# 2012 SUSTAINABILITY REPORT

AQUAFIL
synthetic fibres and polymers

*"Plant in Arco (Italy)"*



# INDEX

# LETTER FROM THE PRESIDENT

The conclusion of the first five-year term with the release of the Sustainability Report last year provided us with unbending sureness that the path we have chosen to follow, despite the difficulties of the macroeconomic scenario, is the right one.
During these five years we have acquired and developed essential skills in challenging area of indicator identification and result measurement.
Thus, in the year ahead we feel ready to expand our analyses beyond our production processes to embrace our products as well, measuring their impacts from a new perspective: "life cycle thinking".
This approach has allowed us to grasp and quantify how directly controlled processes lend only a limited contribution to the overall effects that our products have on the environment during their life cycle. These effects are strongly influenced (in some cases up to 90%) by the raw materials that we procure and use in our production processes.
The commissioning of the ECONYL® back in 2012 marked the activation of a "closed cycle" that recovers products made from polyamide 6 that have reached the end of their life and now are regenerated into a more sustainable raw material without compromising the quality of the end products.

This has allowed us to achieve two advantages:

1) Avoid that products and materials at end of life, such as abandoned fishing nets or carpets, cause significant damage to the environment.
2) Significantly reduce the impacts of our products made with ECONYL®, eliminating the effects generated by chemical and petrochemical processing of the raw materials necessary for the production of Nylon 6.

A filament of ECONYL® generates 50% less greenhouse gas emissions than a petrochemichal filament, producing the same exact technical and functional characteristics.
Proud of our commitment on the ECONYL® project that effectively decreases the "environmental burden" of the raw materials that we use, thus allowing a significant decrease of our products' environmental impacts, we shall continue to invest in and strive for the improvement of our activities' efficiency with relative reduction of emissions (currently more than 30% of the electrical energy that the Aquafil Group uses is from renewable resources).
In this regard, it is my pleasure to announce an innovation that will be implemented next year concerning the crucial decision on the "indicators" employed to benchmark our progress.
Starting next year, we shall use those indicators that measure the efficiency of our activities and processes. Our environmental report shall also include the percentile deviations from optimal performance targets, which year after year we shall endeavor to achieve.
Our commitment is rekindled; not only towards better "performance" ratings but also towards methods of reporting that boast increased clarity, directness and transparency.
We are confident that the latter will both drive and help us to focus our efforts on the areas that "yield" the best results.

*"Bridge over the Sarca river close to Torbole"*

# THE RS AQUAFIL

Starting in 2008, the Group has publishes annually its Aquafil Sustainability Report, an important tool that serves as voluntary reporting to all stakeholders in regards to the main activities and achievements in the social, environmental and economic fields.
The document will be drafted taking into account the guidelines of the Global Reporting Initiative (GRI[1]) with regard to the contents and the numerical indicators used to indicate performance levels. Since 2011, with the aim of providing greater visibility and transparency to the document, the Report (published in June 2012) has been included in the classification process of the GRI and more specifically in the C-level application of the GRI Reporting
From the 2012 edition (published in JULY 2013), the first since the end of the 5 year period of 2007-2011, Aquafil has initiated a revision process of the Report organisation and data management procedures, which, in addition to a different structure of the document, also has the objective of supporting a greater capacity of internal analysis of information in order to progressively increase utility in strategic planning.
One of the first indicators of this new approach is a different organisation of content that includes "streamlined" sections that facilitate the reader in the consultation of the document and offers the opportunity to scan the document directly in its more "appealing" parts via the interactive index that accompanies the reader. Another innovation regards several changes in the analysis of the financial, environmental and social indicators that have been organised under a specific section starting from this edition.

We would like to thank the staff of all the plants that participated in data collection and who supported the "sustainability team" in their delicate tasks of coordination and processing, thus allowing drafting of the 2012 Report.
As always, we welcome any observations relevant to the improvement of sustainability and stakeholder relations.

