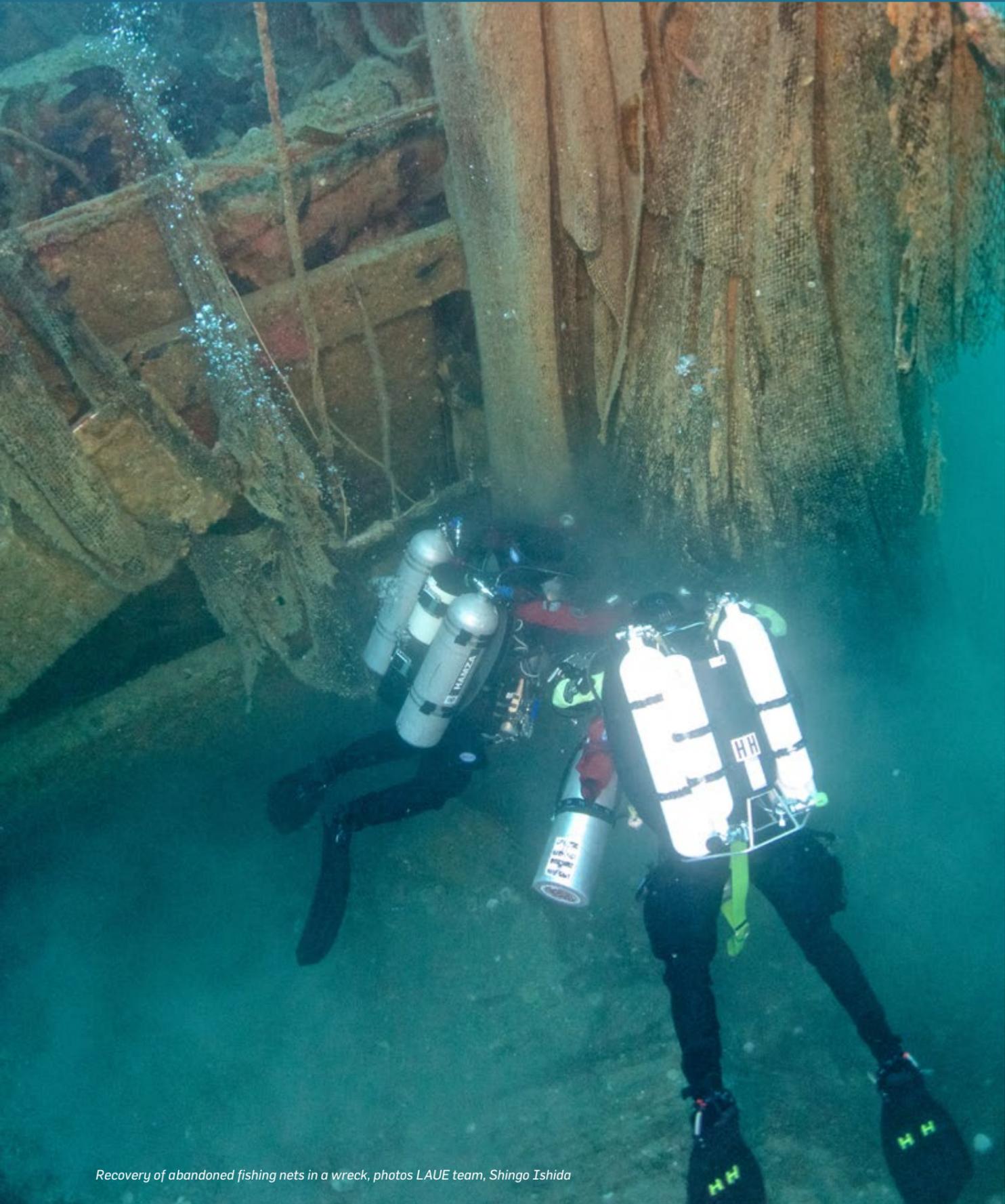
70% PRE-CONSUMER WASTE  
30% POST-CONSUMER WASTE

THE INAUGURATION OF THE ECONYL<sup>®</sup> PLANT IN LJUBLJANA BRINGS A 30% POST-CONSUMER WASTE CONTRIBUTION

2013

50% PRE-CONSUMER  
50% POST-CONSUMER

SPECIAL EFFORTS ARE MADE TO INCREASE THE PERCENTAGE OF POST-CONSUMER WASTE TO A MINIMUM OF 50%



Recovery of abandoned fishing nets in a wreck, photos LAUE team, Shingo Ishida

“We are closing the loop to bring responsible products to life forever.”

After recovering pre- and post-consumer waste containing Polyamide 6, the ECONYL® Regeneration System transforms it into regenerated caprolactam, the raw material used for the Group's production operations. The process enables the recovery of materials

which would otherwise be disposed of. The most important types of waste to recycle are portions of carpets and rugs, plastic fabric and components and fishing nets, which are often left at sea posing significant threats to the ecosystem.



“Some examples of final products made with ECONYL® BCF fibers.

- The flooring at Sedna Hospital in "Sedna", Mexico is made with DESSO AirMaster®.
- Interface's Net Effect™ collection is made with 100% regenerated ECONYL® nylon and is inspired by the shape and movement of the seas and oceans.
- The "Green Red Carpet" used for the GreenTec Awards 2013 created by VORWERK.
- The "Visions of..." collection by DESSO is based on the combination of techniques creating unique visual effects according to the viewing angle.
- The JOIN collection by Marcel Wanders, made from 100% regenerated ECONYL® nylon, is used to create a particular and artistic atmosphere.



*Net Effect™ collection created by Interface is inspired by marine environments.*

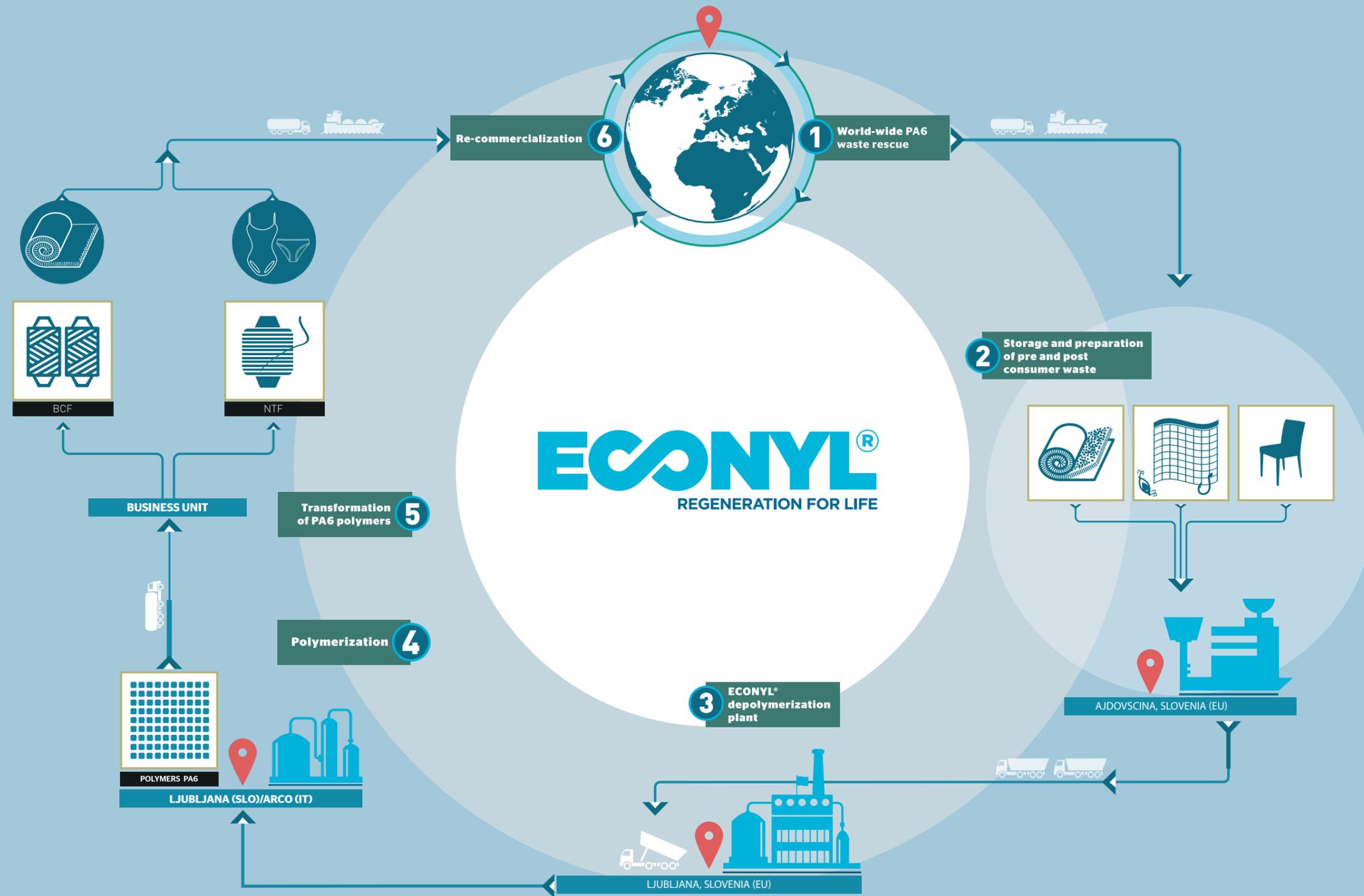


“Some examples of final products made with ECONYL® NTF fibers.

- The “ECO COLLECTION 2014” swimwear created by SUMMERLOVE SWIMWEAR is designed by Vanessa Rivers.
- The “AFRICA-ZANZIBAR” swimwear collection made by LA PERLA.
- Swimwear collection designed by AURIA and MARGOT BOWMAN.
- 2014 ADIDAS swimwear collection.
- Autumn – winter 2014/15 T-shirt collection Autunno-Inverno produced by WAVE-O.
- Sports bras for the TRIACTION Autumn / Winter 2014 collection by TRIUMPH.
- ARENA Waterfeel X-Life® Eco swimwear which is made of material composed of 80% ECONYL® and 20% Lycra.
- KORU swimwear that produces swimwear for surfers.



Swimwear KORU made with ECONYL® yarn



## 4.1 THE PRODUCTION MODEL: 6 STEPS FOR CLOSING THE LOOP

### 1. RECOVERY OF WASTE

Waste is recovered worldwide through the international ECONYL® Reclaiming Program established by the Aquafil Group. The waste is sent to the treatment center in Ajdovscina, Slovenia. **Between 2011 and 2013 more than 30,000 tons of waste were removed from the environment.**

### 2. PREPARATION OF THE MATERIALS

**In the Ajdovscina treatment center, the various types of waste are prepared for the depolymerization process by removing impurities which are fed back into the other recovery chains. In 2013 the percentage of post-consumer waste reached 60%.**

### 3. DEPOLYMERIZATION

The heart of the ECONYL® Regeneration System: the waste is treated to depolymerize nylon in order to produce regenerated caprolactam with the same technical characteristics as caprolactam obtained from fossil sources. **The ECONYL® Regeneration System is an innovative production process which is unique in terms of efficiency and productivity worldwide.**

“Thinking ahead to create regenerable products.”

### 4. POLYMERIZATION

In the two polymerization plants in Arco and Ljubljana, ECONYL® caprolactam is converted into Nylon 6 polymers. **The ECONYL® Regeneration System enables us to produce caprolactam with the same performance and chemical characteristics as caprolactam obtained from raw fossil materials.**

### 5. TRANSFORMATION

The PA6 polymers are then transformed into fibers and used by customers for manufacturing carpeting and clothing. **Fibers produced from the ECONYL® Regeneration System are used in the carpeting and clothing sectors.**

### 6. RE-COMMERCIALIZATION

The products are sold and used by the end consumer. When they have reached the end of their product life, they can be regenerated and used again. **With the ECONYL® Regeneration System, it is possible to endlessly regenerate Polyamide 6 contained in the waste by converting it back into raw caprolactam.**

## 4.2 THE ADVANTAGES

The ECONYL® Regeneration System is endless because the depolymerization process allows us to produce regenerated caprolactam, which has the same characteristics as caprolactam obtained from fossil sources. The possibility of using raw materials extracted from waste enables us to recycle waste which would otherwise end up in landfills or the environment, such as fishing nets which can significantly damage the marine ecosystem if left in the sea.

The system saves non-renewable fossil resour-

ces. In short, for every 10,000 tons of caprolactam regenerated with the ECONYL® Regeneration System\*:

- over 12,000 tons of waste are eliminated
- approximately 70,000 barrels of oil are saved
- the emission of 42,000 tons of CO<sub>2</sub>eq is avoided

# VIRGIN VS ECONYL®

THROUGH ECONYL®

**-55%**

GREENHOUSE GAS EMISSIONS (kg CO<sub>2</sub>eq.)



**-54%**

GROSS ENERGY REQUIREMENT



### › ENVIRONMENTAL PRODUCT DECLARATION OF THE ECONYL® POLYMER

Since 2011, Aquafil has been trying to enhance the study of the environmental impact of its products through the **certification** of environmental product declarations in compliance with the international EPD® System regulations ([www.environdec.com](http://www.environdec.com)). Following the first document of 2011 relative to ECONYL® fibers, the declaration for the ECONYL® polymer was published at the end of 2013.

The project enabled us to **carry out an in-depth analysis to gain knowledge concerning key performance indicators** which provided useful information for research and development purposes. **The main environmental impact indicators** are reported in the EPD statement.

Registration number S-P-00500 of 17/12/2013.

FOR 1 KG OF ECONYL® POLYMER

CONSUMPTION OF FOSSIL RESOURCES FOR THE PRODUCTION OF MATERIAL ALMOST EQUAL TO ZERO KG

CONSUMPTION OF FOSSIL RESOURCES FOR PRODUCING ENERGY EQUAL TO 0.99 KG

GREENHOUSE GAS EMISSIONS EQUAL TO 3.66 KG CO<sub>2</sub>EQ

\* EPD data (2013) compared to the average virgin product. Source: Internal Aquafil 2013.

## 4.3 ECONYL® AND HEALTHY SEAS

“An international collaboration launched in 2013 with the aim of recovering and recycling abandoned fishing nets left at sea.

Healthy Seas is an **international collaboration** that was launched in 2013 by Aquafil, Star Sock and the ECNC Group. This initiative was established with the aim of **recovering and recycling abandoned fishing** nets left at sea to feed the ECONYL® Regeneration System. **The regenerated polymers are then used for making fibers and new products** such as hosiery, swimwear, underwear and carpeting.

Besides Aquafil, the ECNC Land & Sea Group is involved in the project. The Dutch non-profit organization deals with the environmental clean-up of biodiversity and the sustainability of natural environments all over Europe. Star Sock

is licensed to sell international hosiery brand names. To this point, **14 dives** have been conducted with **60 volunteer** scuba divers recovering approximately **20 tons of fishing nets** in the North Sea (The Netherlands and Belgium). Another **two pilot projects** will be implemented in 2014 **along the Adriatic coastline** (Italy, Slovenia and Croatia) **and in the Mediterranean Sea** (Spain).

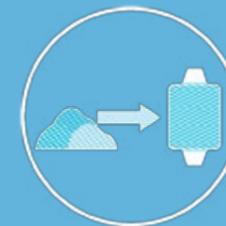


### > THE THREE PILLARS ON WHICH THE HEALTHY SEAS PROJECT IS BASED



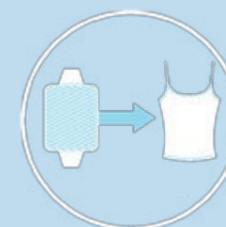
#### RECOVERY OF FISHING NETS - PREVENTION AND AWARENESS

The project anticipates no profit operations aimed at the recovery of fishing nets carried out by volunteer scuba divers and the storage of the nets in special warehouses. Besides the operations for recovering the nets, specific training programs will also be organized concerning the education and prevention of the main stakeholders of the fishing sector and marine environments.



#### REGENERATION OF FISHING NETS TO ECONYL® YARN

This entails the elimination of foreign objects, such as organic plastic or metal elements, from the fishing nets and their transformation into regenerated Nylon 6 fibers using the ECONYL® REGENERATION SYSTEM.

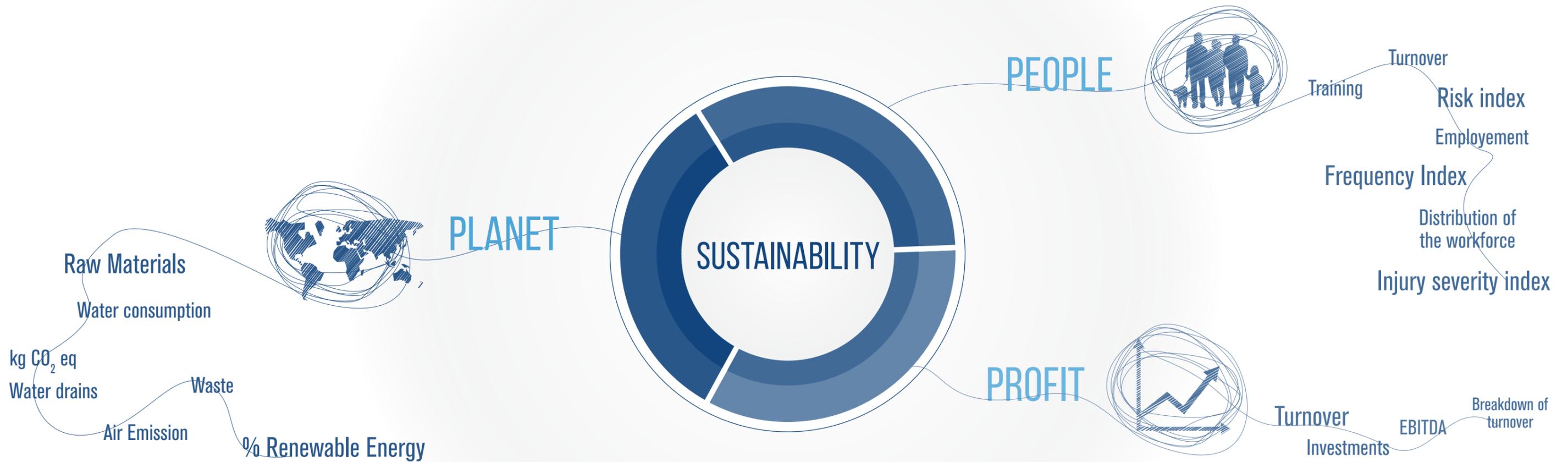


#### PRODUCTS- CLOTHING AND CARPETING

ECONYL® fibers are used for manufacturing new products produced by the textile sector.

# 5. INDICATORS

5.1 PEOPLE - SOCIAL INDICATORS	64
5.2 PLANET - ENVIRONMENTAL FIGURES	78
5.3 PROFIT - ECONOMIC SUSTAINABILITY	102



In this section of the report, the company informs its stakeholders of the performance of certain indicators (3 year reference period 2011-2013) which are useful for understanding and evaluating the Group's performance in terms of sustainability based on the three aspects: **people, planet and profit**.



• **PEOPLE:** presents data and information concerning the Aquafil Group and its usual practices related to the **workforce and personnel management**. In this section you can find information regarding the number of **employees** and the **organization** of the factories in the countries which the Group operates. Much attention is also paid to the **safety** measures which are important features of the Group's sustainability policies.

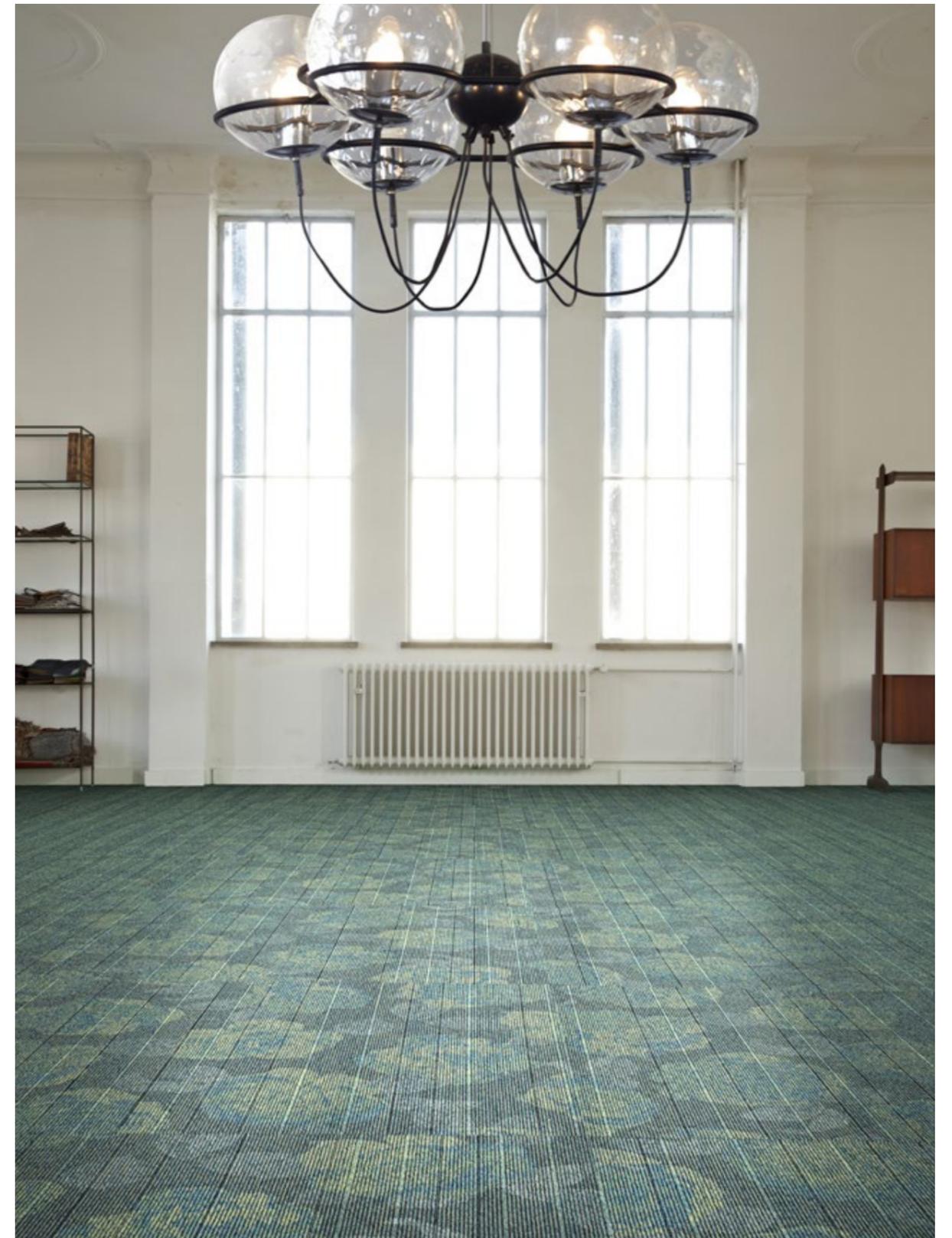


• **PLANET:** reports the environmental performance of the Group which is divided into four main areas of interest: **energy, emissions, waste and water**. The data presented is in absolute values and/or compared to the annual production in order to provide the reader with a clear interpretation of the results. This section also presents the main activities or investments made by the Group to **continually improve the environmental performance of all production plants**.



• **PROFIT:** In the economic and financial section, the Group provides data concerning the EBIDTA sales volume. In order to present the management activities and development policies, information can be found regarding the **distribution of funds** allocated to the business units and the geographical areas of the market.

For an exact interpretation of the data it is important to underline that over the years the area of reference of the report has changed considerably mainly due to the sale and acquisition of business units. For example, in 2013 Aquafil sold the Engineering Plastic business unit (mentioned in the report until April 2013) and acquired the German company Xentrys Leuna, which was renamed Aqualeuna, and not included in the 2013 report.



"Vision of Flower" collection by Desso

## 5.1 PEOPLE – SOCIAL INDICATORS

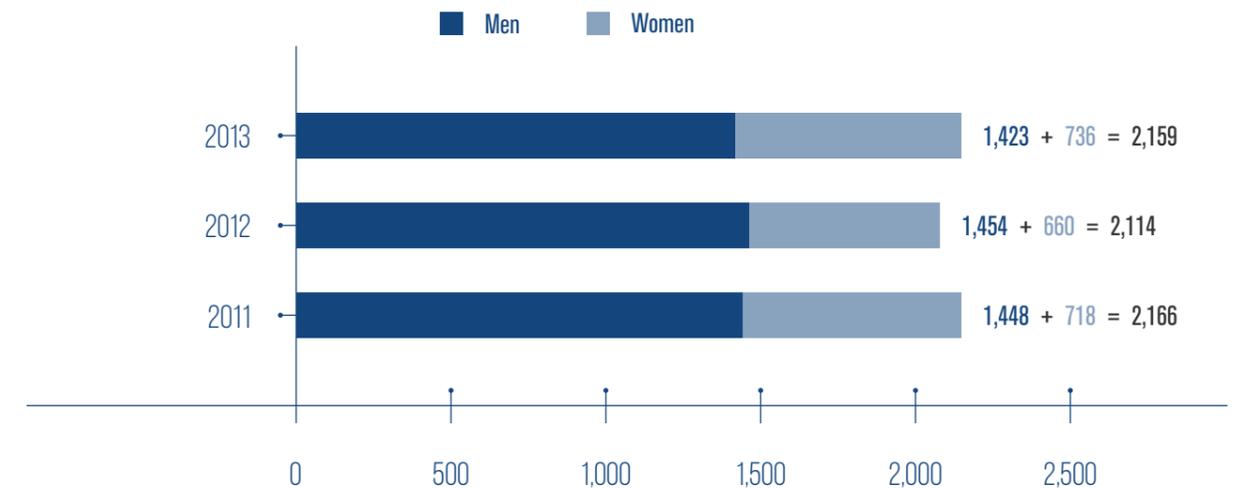
Over the last year, human resources management has been influenced by the **reorganization of industrial and managerial issues** which led to the sale of Engineering Plastics (EP) business unit to Domo Chemicals and the acquisition of German company Xentrys in Leuna which deals with spinning and BCF processing.

Due to these events and normal business operations, **the number of employees in 2013 reached a total of 2,159, 2% more than 2012.**

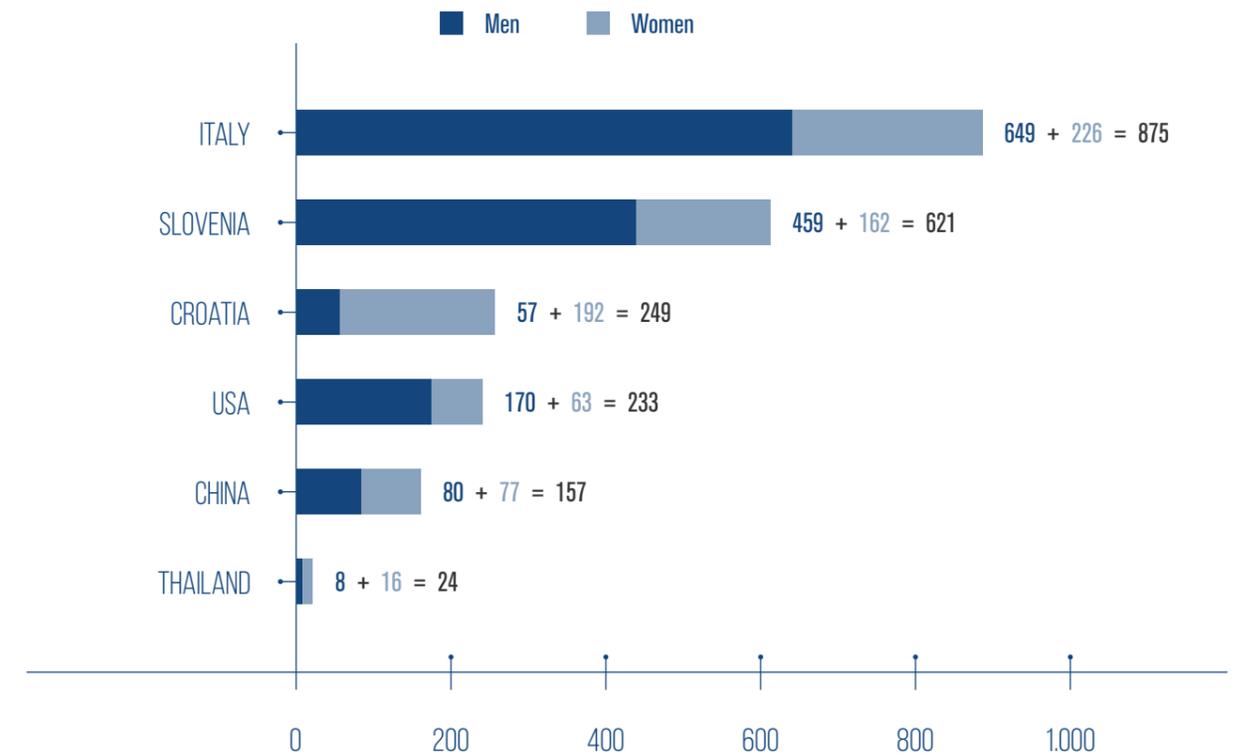
Besides sales and acquisitions, the most significant variations can be observed in the number of **employees at the plant in Oroslavie, Croatia.** The number of employees increased from **153 in 2012 to 249 in 2013.**

No significant variations were observed in the USA or Thailand. There was a considerable decrease of 112 Italian employees due to the sale of the EP business unit in April 2013.

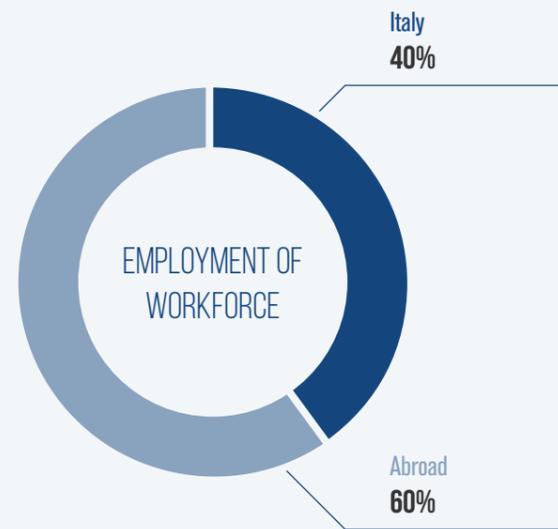
### > PERSONNEL EMPLOYED BY THE AQUAFIL GROUP



### > GEOGRAPHICAL DISTRIBUTION OF THE WORKFORCE



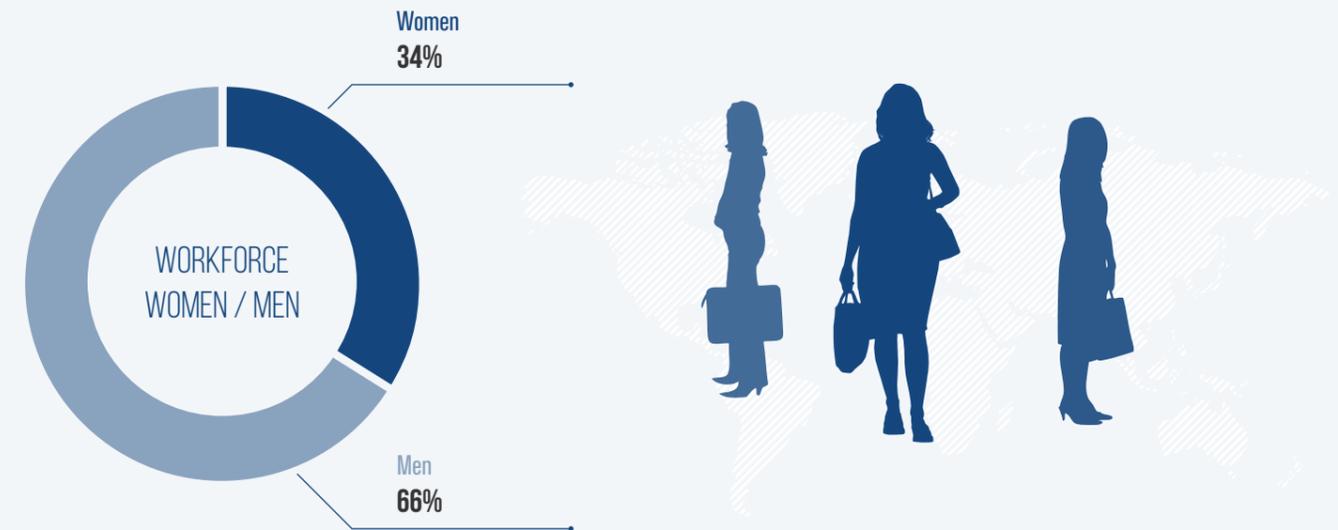
“In line with the Group's internationalization policies, approximately 60% of the workforce is employed abroad.”