**Maria Giovanna Sandrini**
Head of Communications
maria.giovanna.sandrini@aquafil.com

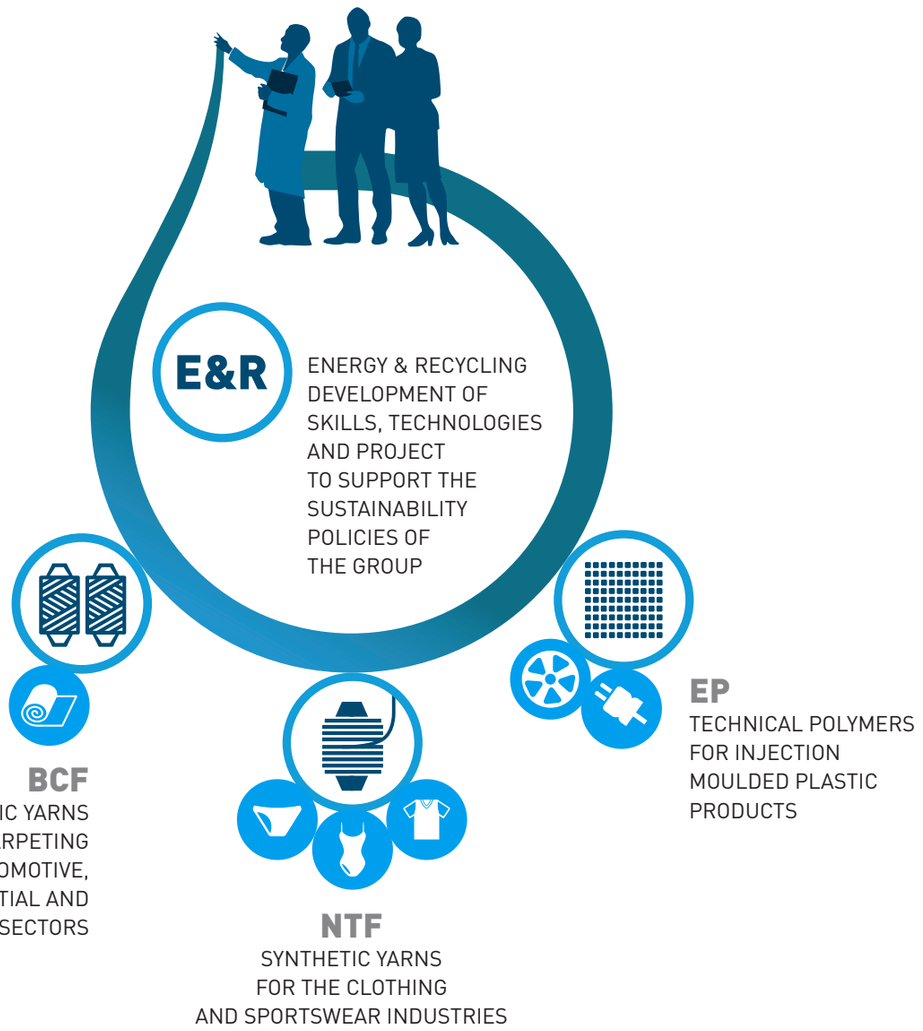


[1]www.globalreporting.com



*“NTF yarn”*

# 1. THE AQUAFIL GROUP



## 1.1 HISTORY AND ORGANIZATION OF THE GROUP

Since its founding in 1969 in Arco (TN, Italy), the Aquafil Group has been active in the production and sale of polymers and polyamide synthetic fibres. The Group's activities are organized into three main business units: BCF (Bulk Continuous Filament) for the production of yarns intended for flooring textiles, NTF (Nylon Textile Filament) for the production of yarns destined to the apparel industry and EP (Engineering Plastics) for the production of polymers for plastic moulding. The three business units are supported by a fourth one, Energy and Recycling (E&R), which works transversally and, both inside and outside of the group, deals with sustainability projects focused mainly on encouraging the use of renewable energy sources and the production of products from regenerated raw material.