The gender distribution of the workforce varies greatly within the Group's production facilities according to the geographical region and type of products made.

In Italy, Slovenia and the USA female workers are less than 30%, while they amount to 49% in China, 67% in Thailand and 77% in Croatia.

Female employees compose 34% of the Aquafil workforce.



Distribution of the workforce in the various nations

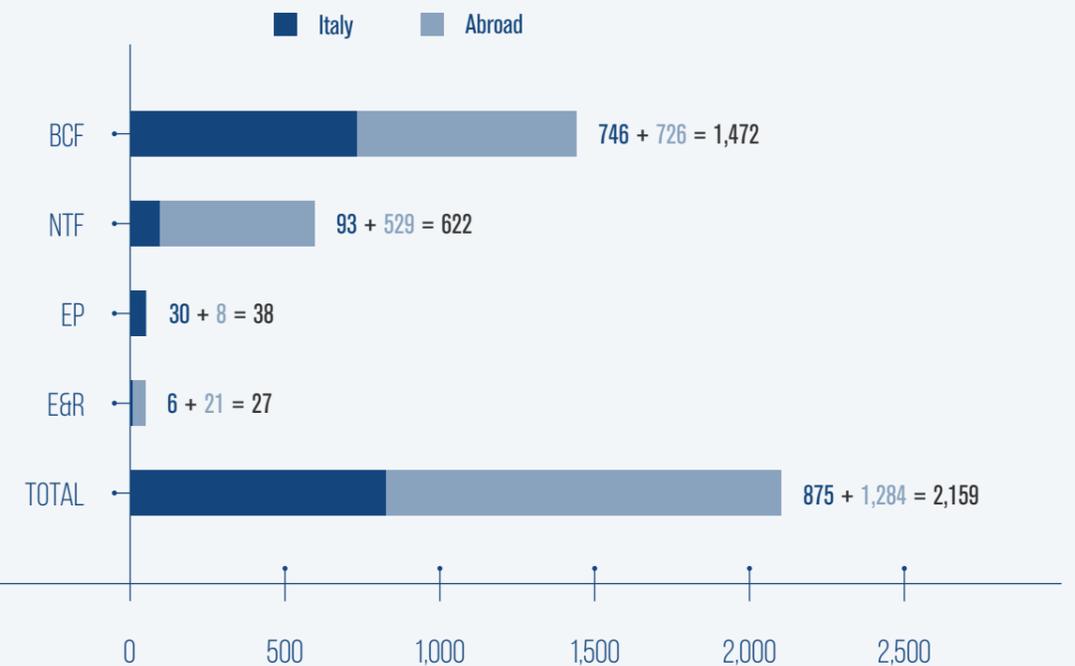
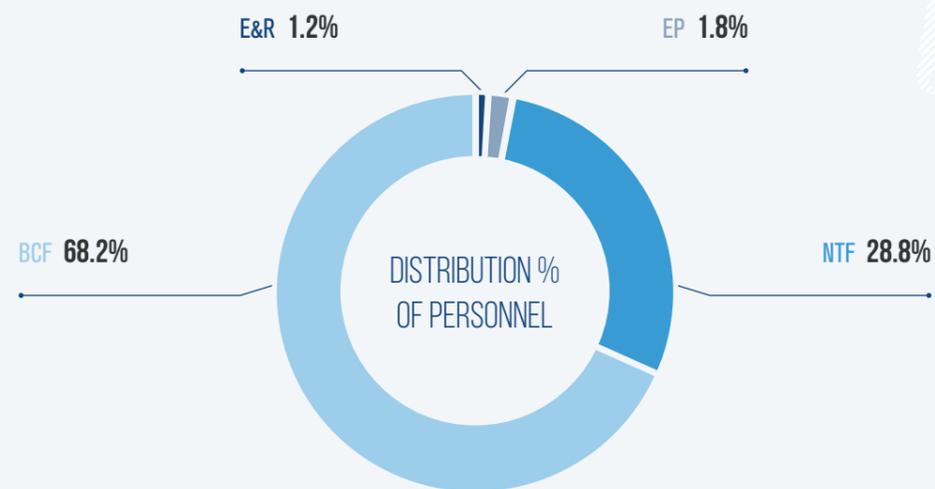
GEOGRAPHICAL AREA	MEN			WOMEN			TOTAL		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Italy	727	746	<b>649</b>	243	241	<b>226</b>	970	987	<b>875</b>
Slovenia	442	430	<b>459</b>	165	160	<b>162</b>	607	590	<b>621</b>
Croatia	45	24	<b>57</b>	188	129	<b>192</b>	233	153	<b>249</b>
USA	157	178	<b>170</b>	56	57	<b>63</b>	213	235	<b>233</b>
Thailand	7	6	<b>8</b>	16	16	<b>16</b>	23	22	<b>24</b>
China	70	70	<b>80</b>	50	57	<b>77</b>	120	127	<b>157</b>
<b>TOTAL</b>	<b>1,448</b>	<b>1,454</b>	<b>1,423</b>	<b>718</b>	<b>660</b>	<b>736</b>	<b>2,166</b>	<b>2,114</b>	<b>2,159</b>

COMPANY COMPOSITION	ITALY						ABROAD						TOTAL		
	MEN			WOMEN			MEN			WOMEN					
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Directors	21	21	<b>20</b>	2	3	<b>3</b>	6	8	<b>6</b>	0	0	<b>0</b>	29	32	<b>29</b>
Managers	35	34	<b>27</b>	5	5	<b>4</b>	71	76	<b>79</b>	10	13	<b>15</b>	121	128	<b>125</b>
Clerical workers	120	125	<b>111</b>	81	86	<b>74</b>	37	37	<b>42</b>	90	93	<b>103</b>	328	341	<b>330</b>
Factory workers	558	566	<b>491</b>	148	147	<b>145</b>	606	586	<b>647</b>	376	314	<b>392</b>	1,688	1,613	<b>1,675</b>
<b>TOTAL</b>	<b>734</b>	<b>746</b>	<b>649</b>	<b>236</b>	<b>241</b>	<b>226</b>	<b>720</b>	<b>707</b>	<b>774</b>	<b>476</b>	<b>420</b>	<b>510</b>	<b>2,166</b>	<b>2,114</b>	<b>2,159</b>

Comparing the composition of the workforce to the business areas, it is clear the Group has **advanced in the BCF market** where most workers are employed. It is also important to note the Aquafil Group **invests in research and development**: this is the role of the E & R business unit which is composed of 48 people, 27 of which are permanent employees and 21 are contract employees.

EMPLOYMENT CONTRACT	FULL-TIME EMPLOYEE		PART-TIME	
	MEN	WOMEN	MEN	WOMEN
Indefinite or Permanent Contract	1,315	604	8	26
Temporary and Fixed Term contract	97	82	3	24

### > DISTRIBUTION OF PERSONNEL IN THE VARIOUS BUSINESS UNITS IN 2013



## > THE INFLUENCE OF PROJECTS AND ORGANIZATIONAL RESTRUCTURING ON THE MANAGEMENT OF THE AQUAFIL PERSONNEL

“Aquafil strongly believes in communication between trade unions and workers' representatives based on collaboration and planning research with the aim of aiding negotiations between the two parties.

### • Aquafil Engineering Plastics S.p.A.

With the sale of the EP business unit to Domo, the workforce decreased from 138 employees in 2012 to 32 at the end of 2013. 105 employees were transferred to Domo Engineering Plastics S.p.A.

### • Aqualeuna G.m.b.H.\*

Following the acquisition of German company Xentrys, 232 workers were hired. Of these, about 130 remained in the workforce to operate the company while the remaining personnel left in the first few months of 2014 by means of a contractual social plan foreseen by local regulations undersigned by the company and social organizations.

### • Borgolon S.p.A.

the CIGS procedure was launched following the transfer of a production unit, with subscription to redundancy schemes.

### • Aquaspace S.p.A.

The CIGS procedure was launched following the decrease of the specific market of reference space dyed yarn.

### • Aquafil S.p.A.

Renews its agreement with trade unions concerning participation bonuses and second level contracting. Following debates with the trade unions in Trento, Italy, specific initiatives providing support to employees were launched in 2013; a special welfare procedure was implemented.

### • Tessilquattro S.p.A.

The ordinary CIG was requested.

\* Not included in the 2013 report

“There was a 2% lower turnover in 2013 compared to 2012 which affected 328 employees.

**42% of the turnover is associated with the termination of contracts.** A careful analysis of the data underlined that the Chinese and American plants were the most affected by the termination of contract turnover with percentages of 56 and 30% respectively. This trend does not appear to be linked to actions or causes associated with the Aquafil Group or the relationship with its employees, but due to the **specific market in the nation of reference.**

2013 TURNOVER			
	ITALY	ABROAD	TOTAL
Resignations	7	130	137
End of contract	7	7	14
Termination of employment	2	34	36
Pensions	6	4	10
Transfer within the Group	5	8	13
Labor mobility	0	12	12
Other causes	0	1	1
Transfer of employees due to sale of EP	105	0	105
<b>TOTAL</b>	<b>132</b>	<b>196</b>	<b>328</b>

In 2013 a new turnover entry was included concerning the transfer of employees associated with the sale of the EP business unit to Domo Chemicals.

## &gt; SAFETY

“Improve the behavior and increase the awareness and culture of health and safety issues.”

Aquafil is strongly committed to promoting the **culture of safety and ethical behavior** by means of safety policies at all levels of the organization and in all nations in which the Group operates.

The main initiatives regarding safety in the workplace are organizational activities such as **training programs**, awareness raising **campaigns** and important **structural intervention** to ensure the safety of employees, **equipment** and **environments**.

By analyzing the main performance indicators we can see that following a significant decrease over the last few years, the accident and injury rate has reached excellent levels regarding the industrial operations.

- **Frequency index (FI)**, which compares the number of accidents to the exposure to risk, was 9.64 .

- **Seriousness of risk index (GI)**, which compares the seriousness of injury to the exposure to risk, was 0.25.

- **Risk index (RI)** the performance observed was 2.42.

# €800 THOUSAND

INVESTED FOR PROMOTING HEALTH AND SAFETY

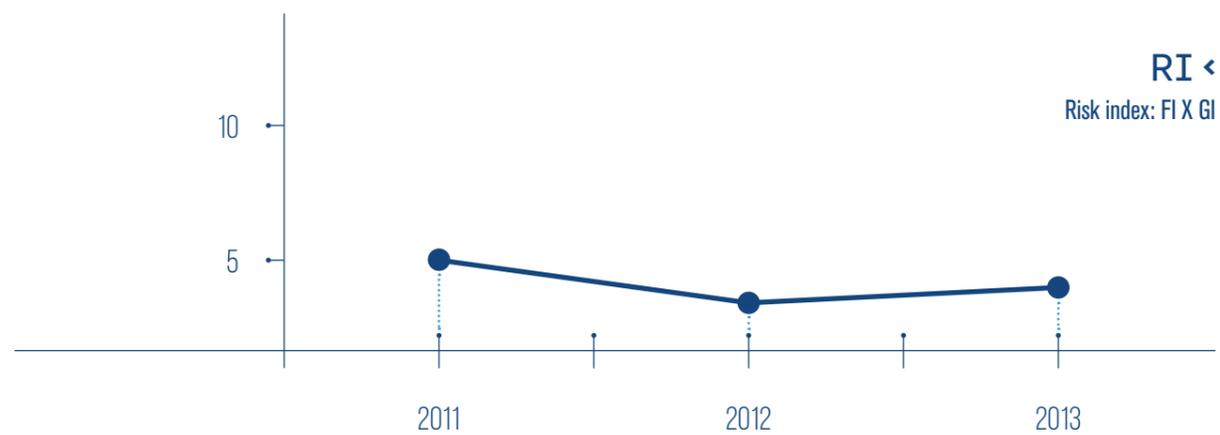
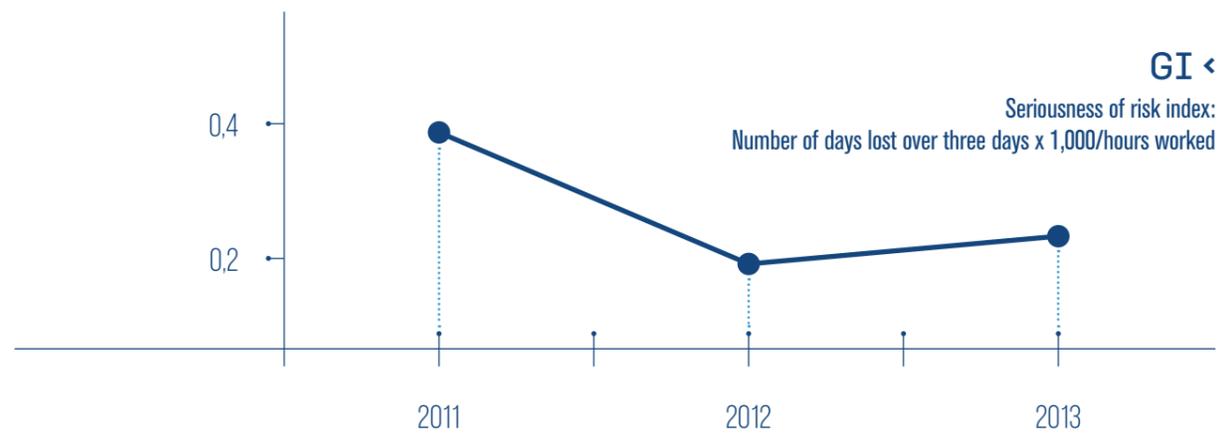
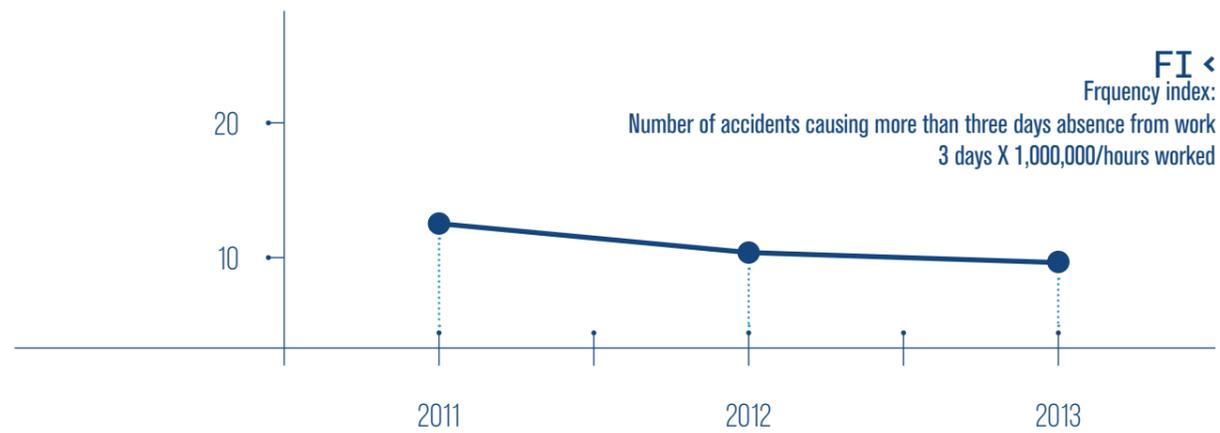
“In 2013 Aquafil invested approximately €800 thousand in specific projects aimed at promoting health and safety in all business activities.”

## FROM 2011 TO 2013

### > ACCIDENTS AND WORKING DAYS LOST

With a 4% reduction in the number of hours worked (3,941,885 recorded in 2013), the number of accidents that caused injuries requiring more than three days absence **decreased by 12%**.

YEAR	HOURS WORKED	INJURIES > 3 DAYS	DAYS LOST > 3 DAYS	FI	GI	RI
2013	3,941,885	38	990	9.64	0.25	2.42
2012	4,112,119	43	751	10.46	0.18	1.91
2011	4,163,723	54	1,540	12.97	0.37	4.80



An important aspect of the Groups activities is the safety and safeguarding of its customers. In close collaboration with suppliers, the Group manufactures and develops products in compliance with the regulations set by REACH EC 1907 / 2006 regarding the chemical substances contained in its products.

## > MOVING TOWARDS "ZERO INFORTUNI" BY PROMOTING SAFE AND RESPONSIBLE BEHAVIOR

In 2013 Aquafil launched the "**Zero Infortuni**" project with the aim of changing corporate culture by reviewing all industrial processes in order to find ways of **preventing** accidents. The project is strongly promoted by management and foresees the involvement of all personnel.

This experimental project started in June 2013 at the Arco plant and foresaw an initial internal survey aimed at determining the perceptions and dynamics of Aquafil's specific risk factors which led to the provision of **information** and **training courses** for employees concerning health and safety in the workplace at the end of 2013.

### ACHIEVEMENT OF "Zero Infortuni:"

- **by organizing information initiatives** aimed at calling attention to safety and improving the proactive involvement of workers
- **by providing training** concerning safety issues in the workplace
- **by establishing** high operational safety standards

In the first months of implementation at the Arco plant:

- 131 employees attended training activities
- 2,195 hours of training were provided



> TRAINING

19,041

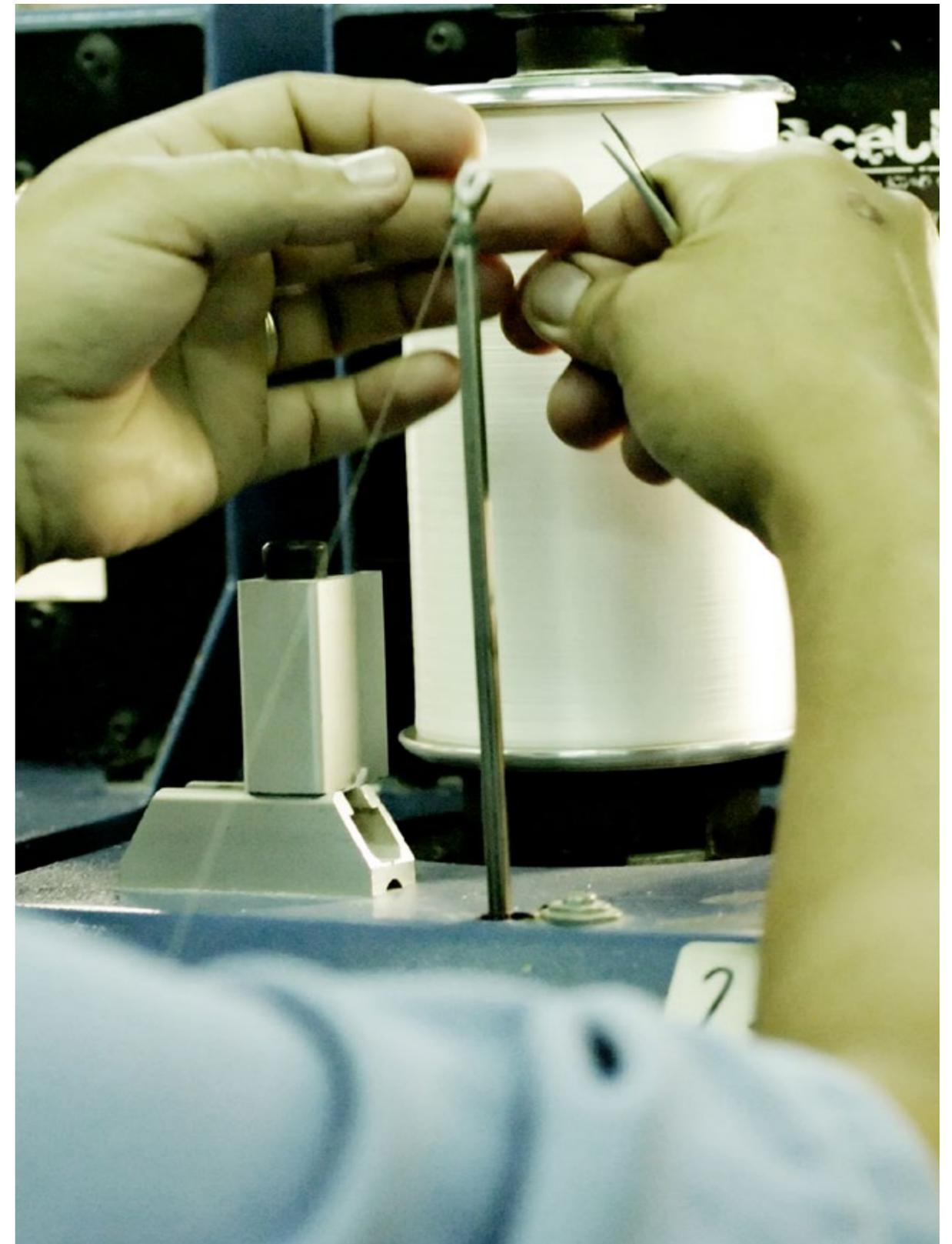
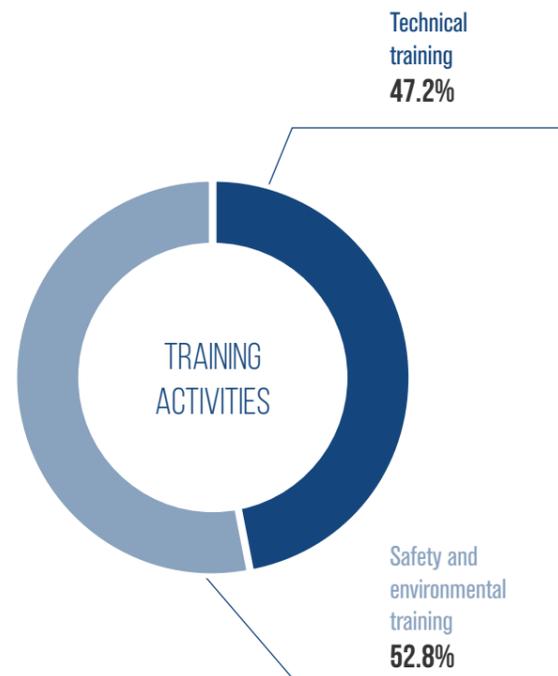
TOTAL NUMBER OF TRAINING HOURS IN 2013

“Training aimed at improving skills and specific professional competence.”

Aquafil is an international group that strongly believes in investing in human resources with the aim of improving skills which are carried out through specific training programs. This strategic factor favors Aquafil's **development** and **competitiveness** in the market.

Aquafil's training programs focus on **two main areas**:

- **Technical** training programs: with the aim of enhancing scientific skills and consolidating knowledge within the company.
- **Safety** and **environmental** training programs: with the aim of spreading knowledge concerning safety measures in the workplace and the safeguarding of the environment.



Yarn analysis in textile lab to check the characteristics

## 5.2 PLANET – ENVIRONMENTAL FIGURES

“The data reported in this section are divided between the main areas of interest of the Aquafil Group: energy, emission, water and waste.

The presentation of data and 'trend analysis' are useful tools for understanding and judging the performance of an organization.

It is not always easy to fully comprehend the information and it may not clearly reflect the positive or negative performance of a company. For industrial Groups that carry out various complex operations in plants of different types and sizes, it is not always possible to judge the present trend of the absolute values of environmental performance correctly in respect to the past. For example, the increase of total emissions could be due to an increase in production and not to a decline in environmental performance. In order to report performance objectively, another important issue to consider concerns the variations in the composition of products manufactured,

such as the new slant towards producing more technologically complex products. An increase in the data per ton of product manufactured does not represent a decline in environmental performance but may result from the increased production of more complex goods that require a higher number of procedures on the fibers that are essential for satisfying the quality requirements of our customers.

When analyzing the data, it is essential to bear in mind the manufacturing and organizational changes made by the Group in 2013 which led to the production of more complex products.

In fact, it is observed that less than 10% of simple polymers (blend and compound) were produced in 2013 as opposed to 23% in 2012.



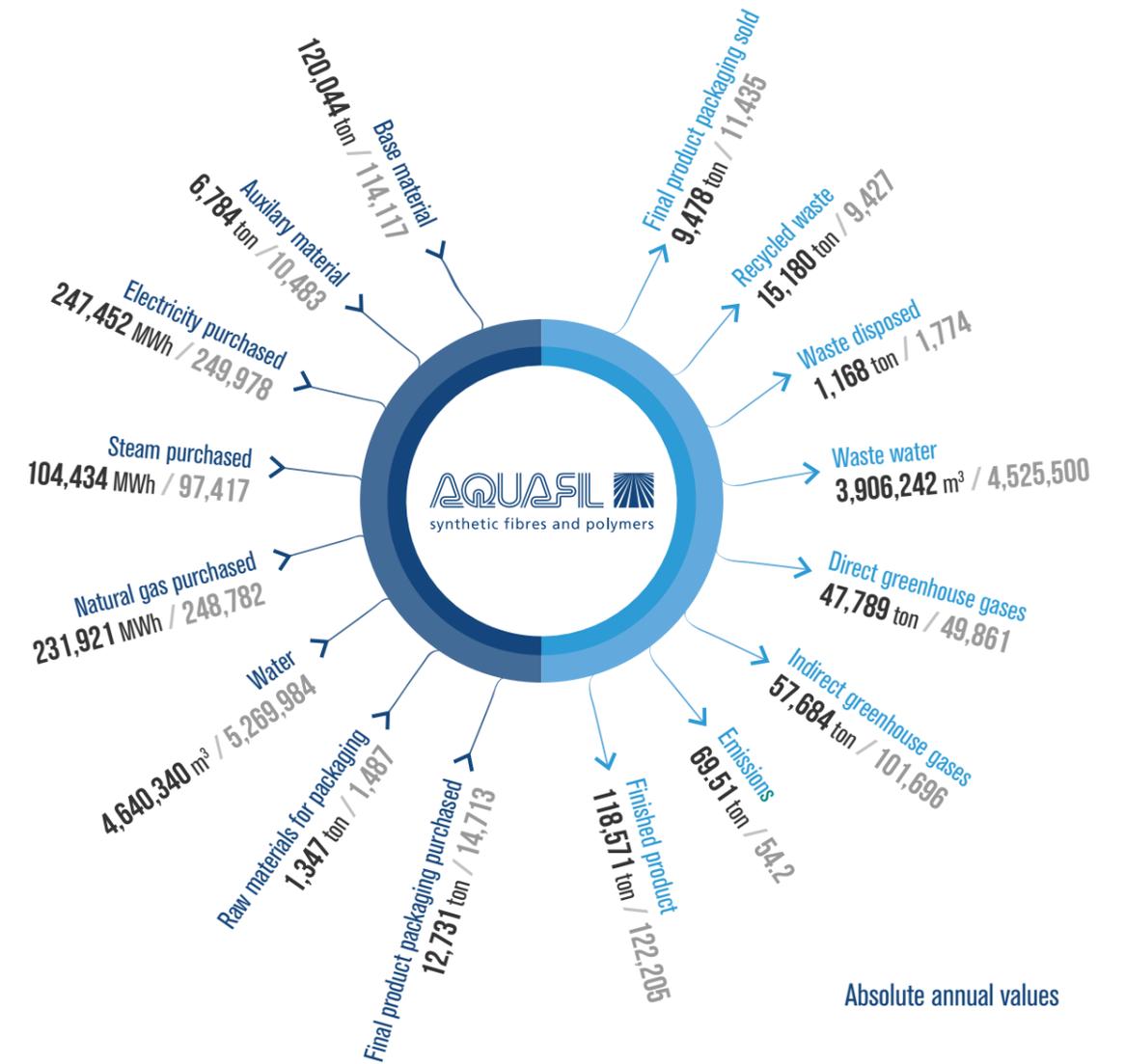
Julon (Ljubljana, Slovenia)

## &gt; THE DATA, TRENDS AND OBJECTIVES OF THE PROCESS

Normalized values per ton of final product

	ENVIRONMENTAL ASPECT	MEASUREMENT	2011	2012	2013
INPUT	Base material	ton/ton	0.929	0.934	1.012
	Auxiliary material	ton/ton	0.077	0.073	0.045
	Electricity purchased	kWh/ton	1,885	2,046	2,087
	Steam purchased	kWh/ton	640	797	881
	Natural gas purchased	kWh/ton	1,896	2,048	1,956
	Water (including condensate from steam)	m <sup>3</sup> /ton	39.4	43.1	39.1
	Raw materials for packaging	ton/ton	0.013	0.012	0.011
	Final product packaging purchased	ton/ton	0.12	0.12	0.11
OUTPUT	Final product packaging sold	ton/ton	0.095	0.094	0.080
	Recycled waste	kg/ton	63.9	77.1	128.0
	Waste disposed	kg/ton	11.9	14.5	9.8
	Waste water	m <sup>3</sup> /ton	34	37	32.9
	Direct greenhouse gases	kg/ton	372	408	403
	Indirect greenhouse gases	kg/ton	720	832	486
	Emissions	gr/ton	456	444	586

## INPUT VS OUTPUT



2013 VS 2012

> RAW MATERIALS

• **Basic raw materials**

85% mainly composed of caprolactam, Nylon 6 polymers and Nylon 6 waste which is used for the ECONYL® Regeneration System.

• **Auxiliary materials and additives**

represent 5% of all the materials.

• **Packaging Materials**

represents 10% of the raw materials and includes the packaging of the raw material produced and the packaging of the finished products: BCF and NTF fibers.

In 2013 there was a 35% decrease in auxiliary materials. This decrease was due to the sale of the EP business unit which led to a significant reduction in the consumption of additives.

Fiberglass, alone, accounted for almost 50% of EP's additive consumption, dropped from 4,447 tons in 2012 to 1,748 tons in 2013, showing a decrease in consumption equal to -2,699 tons.