**THE AQUAFIL GROUP HAS MANAGED OVER THE YEARS TO GAIN A LEADING ROLE, PARTICULARLY IN THE TEXTILE FLOORING INDUSTRY (BCF), WHERE TODAY IT STANDS AS THE LEADING EUROPEAN GROUP AND THE SECOND IN THE WORLD IN TERMS OF SALES VOLUMES.**

**E&R**
ENERGY & RECYCLING
DEVELOPMENT OF SKILLS, TECHNOLOGIESAND PROJECT TO SUPPORT THE SUSTAINABILITY POLICIES OF THE GROUP

**BCF**
SYNTHETIC YARNS FOR CARPETING FOR THE AUTOMOTIVE, RESIDENTIAL AND CONTRACT SECTORS

**NTF**
SYNTHETIC YARNS FOR THE CLOTHING AND SPORTSWEAR INDUSTRIES

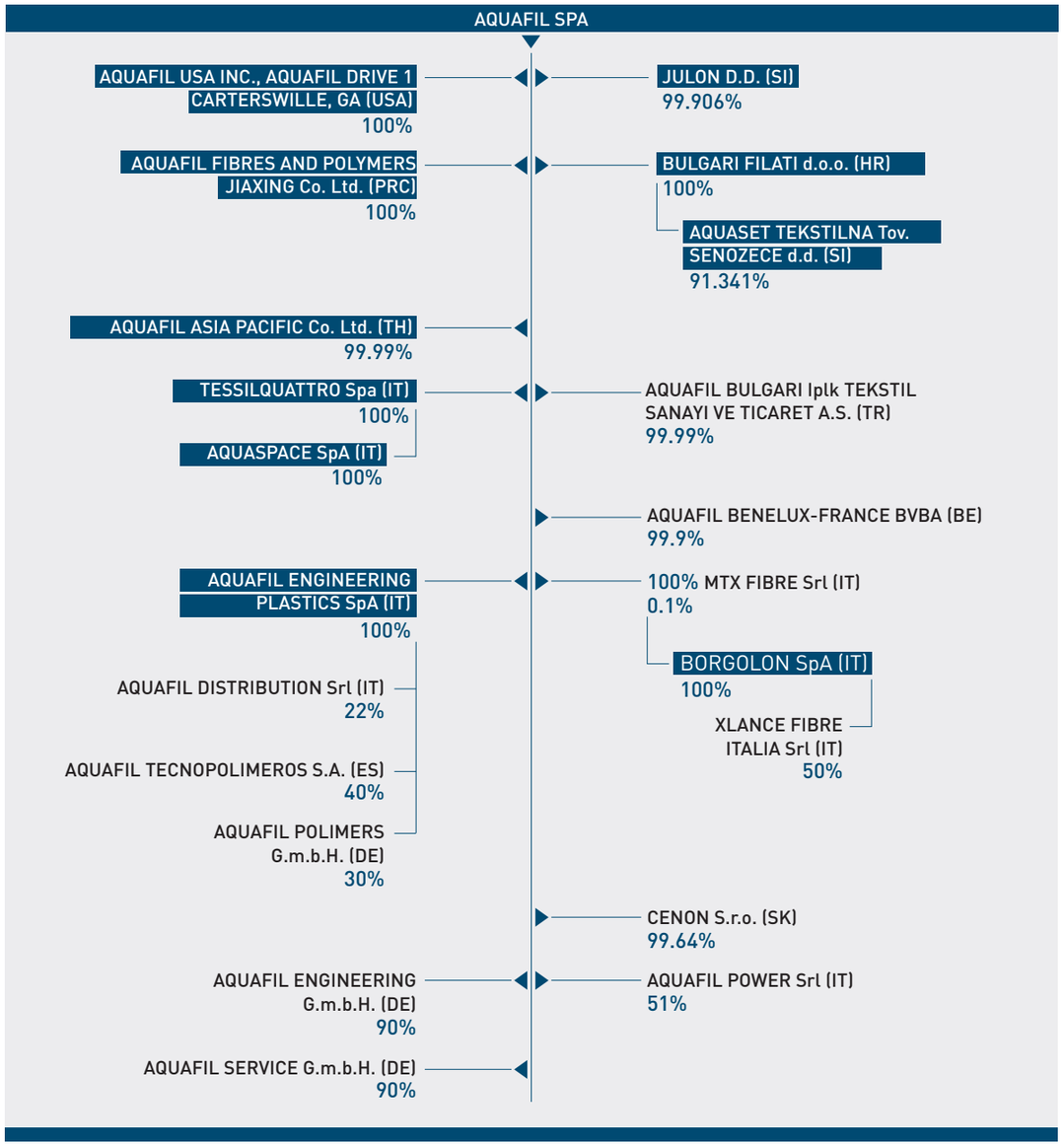
**EP**
TECHNICAL POLYMERS FOR INJECTION MOULDED PLASTIC PRODUCTS

**Turnover**
outside the Italian borders
more than **70%**

## 1.2 AQUAFIL IN ITALY AND IN THE WORLD

Thanks to company internationalization and consolidation that started since the mid-'90s, the Aquafil Group has increasingly become a "global" producer, a condition that allows it to efficiently oversee all areas of strategic interest in the target market.
Aquafil Spa is a corporation not listed on the Stock Exchange, whose stakes are held mostly by the Bonazzi family. Since 2009, the corporate structure has included the management company H&C Romeo, financed by funds managed by Hutton & Collins, which has invested Đ 45 million in Aquafil; in addition, shares are also owned by several minor shareholders who are all part of the Board of Directors.
Despite continuous growth, Aquafil has always maintained its strong ties with the Alto Garda area of Italy and the town of Arco, where Group HQ is located.
The Board of Directors and the Executive Committee meet in the Headquarters, which also contains the Financial Administration Department and Human Resources, R&D laboratories and facilities, ICT and logistics - departments that operate in continuous coordination with customers and with all sites located in various geographic areas.