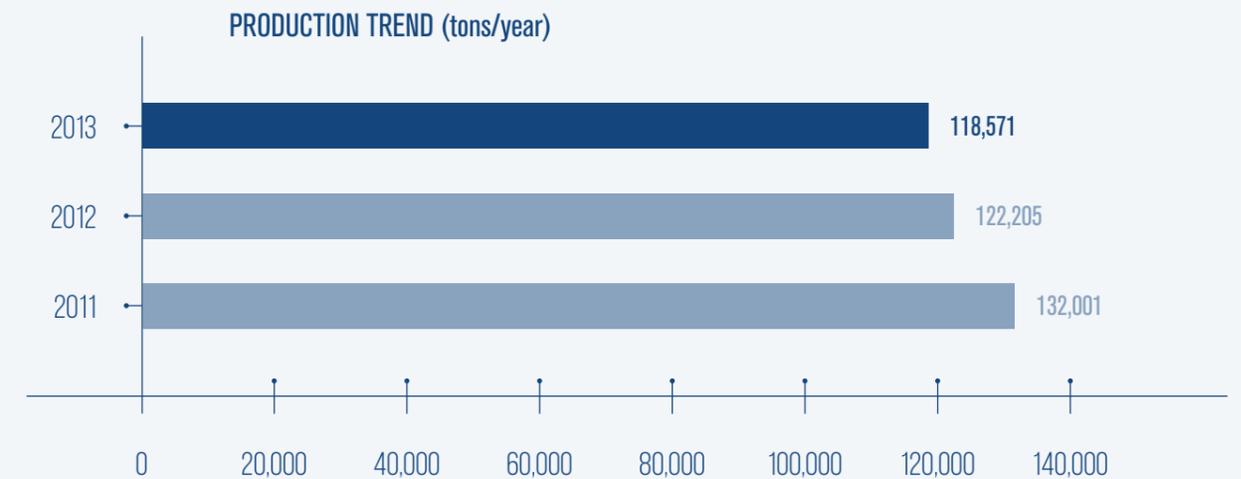
140,907 tons of raw materials used in 2013

We have used 117,507 tons of non-renewable materials in 2013

The recycled input materials represent 10% of all the materials used

> FINISHED PRODUCT

In 2013, the net production (the amount of products sold by the Group) amounted to 118,571 tons showed a 3% decrease compared to 2012.

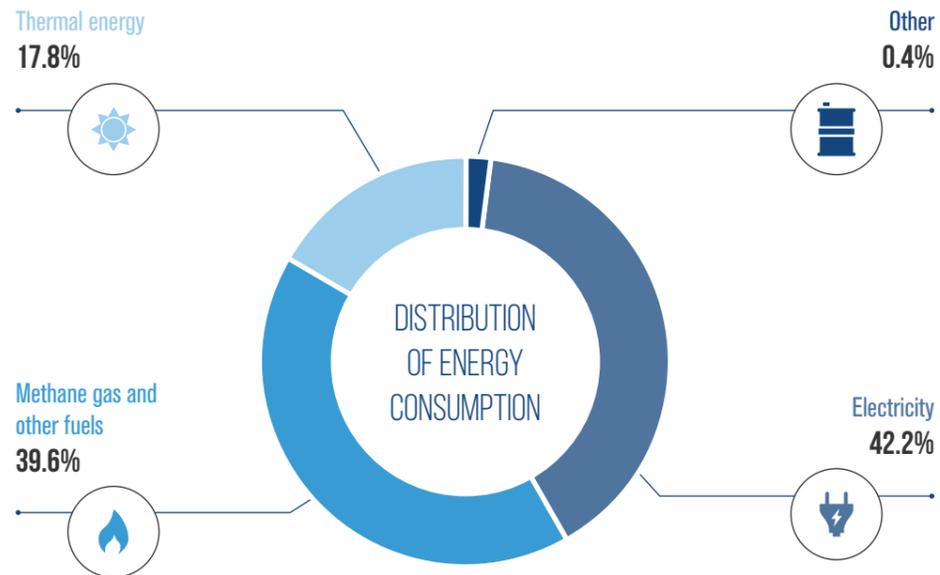


## &gt; ENERGY

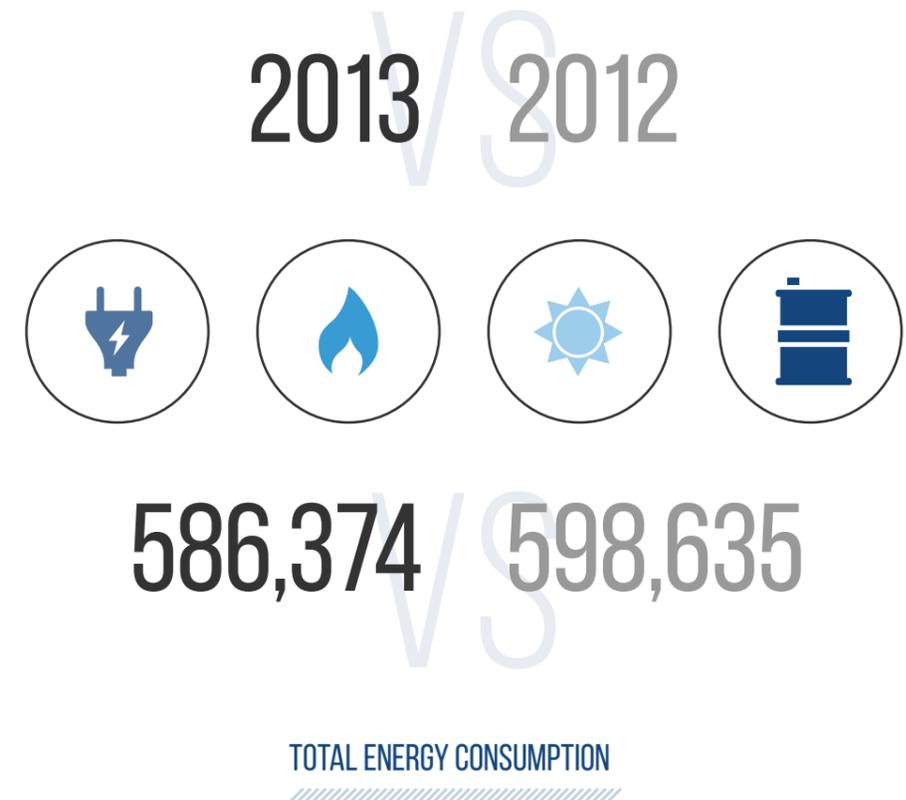
Reduce waste and increase production efficiency.

The Aquafil Group achieves environmental sustainability related to energy consumption by reducing waste and increasing the efficiency of its production facilities. Moreover, using renewable sources of energy and installing photovoltaic systems at the Group's facilities helps to achieve our goals.

In 2013, the total energy consumption of the Group was 2% lower than 2012 and the consumption rates of electricity and natural gas were approximately 40% while the remaining 20% of energy came from thermal sources purchased externally.



ENERGY CONSUMPTION	UOM	2011	2012	2013
Electricity	MWh	248,810	249,977	247,452
	GJ	895,716	899,917	890,827
Methane gas and other fuels	MWh	250,248	248,782	231,921
	GJ	900,893	895,615	834,015
Thermal energy	MWh	97,669	97,417	104,434
	GJ	351,608	350,701	375,962
Technical and combustible gases	MWh	2,227	1,894	1,882
	GJ	8,017	6,818	6,775
Photovoltaic system	MWh	219	564	685
	GJ	788	2,030	2,466
Total energy consumption	MWh	599,173	598,635	586,374
	GJ	2,157,022	2,155,086	2,110,950
Total energy consumption referring to annual production	KWh/ton	4,539	4,899	4,945
	GJ/ton	16,340	17,636	17,802



> RENEWABLE SOURCES

In 2013 the Group produced 685 MWh of electricity thanks to photovoltaic systems installed at its factories.

In 2013, as much as **72% of Aquafil's electricity requirements** came from **renewable sources** which were certified by the Renewable Energy Certificate System (RECS), showing an improvement of 30% from 2012.

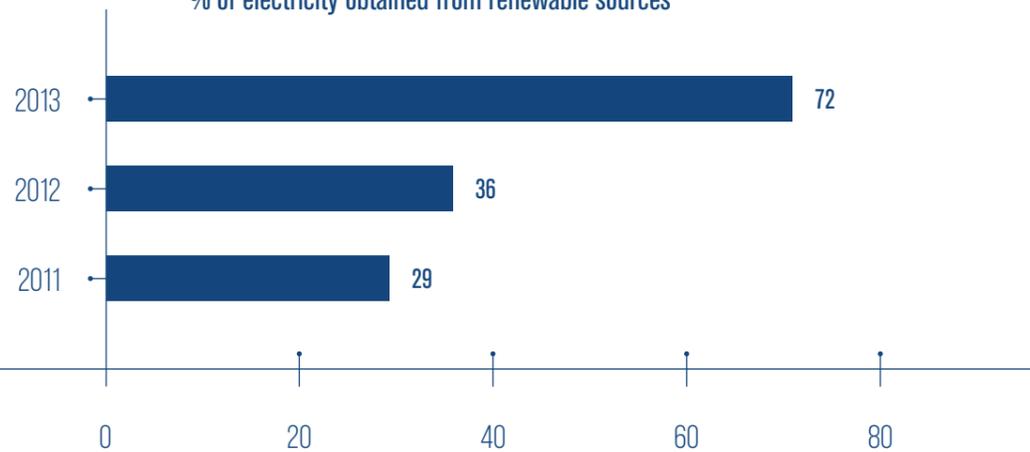
The best performance was achieved thanks to the **contribution of the plants located in Slovenia**.

In 2013 the Ljubljana, Aidovscina and Senosece facilities were powered **using 100% renewable energy** and the factory in Celie with 30%.

The Aquafil Group is also **actively involved** in renewable energy projects and investments by:

- installing photovoltaic systems (Cartersville and Arco) at its factories
- investing a quota of shares in the ReEnergy Capitol Fund (which operates in the renewable energy and environmental sector)
- through the concession of the Cares factory roofs (Tessil4, Italy).

% of electricity obtained from renewable sources

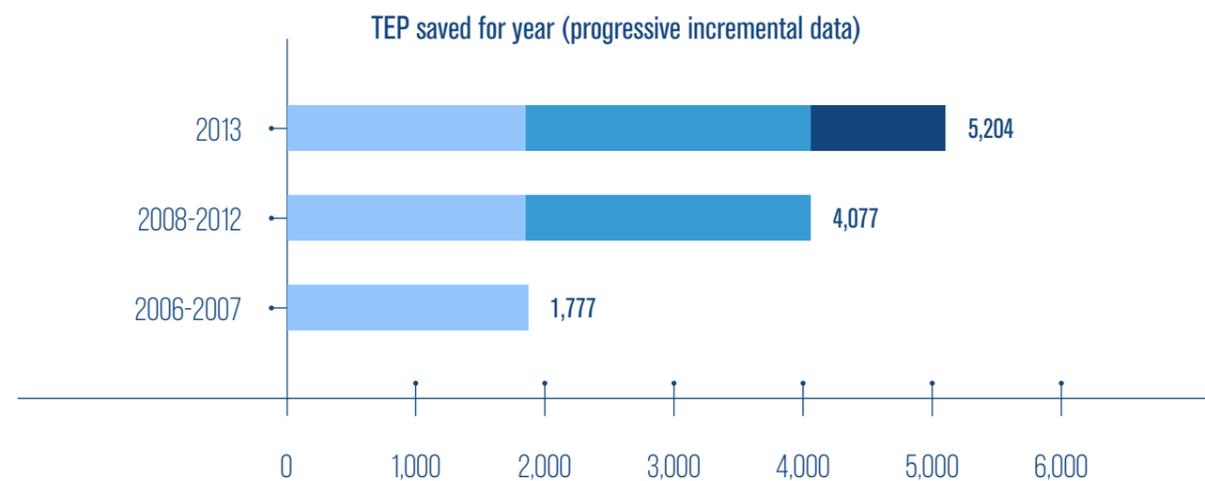


## &gt; COGENERATION SYSTEM

“The plant has achieved a total saving of 27,103 TEP since its installation in 2006.

One of the most significant stages of Aquafil's innovation process was the **construction of the cogeneration plant Arco**. This demonstrates Aquafil's commitment to improving its facilities worldwide. Over the years, various improvements have been made which **transformed the plant into a tri-generation plant**.

The plant is the Group's flagship and demonstrates the improvement and sustainability policies of the Group which have led to an **annual saving of 3,165 additional TEP** and a total saving of 27,103 TEP since its installation in 2006.

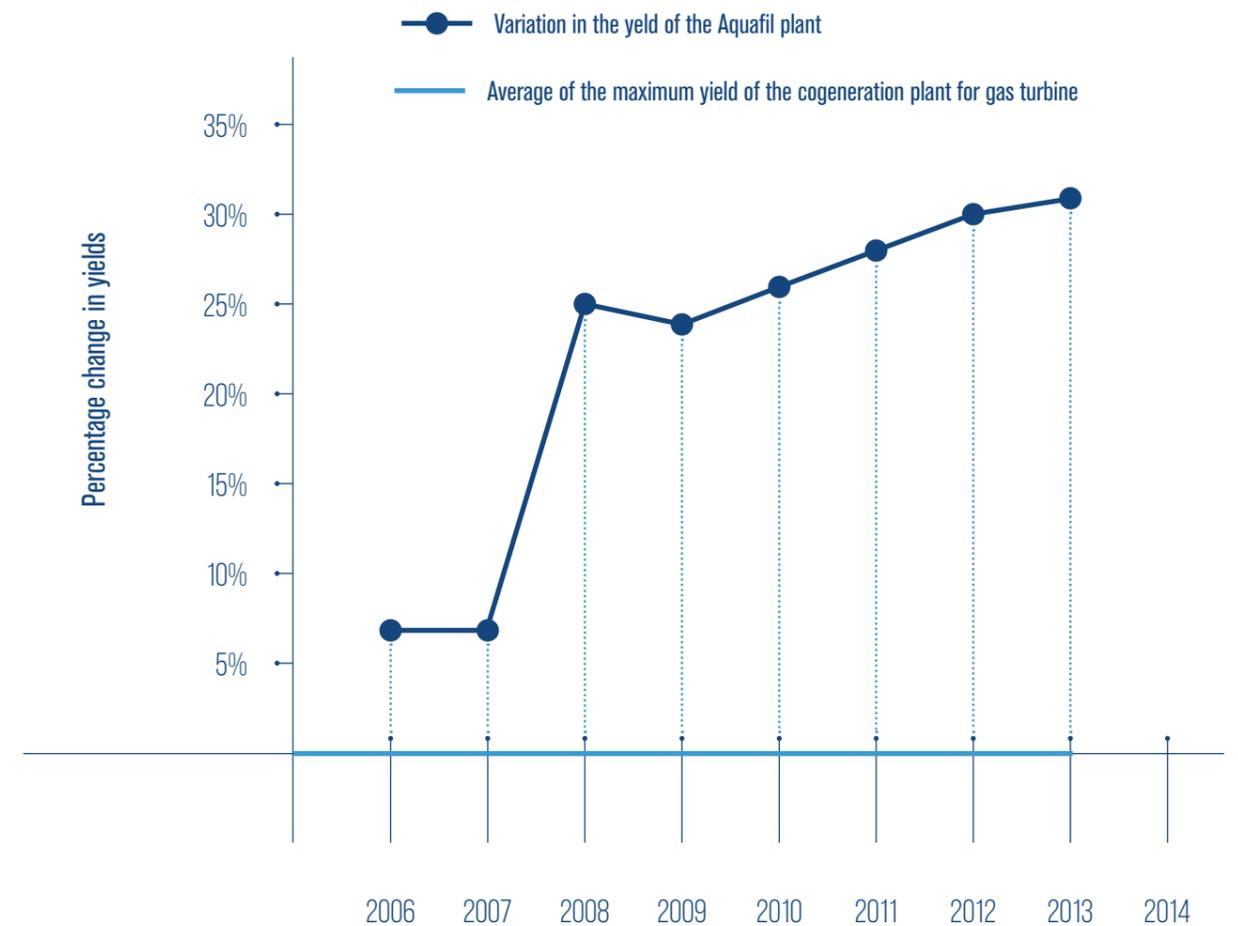


COGENERATION PLANT SAVINGS	2006-2007	2008-2012	2013	TOTAL
TEP	3,554	20,384	3,165	<b>27,103</b>
BBL	24,838	142,460	22,120	<b>189,418</b>
ton CO <sub>2</sub>	11,372	65,227	10,128	<b>86,728</b>

1 TEP (ton of oil equivalent) = 6.98 BBL (Barrel of oil)

1 TEP = 3.19 ton CO<sub>2</sub>

Aquafil cogeneration plant's yield, compared to the value taken as reference



## > EMISSIONS

Aquafil is committed to using **the best available techniques** for reducing emissions and limiting primary pollutants by carrying out **periodical analyses** at its plants.

The main atmospheric emissions generated by Aquafil are divided into:

- **Greenhouse gases** emissions (only CO<sub>2</sub>) due to energy use and transportation.
- Emissions of **other substances** produced by chemical processes and partly by combustion.

## > GREENHOUSE GAS EMISSIONS

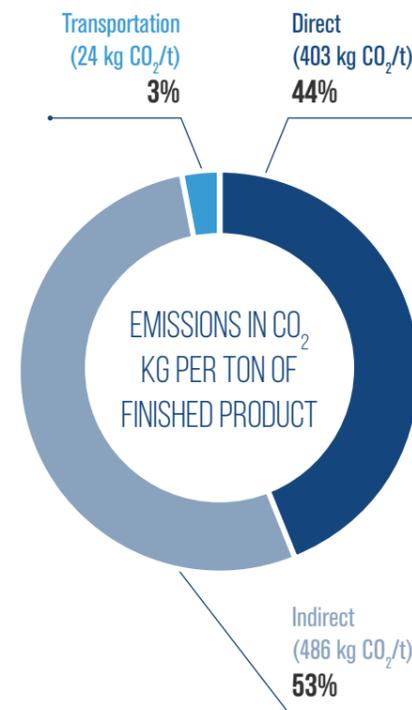
In Aquafil, **44% of greenhouse gas emissions are caused by direct emissions** released by utilities plants production.

The cogeneration plant is responsible for 75% of the direct impacts and a **small part is due to the boilers** used for heating and production systems.

On the other hand, 53% of the impact is caused by **emissions generated during electricity production** and the steam used by Aquafil which is purchased from external suppliers. The **emissions generated by the fuel** used for transporting the goods to the various companies of the Group represents **3% of the impact**.

In 2013, the purchase of energy from renewable sources through the RECS system of voluntary certification of renewable energy led to a **saving of 81,698 tons of CO<sub>2</sub>**.

Energy consumption for direct and indirect emissions: the calculation is based on specific national standards coefficients defined for each source considered (eg UNFCCC national inventory).



## > THE EMISSIONS OF OTHER SUBSTANCES DERIVING FROM CHEMICAL PROCESSES AND PARTLY FROM COMBUSTION

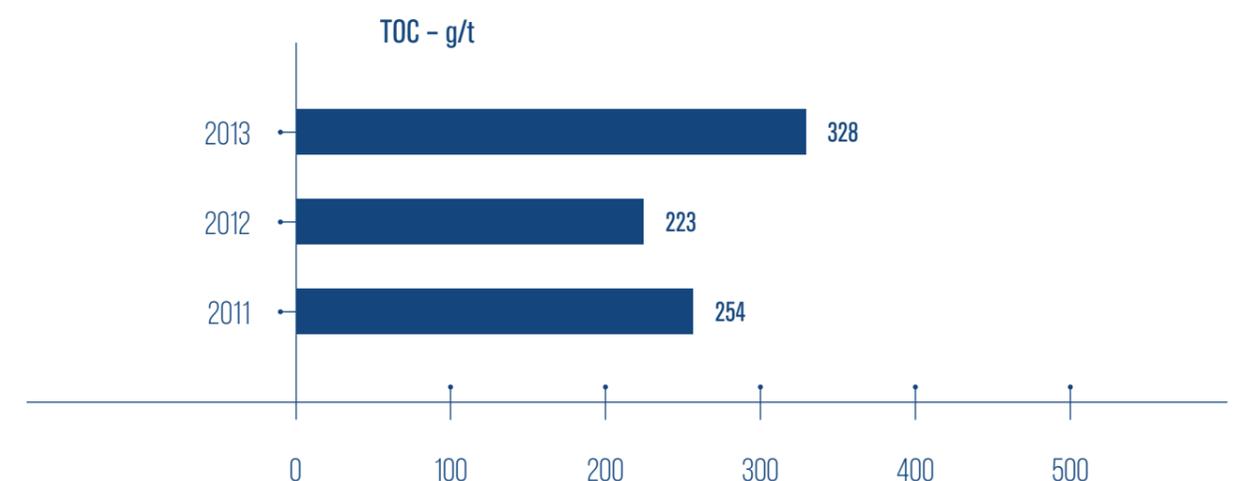
“Control analyses carried out more frequently than established by regulation.”

These are substances such as TOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM10 and dust that are **released during the polymerization process** and in the **dust produced during the industrial processes**.

Most of these belong to the **TOC** (Total Organic Carbon) Group which includes **56% of the substances monitored**.

In 2013 the value related to TOC emissions showed an increase per ton of finished product.

Substances deriving from chemical processes and partly from combustion: The calculation is based on Direct measurement.



## > WATER

The year **2013** was declared “**international cooperation year of the water sector**” by the UN. The goal was to increase people’s awareness of the need to take an active role in water management due to **growing demand**.

Even if the earth is covered by 71% water, as much as 97% of the total amount is salt water, 2.5% is frozen in ice caps and glaciers and **only 0.5% is usable for mankind at a reasonable cost**.\*

Aquafil is aware that the **sustainable management of water resources is one of the main global environmental issues**. The Group pays close attention to its industrial policies and **strategies by reusing water in closed circuits** and monitoring and managing waste water carefully in order to reduce consumption.

In 2013, the Aquafil Group used about 4.5 million cubic meters of water to power its operations, **saving 640,000 m3 of water compared to 2012, which was approximately 12% of the total consumption**.

\* Word business Council for Sustainable Development: Water Facts and trends 2009.



# 4,518,120 m<sup>3</sup>

TOTAL WATER CONSUMPTION

# 3,906,242 m<sup>3</sup>

TOTAL WASTE WATER

# 38.1 m<sup>3</sup>/TON

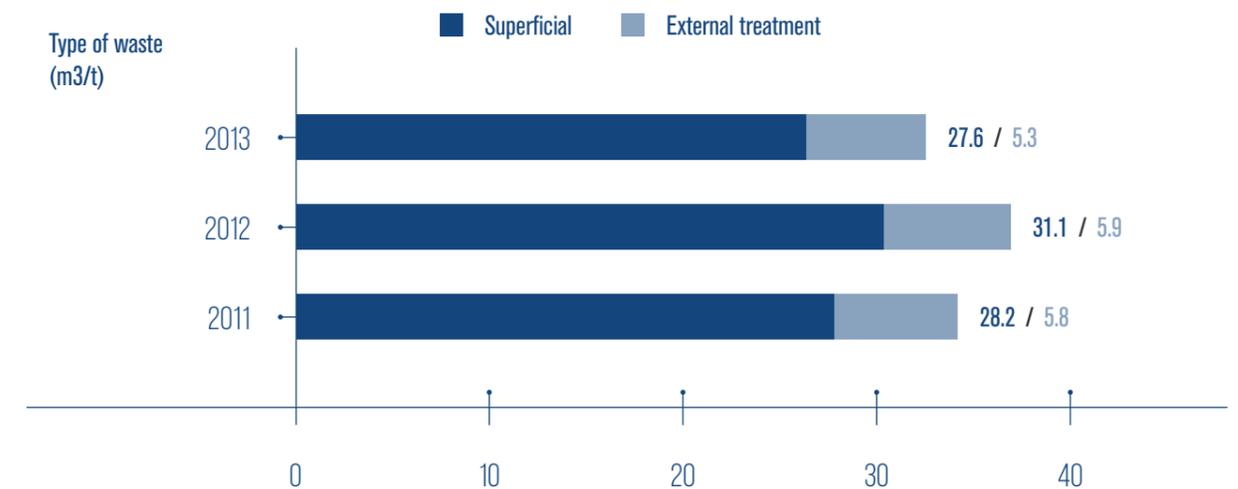
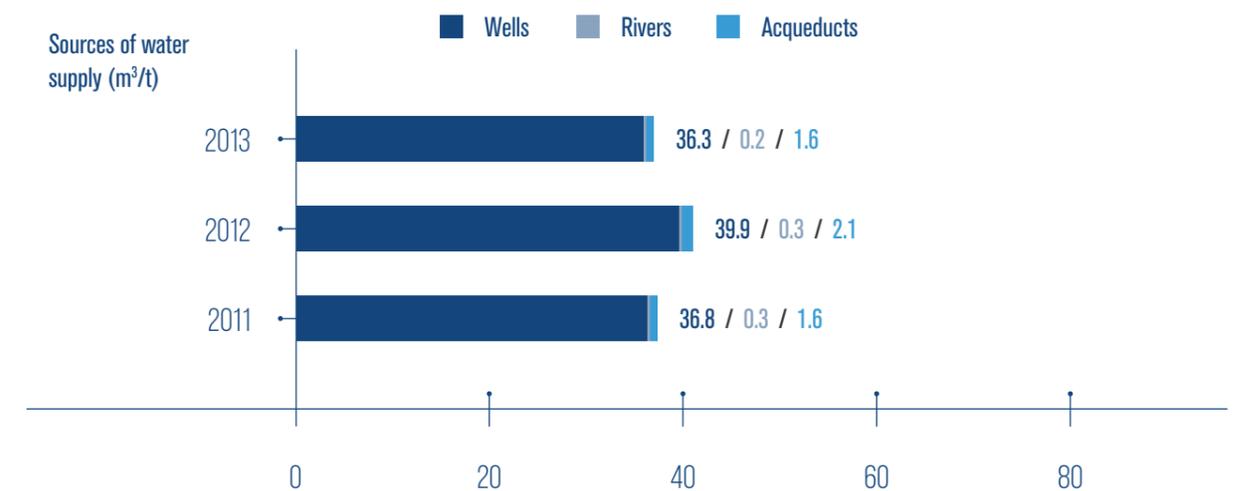
TOTAL CONSUMPTION BY PRODUCTION PROCESSES

# 32.9 m<sup>3</sup>/TON

TOTAL WASTE WATER GENERATED BY PRODUCTION

**Most of the waste water generated** by the Group’s facilities is **discharged into surface waters as a result of the control procedures and monitoring of significant pollutants** of which the most important is COD (chemical oxygen demand) which is mainly related to the presence of organic substances.

The initiatives may foresee the **continual analysis of waste water with a detection system equipped with an alarm** threshold similar to the one installed at the Arco plant.



> AQUASPACE: PURIFICATION ON BEHALF OF A THIRD PARTY

The Aquaspace plant is **launching a new project aimed at the sustainability of the surrounding area**. The purification system is generally used to treat the waste water generated by the dyeing process which, due to the decrease in volume, appeared to be overstaffed.

Therefore, since the treatment capacity exceeds the factory's requirements, **it will be used for treating the waste water generated by other Triveneto companies** for a total of 160 thousand tons of liquid waste per year.

The revamping project is expected to be completed in Summer 2014 with a total investment of €5 million **to improve the efficiency of treatments and installation of the most advanced technology**.

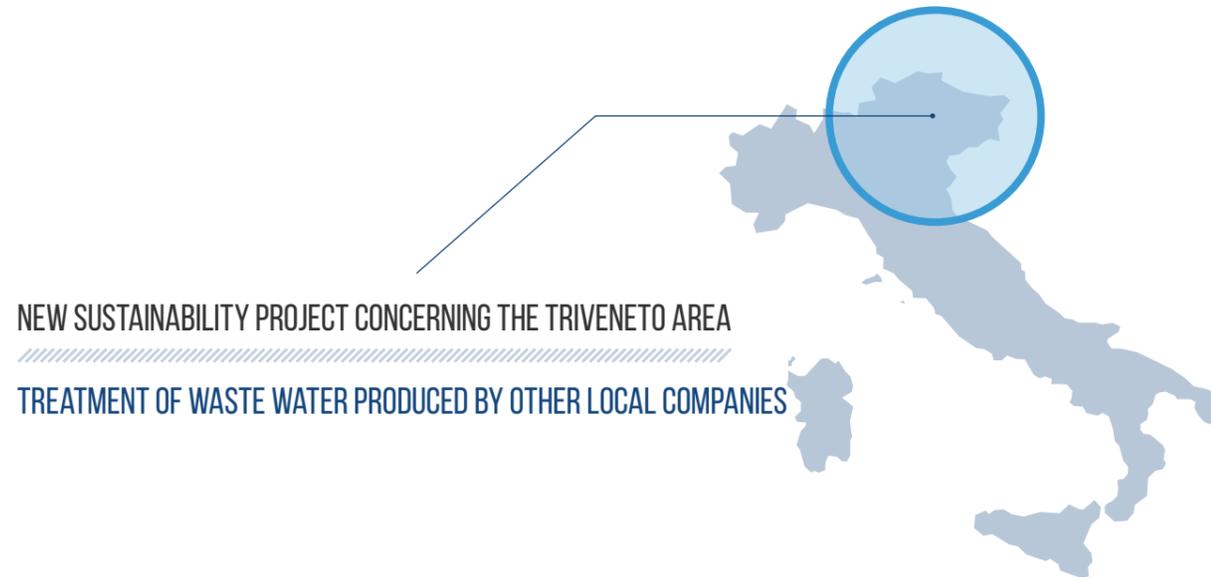


**160,000** TONS

LIQUID WASTE PER YEAR

**€ 5 MILLION**

TO IMPROVE THE EFFICIENCY



NEW SUSTAINABILITY PROJECT CONCERNING THE TRIVENETO AREA

TREATMENT OF WASTE WATER PRODUCED BY OTHER LOCAL COMPANIES



Upgrading of oxidation tank for biological wastewater treatment, installed at Aquaspace (Rovereto, Italy)

## > WASTE

There are many projects and initiatives aimed at improving and optimizing waste management.

In 2013, the total amount of waste attributed to Aquafil's industrial processes increased overall.

However, if we analyze the trend of the individual categories, we realize that this trend is not actually due to a decrease in environmental performance, but caused by variations in the management of waste and important factors.

One of the reasons is higher Econyl® Regeneration System capacity, but most of the increase is related to the use of waste technology used to feed the internal production cycles due to the sale of the Engineering Plastics business unit in April 2013.

SUBDIVISION OF WASTE BETWEEN SORTED AND UNSORTED	UOM	2011	2012	2013
Hazardous Sorted Waste	kg/t	13.1	34.2	46.9
Non-hazardous Sorted Waste ↳ Disposed of by Engineering Plastics April 2013	kg/t	51.5	52.5	88.7 43.3 + 45.4
Non-hazardous Unsorted Waste	kg/t	5.7	4.9	2.3

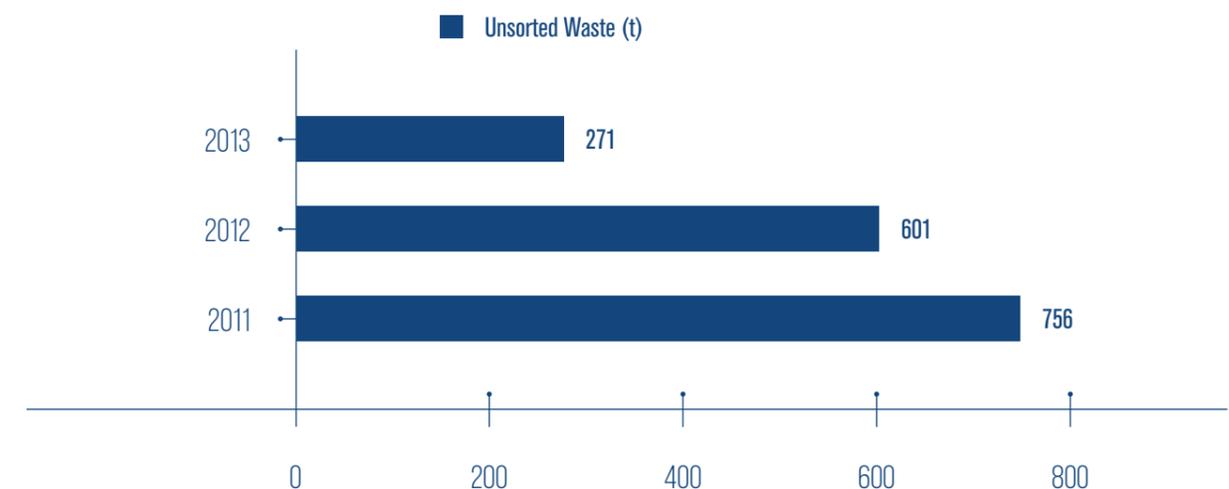
Process waste sent to power production processes of the EP business unit.