**THOUGH IN THE ARCO HQ MANAGEMENT AND ADMINISTRATIVE STRUCTURES ARE CENTRALISED, THE VARIOUS UNITS AROUND THE WORLD ARE CHARACTERIZED BY STRONG INDEPENDENCE AND AUTONOMY. OVER 70% OF THE TURNOVER IS GENERATED OUTSIDE THE ITALIAN BORDERS.**

## 1.3 GOVERNANCE

**THE GOVERNANCE GROUP AQUAFIL IS DEFINED THROUGH TWO MAIN BODIES: THE BOARD OF DIRECTORS AND THE EXECUTIVE MANAGEMENT COMMITTEE. AT THE TOP OF BOTH BODIES SITS GIULIO BONAZZI, PRESIDENT AND CEO OF AQUAFIL, REPRESENTATIVE OF THE FAMILY WHICH OWNS THE INDUSTRIAL GROUP.**

### EXECUTIVE MANAGEMENT COMMITTEE

The Executive Management Committee has a duty to support and assist the Board of Directors. This body is entrusted interventions in industrial, commercial and logistics areas. The Committee is also assigned the task of monitoring the performance of the Group, the advancements of projects and policies related to sustainability, safety, training and work.

### BOARD OF DIRECTORS

It has the task of guiding the practical operations of Aquafil Spa defining strategies for the different areas of development, the guidelines and the investment plan. The Board of Directors, in addition to several internal members to Aquafil, also includes two representatives of the English company H&C Romeo, a member of the Group since 2009.
The limited subdivision of shares allows all stakeholders to sit within the ranks of corporate Governance. This is why no institutionalized instruments that allow minority shareholders to get in touch with the Board of Directors exist at Group level, as these stakeholders already sit on the Board.

› GIULIO BONAZZI
**PRESIDENT AND CEO**

› CARLO BONAZZI
**HONORARY PRESIDENT**

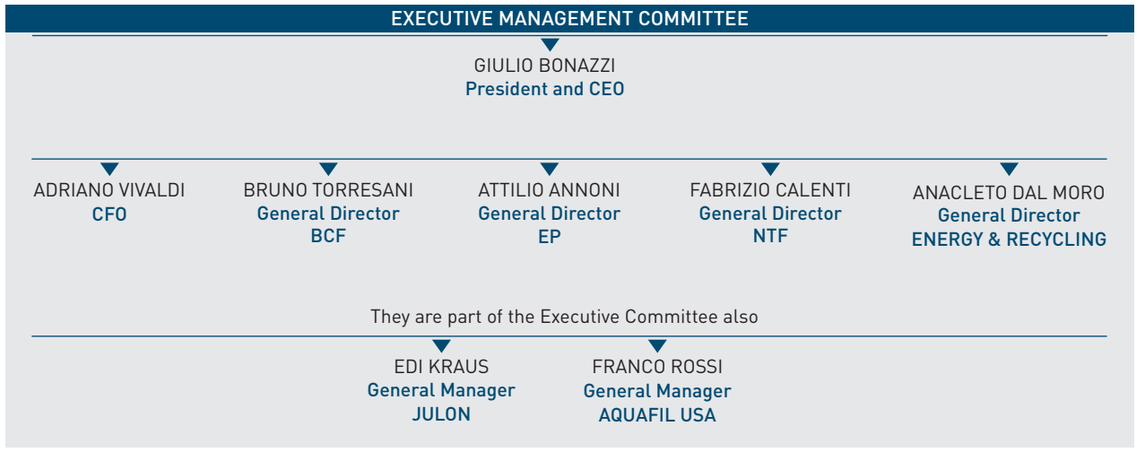
› ADRIANO VIVALDI
**CFO**

› FABRIZIO CALENTI
**CEO**

› EDI KRAUS
**ADVISER**

› MAURO MORETTI
**ADVISER**

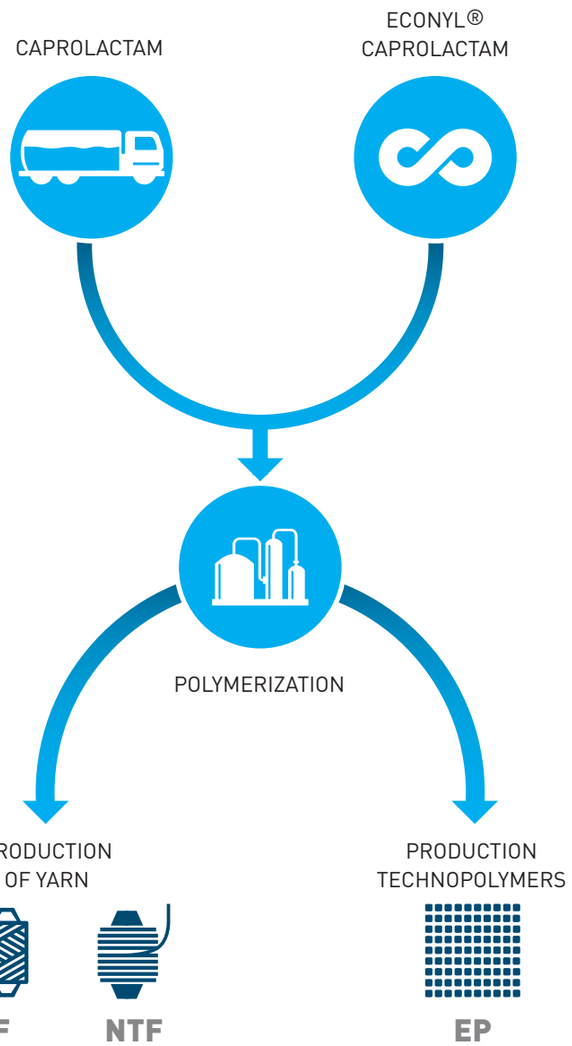
› RAFAEL TORRES BOULET
**ADVISER**



*“BCF yarn”*

## 1.4 ACTIVITIES AND PRODUCTS

**AQUAFIL IS ONE OF THE KEY PLAYERS IN ITALY AND IN THE WORLD IN THE PRODUCTION OF SYNTHETIC FIBRES, ESPECIALLY POLYAMIDE 6 BASED.**