Until April 2013 indeed process waste generated by production was used, as raw material, to feed the production process of the EP business unit. The sale of the Engineering Plastics business caused a significant increase in the amount of non-hazardous recyclable waste generated by industrial processes. Since the industrial process waste could no longer be directly recycled by EP, it is sold to external parties who will use

these products to feed their production processes. By excluding the process waste generated by the production process from the performance analysis (thus hypothesizing a theoretical internal recovery, equal to the amount observed in the 2012 report), would lead to an 18% reduction in the amount of non-hazardous separated waste: 5,135 tons in 2013 as opposed to 5,819 in 2012.

SLUDGES DERIVING FROM WATER TREATMENT	UOM	2011	2012	2013
	kg/t	1.4	1.2	2.5

During 2013, the amount of unsorted waste generated by the Group only amounted to 2%, which demonstrates the commitment to promoting activities for the separation and recovery of waste. Over the last three years, the absolute values of unsorted waste at Group level dropped by 64%.



> THE AQUAFIL APPROACH TO THE NEW WAY OF REPORTING SUSTAINABILITY: THE WEB TOOL

The indicators as "spread" between the performance achieved and expected.

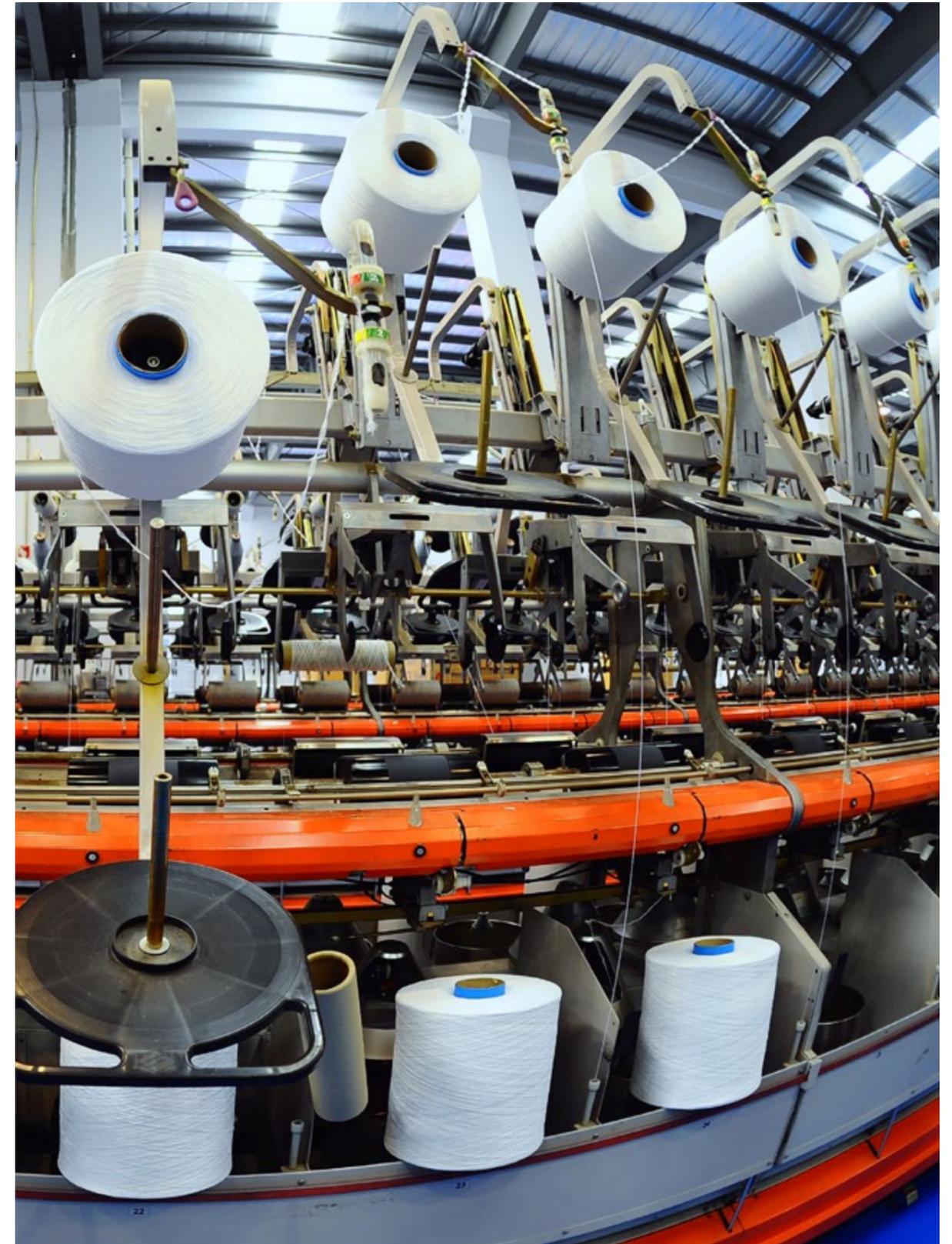


As mentioned in last year's report, a project was launched in 2013 to find a **new tool for reporting and analyzing environmental indicators**.

In economics, the term "spread" is used to identify the most progressive country and in sports the distance is measured that separates one athlete from another. **In the same way we have selected indicators which measure the "optimal" level of impact** achievable for each main industrial operation in each factory, **reporting periodically the gap between the "expected" goal and the actual result**.

The approach is divided into **two levels** by integrating **factory and product data**. The information is collected and **elaborated on a monthly, biannual or annual basis** by an internal team.

The continuous availability of detailed, up-to-date data and the ease of extracting and querying these data help Aquafil to tackle the challenge of sustainability by measuring its performance and communicating with full transparency internally and externally.



Yarn manufacturing in twisting division

## > THE JULON CASE STUDY

Julon is probably the **most complex plant within the Group**. Besides the conventional processes, it is also the heart of the ECONYL® Regeneration System. For this reason, it has been chosen as an **“experimental”** site.

The consolidation of the plant data enables a **thorough analysis** that gives us a complete picture of the new set up.

The information collected and elaborated concern:

- the regulations (“normal” consumption and emissions, therefore standard) of reference
- the production data for each manufacturing phase and category of product
- the actual consumption and emission data for each period.
- a series of other significant environmental parameters

The data may be read according to the **plant** or the **product**.

Data regarding each plant can be observed periodically by the user allowing for critical analysis that can highlight extraordinary events or gaps in respect to the trend of production standards. However, the added value of this approach is the **possibility of focusing on the “product”** from a “Life Cycle Thinking” point of view, rather than the **“plant”**.

The Web Tool will enable us to provide each plant with a **calculation of the environmental impact** of the products it manufactures. It is also important to note that in a complex and integrated organization like ours, many articles are subjected to various phases of production

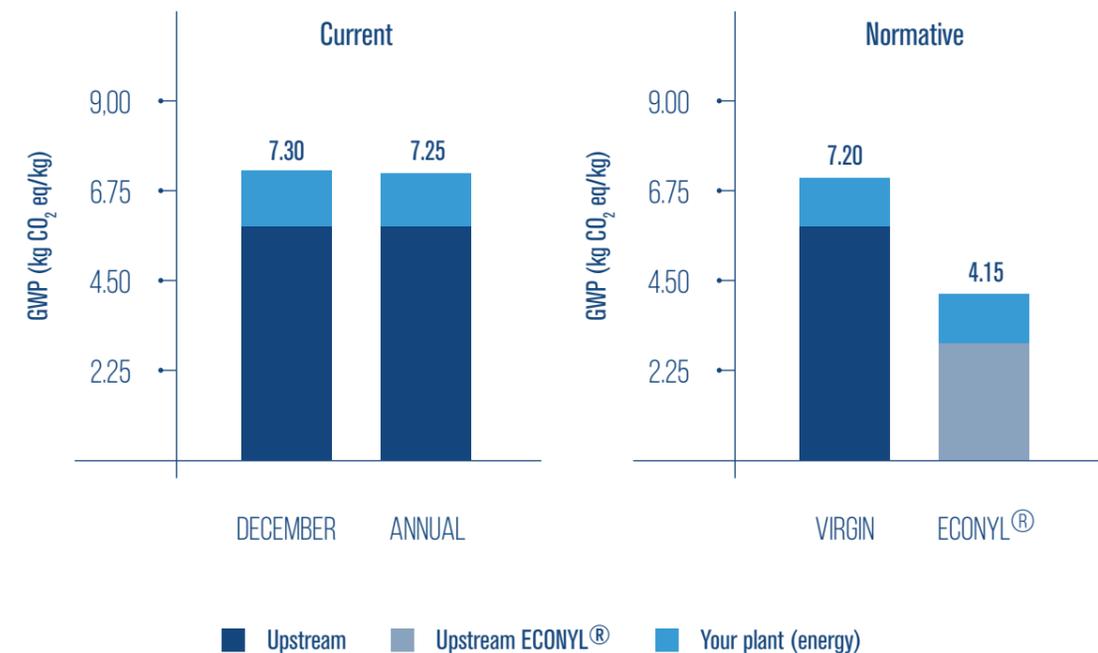
which are sometimes carried out in several factories. Besides adding further value to the product, these additional phases add an inevitable effect on the environment.

We have set a goal to **quantify precisely the environmental impact of the raw materials used and the environmental load added to them** by our manufacturing and processing activities. In this way, we can effectively communicate with our suppliers and customers who share our commitment to developing sustainable products and processes.

The tool will **compare the environmental impact of our products** made with virgin raw materials (purchased caprolactam) with products made with ECONYL® caprolactam (produced by the ECONYL® Regeneration System using waste as raw material). The primary aim of this research is to **focus the attention** of management and the whole corporation not only on the cost and quality of the components of each product and/or the environmental performance of a single plant, but on the **increasingly important issue of the environmental impact** that each product creates during its life cycle.

Some of our more environmental-friendly customers and consumers have already begun to pay attention to these important issues.

Consumption of electricity



Values contained in figures above are for illustrative purposes only

## 5.3 PROFIT – ECONOMIC SUSTAINABILITY

### > GLOBAL ECONOMIC FRAMEWORK

In 2013, the **world economy rose** by 2.9% in terms of GDP and 2.1% in terms of international trade showing different trends for the main geo-economic areas. The Asian economies slowed down during 2013, but showed signs of recovery in the second half of the year, particularly China.

Generally speaking, **economic growth in emerging countries was higher** than that in developed countries, which continue to play an important role in the global economy. Regarding industrialized nations, the U.S. economy appears to be improving gradually, even though it is still lower than last year, thanks to the slight increase in wages, the increase in the purchasing power of households due to the drop in inflation

and better employment opportunities. In **Europe**, various nations have had different economic results: Germany has shown a positive trend, there is growing economic difficulty in France and the Spanish economy is gradually recovering.

In 2013, GDP in Europe presented a value of -0.4%, which, in addition to the **difficulties** of some of leading countries (namely France and the Netherlands), also reflected the (a) continuing restrictions on access to credit; (b) the strength of the euro, which has a negative effect on exportation (c) imbalance in real estate markets; (d) the high unemployment rate which has a negative effect on household consumption.

In 2013, Italy had a 1.8% drop in GDP, however,

in the last trimester of the year there were signs of positive growth and the country appeared to be recovering from the recession as industrial production began to rise. and Exportation and importation were expected to increase which will hopefully lead to improvement in domestic demand.

From a **financial** and **economic** standpoint, 2013 was a very important year as it was characterized by two essential strategies:

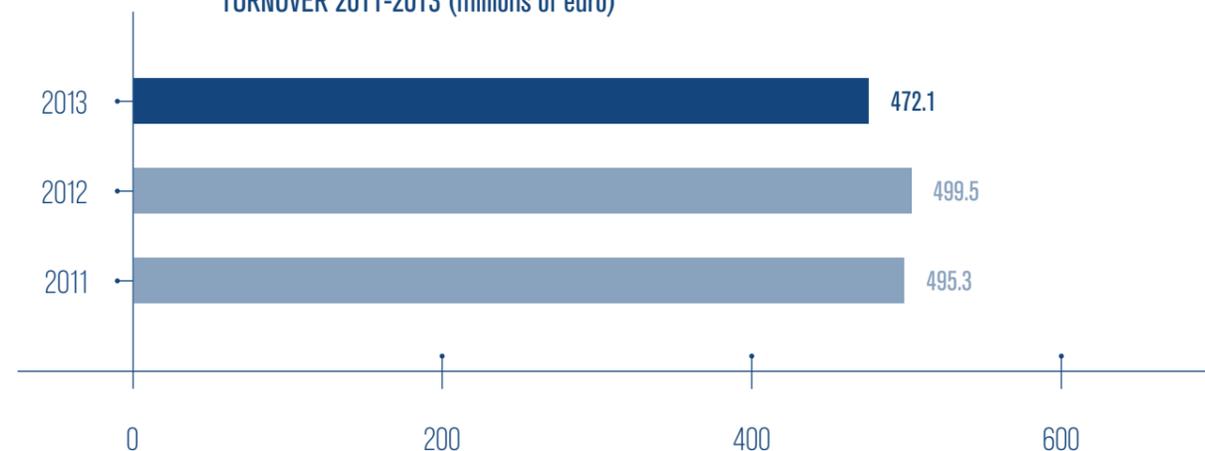
- **Aquafil's role as a leading global** manufacturer of carpet fibers strengthened with the October acquisition of German company Xentrys Leuna. This acquisition enabled us to increase our production and commercial capacity with new types of products and customers.

- **The sale of the Engineering Plastics business unit** produced a large amount of capital gains.

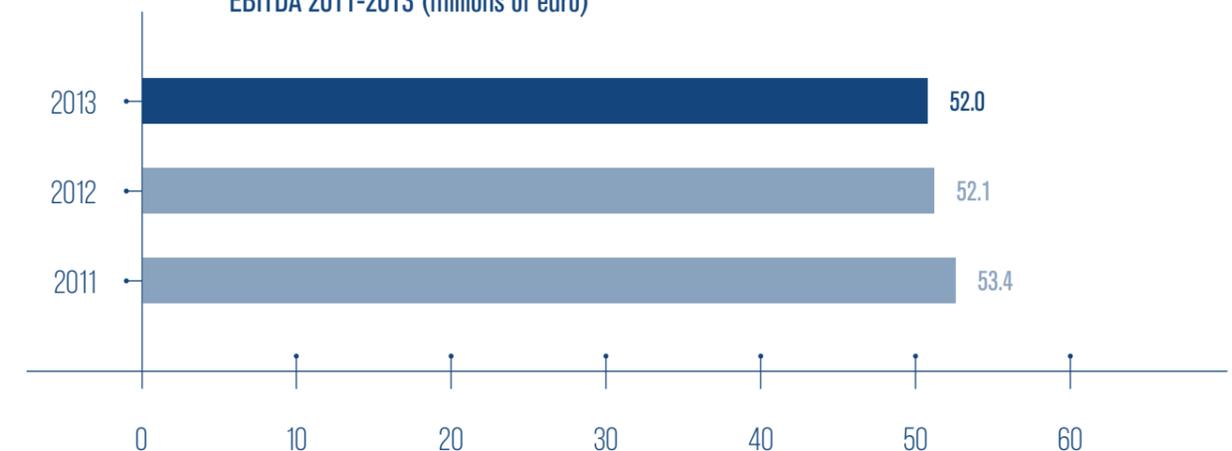
- **The gross operating margin (EBITDA)** was equal to €52 million, corresponding to 11% of consolidated revenues and confirms the result achieved in the previous year.

If the EP business unit had not been sold in 2013 and the German company producing BCF fibers had not been acquired, which were operations required for consolidating the Group on the BCF market worldwide, the EBITDA proforma obtained would have been equal to €57 million while the "pro forma" turnover would have been about €490 million.

TURNOVER 2011-2013 (millions of euro)



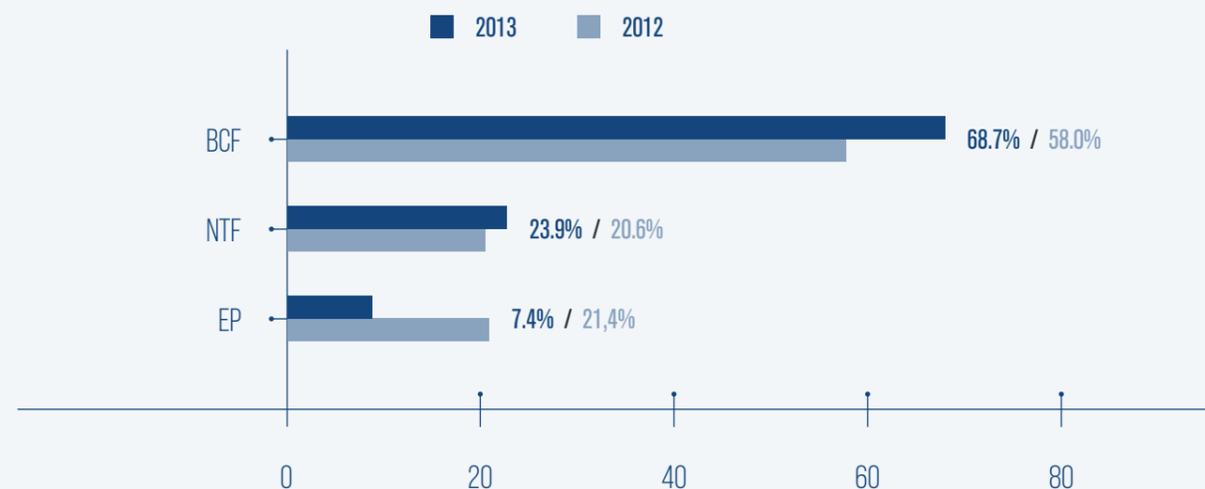
EBITDA 2011-2013 (millions of euro)



## > PERFORMANCE ANALYSIS OF THE INDIVIDUAL BUSINESS UNITS:

- The **BCF** business unit has steadily increased its sales volume compared to 2012 due to a drop in prices of raw materials. In 2013, the business unit recorded slightly higher levels of production than 2012 and a slight increase in unit margins.
- The **NTF** business unit has greatly increased in sales volume and turnover due to price dynamics similar to the BCF unit.
- The **EP** business unit was sold in April 2013, therefore, only partially contributed to the turnover and the profitability of the Group.

DISTRIBUTION OF CONSOLIDATED TURNOVER OF THIRD PARTIES (%)



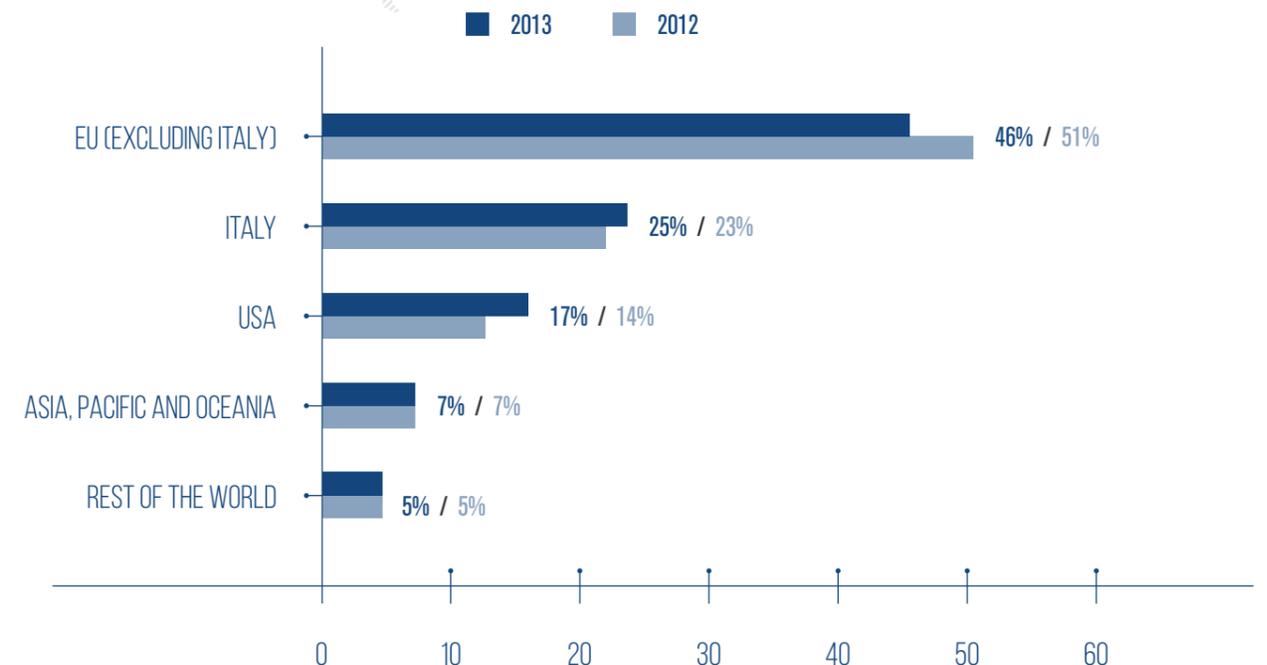
**The orientation towards foreign markets in Europe and worldwide, and the internationalization of production,** favored by the location of production sites in countries with the highest growth rates are particular elements of the Group's financial policies and strategies. **In 2013 Aquafil strengthened its role as worldwide manufacturer** by consolidating its commercial infiltration in the continents where its plants are based.

The geographical distribution of turnover consolidated for each macro area shows a steady increase in **turnover in the U.S. and a steady trend in the Asian Pacific area and Oceania.**

**In Italy,** the sales were composed of approximately 50% polymers and 50% NTF fibers which were sold to national customers who, in turn, exported most of the products



DISTRIBUTION OF TURNOVER FOR GEOGRAPHIC AREA (%)



## › RESEARCH, DEVELOPMENT AND INVESTMENT

Research is one of the fundamental pillars of the Group's activities and it allows for continuous innovation.

Research is one of the **fundamental pillars** of the Group's activities and it allows for **continuous innovation** with the aim of improving technical and environmental performance of processes and products.

The main activities carried out in 2013 were:

- **Technological improvement** and **optimization** of the ECONYL® Regeneration System
- **Development of new PA6** polymers aimed at improving dyeing techniques and soil resistance of BCF yarns for textile flooring
- **Development of BCF yarns with innovative flame-retardant**, anti-bacterial and anti-soiling characteristics and yarn made of hollow fibers for special applications
- **Development of experimental surface coatings** of the fibers by means of nanotechnology
- Optimization of **energy performance** of production and processing plants
- Industrial development of **XLA® fibers**
- Research aimed at analyzing **the affects of UV rays** applied to textile fibers

The research activities were carried out with the cooperation of various research bodies and research institutes including: the University of Trento, the Italian Institute of Technology in Genoa, the University of Maribor (Slovenia), the Chemical Institute in Ljubljana (Slovenia) and Georgia Institute of Technology (USA).

During 2013, Aquafil's **investment rates** in the fields of environment, safety, energy and waste management amounted to **€1.6 million**. Additionally, the Group allocated €1.3 million for the development, promotion and optimization of the ECONYL® Regeneration System.

2013 INVESTMENTS	INVESTMENTS IN EURO
Environment	558,170
Safety	799,706
Energy	269,645
Waste management	48,657
ECONYL®	1,326,130
TOTAL	3,002,308

Aquafil's investments are a clear indication of the attention and commitment of the board of directors in defining development strategies and investment plans for sustainable development, climatic changes and the risks and opportunities associated with them.

Opportunities associated with climate change

- to provide new products and services in order to face the challenges related to climatic change

*Thanks to the ECONYL® Project, which enables us to produce regenerated raw materials from pre and post-consumer waste, AQUAFIL has succeeded in reducing the emissions (-55%) of the products made with 100% regenerated ECONYL® polymer.*

- to achieve general competitive advantage generated by technological changes associated with climatic change ;

*Use of renewable energy sources, in 2013 as*

*much as 72% of electricity requirements came from renewable sources, Process optimization*

Risks due to physical changes associated with climate change:

- natural disasters caused by climate change - Aquafil has activated a specific insurance policies;
- costs associated with regulatory compliance, higher costs for carbon credits.

Aquafil invests € 1.6 million in environmental, safety and waste management projects.

## > SUMMARY OF THE AQUAFIL GROUP'S INCOME STATEMENT

Data expressed in thousands of Euro

RIF.	DESCRIPTION	2013	2012
A1	Revenues from sales and services	472,161	499,484
A2	Change in inventories	1,791	(111)
A4	Capitalisation of internal construction costs	1,886	4,282
A5	Other revenues and income	3,645	4,691
A	Value of production	479,483	508,346
B6 B11	Raw material, supplies, consumables and merchandise	(261,313)	(284,948)
B7-8, B13-14	Service and other operating costs	(89,791)	(93,711)
B9	Personnel costs	(76,343)	(77,605)
	EBITDA	52,036	52,082
B10a-b	Amortisation and Depreciation	(26,410)	(27,833)
B10c-d, B12	Provision and write-downs	(888)	(2,722)
A - B	EBIT	24,738	21,527
C	Net financial income and charges	(17,249)	(18,926)
D, E20-21	Extraordinary income and charges	21,167	(699)
	Profit before taxes and minority interest	28,656	1,902
E22	Income tax	(2,746)	(645)
	Net profit before minority interest share	25,910	1,257
23	Minority interest profit	56	62
24	Group net profit	25,854	1,195
	Group Cash Flow (profit + deprec.)	52,264	29,028



BCF bobbins

## &gt; BALANCE SHEET AND FINANCIAL STATEMENT

RECLASSIFIED FIXED ASSETS / EURO IN THOUSANDS		31/12/2013	31/12/2012
	Fixed assets		
BI	Intangible assets	11,147	11,443
BII	Property, plant & equipment	153,810	171,245
A, BIII (v. N.I.)	Financial and other fixed assets	4,246	4,351
	1. Fixed assets	169,203	187,039
	Net working capital		
CI	Inventories	130,702	130,444
CI1-4	Trade receivables	45,344	45,876
CI4bis-5, D	Other receivables	16,674	17,402
D6, D7* (v. N.I.), D9-10	Trade payables	(84,333)	(84,338)
D12-14, E	Other payables	(21,605)	(23,219)
	2. Net working capital	86,782	86,165
C	Employee leaving indemnity provision	(7,330)	(7,981)
B	Provisions for risks and charges	(10,769)	(7,206)
B, C	3. Provisions	(18,099)	(15,187)
	(1+2+3) = 4. Net capital employed	237,886	258,017

\* net of leasing payables.

\*\* include the short and m/l term of loan

RECLASSIFIED LIABILITIES AND NET EQUITY / EURO IN THOUSANDS		31/12/2013	31/12/2012
	Shareholders' equity		
AI	Share capital	(19,686)	(19,686)
AII-VIII	Reserve	(35,442)	(50,484)
AIX	Net profit for the years (loss)	(25,854)	(1,195)
	a) Group Net Equity	(80,982)	(71,365)
AX	b) Minority interest equity	(292)	(696)
	1. Total shareholders' equity	(81,274)	(72,061)
	Net financial position:		
CIII, CIV, BIII2	Medium/long term securities, liquidity	57,112	50,091
D4 (v. N.I.)	Bank and financial institutions – short term	(78,580)	(61,978)
D4 (v. N.I.)	Bank and financial institutions – medium/long term**	(108,740)	(118,978)
D7 (v. N.I.)	Leasing payables	(20,231)	(23,257)
	Other financial payables	(1,716)	0
	a) net financial position – third parties	(152,154)	(154,122)
BIII2, CI4, D11	Receivables from holding companies	26,051	30,980
D3	Shareholder payables – medium/long term	(30,508)	(62,814)
	(b) net financial position - shareholders	(4,457)	(31,834)
	(a+b) = 2. Total net financial position	(156,612)	(185,956)
	(1+2) = 3. Total of sources	(23,886)	(258,017)

For an in-depth analysis please consult the annual 2013 balance sheet which can be seen in the financial section of the Aquafil website:

# 6. APPENDIX

6.1 GLOSSARY

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## 6.1 GLOSSARY

For a better understanding of the terms and acronyms used in this report, see the glossary below.

- **CIG Layoff unemployment insurance:** is an industrial policy tool designed to cope with crises or to enable companies to address restructuring/reorganization issues.
- **CO Carbon monoxide:** a toxic gas produced by the incomplete or partial combustion of fuels.
- **Carbon Dioxide CO<sub>2</sub>:** Gas-naturally present in the atmosphere deriving from combustion, respiration and the decomposition of organic material due to carbon oxidation.
- **COD Chemical Oxygen Demand:** Oxygen consumed in order to chemically oxidize the organic and inorganic substances dissolved and suspended in water. This parameter is mainly used for estimating the content of oxidizable compounds and therefore the possible pollution levels of natural or waste water.
- **Cogeneration:** combined process concerning the production of electricity/mechanical and thermal energy (heat) produced in special plants using primary energy.

- **RENEWABLE ENERGY:** source of energy continually supplied by nature; energy obtained from continuous or repetitive sources which are periodically returned to the natural environment.
- **LCA - Life Cycle Assessment:** collection and evaluation of inputs, outputs and potential environmental impacts of a production system throughout its life cycle by means of an objective procedure of valuation of the energy and environmental load related to a process by identifying and quantifying the amount of energy, materials and waste released into the environment.
- **NOx-SOx:** nitrogen and sulfur oxides respectively.
- **PM10:** particulate matter in the atmosphere in the form of microscopic particles whose aerodynamic diameter is equal to or less than 10µm.
- **Regenerated polymer:** polymer produced with a process that involves the regeneration of the original polymeric structure of the base polymer.

- **REACH-Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No. 1907/2006** which aims at increasing safety, safeguarding the health of people and the well-being of the environment, in respect to the risks arising from the use of chemicals.
- **TOC Total Organic Carbon:** amount of carbon in an organic compound. This parameter is used as an indicator of water quality and for assessing the content of organic matter present in flue gas.
- **Web Tool:** is a web based program accessible with browsers for sharing, exchanging, analyzing and validating data and information.

## 6.2 GRI INDEX

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## Statement GRI Application Level Check

GRI hereby states that **Aquafil SpA** has presented its report "Sustainability Report 2013" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level C.

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Amsterdam, 14 August 2014

Ásthildur Hjaltadóttir  
Director Services  
Global Reporting Initiative



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Cover photo dedicated to the  
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