# LE BUSINESS UNIT

## BCF
## BULK CONTINUOS FILAMENTS

Aquafil Group's core business is the business unit for the production of filaments for textile flooring for the contract (hotels, offices and public venues), automotive (car carpets and coverings) and residential sectors. The activities are characterised by continuous innovation that year after year renews a significant portion of the products in the collection. Among the most important products, specifically designed for the needs of this market segments, are ALTO® CHROMA, ALTO®, AQUALON, AQUALON HD, ECONYL®.

**IN 2012, 58% OF SALES IS RELATED TO THE BUSINESS UNIT BCF.**

## NTF
## NYLON TEXTILE FILAMENTS

Is aimed at the production and marketing of a wide range of synthetic fibres, including Ultralon®, ECONYL®, Dryarn®, Borgolon® and Microlon® the elastomeric XLA™ fibre mainly for the production of fabrics for underwear, hosiery, sportswear, fashion and beachwear.

**THE AQUAFIL GROUP IS NOW THE MAIN SUPPLIER OF THE MOST IMPORTANT ITALIAN AND EUROPEAN BRANDS IN THE SPORTSWEAR AND FASHION INDUSTRY.**

## EP
## ENGINEERING PLASTICS

Manages the Aquafil Group activities in the market for polyamide polymers, offering a range of products destined for extrusion and injection moulding.
The main products are Aquamid polyamide 6 and 66, both natural and dyed, Aquamid R, recycled products, regenerated ECONYL® products and Aquarel, master colourants and opacifiers for moulding of PA6 and PE.

## E&R
## ENERGY & RECYCLING

Created in 2008, the E&R – Energy & Recycling Business Unit is at the service of all the Group's production facilities, operating in "transversal" areas and carrying out research and implementation of sustainability projects. The main areas of action of the E&R are:

- **ENERGY**
  Promotion of projects and technological innovations for the production of electricity and heat from renewable resources or those having low environmental impact, even for the direct benefit of the plants of the group in order to increase the efficiency of energy use and reduce greenhouse gas emissions.

- **RECYCLING**
  Promoting the use of recycled raw materials with waste regeneration projects which would also include direct collaboration with customers aimed at encouraging the design of easily recyclable materials .

- **CULTURE**
  Promotion of a culture of sustainability in relations with all stakeholders that can be implemented through continuous training and awareness fostering activities for employees through the creation and promotion of projects in partnership with clients, suppliers, or local communities.

*"Internal plant, Ljubljana (SLO)"*

# THE FIELDS OF APPLICATION

The fields of application in which the Aquafil products are used mainly are:

**INTERIOR DESIGN, BUILDING & CONSTRUCTION**
The Aquafil Group operates in the field of interior design and construction through the production of synthetic textile flooring (BCF) used in the residential sector and supply of hotels and large surfaces, as well as through the creation of technical polymers (EP) used in the construction of buildings and infrastructure components.

THE CONSTANT DEVELOPMENT OF NEW PRODUCTS ALLOWS THE COMPANY TO MEET INCREASINGLY COMPLEX AND DIVERSE MARKET NEEDS WITH HIGH STANDARDS OF QUALITY AND SUSTAINABILITY.

**AUTOMOTIVE**
An area of strategic importance for the Aquafil Group is certainly represented by the automotive industry in which the synthetic fibres (bulk continuous filaments – BCF) are used for the production of floor mats and coatings, and where some polymers (EP) are used for the construction of plastic components and replace, with high performance, parts normally made of metal.

THE STRATEGIC CHOICE OF MATERIALS WILL HELP TO IMPROVE AERODYNAMIC PERFORMANCE AND REDUCE THE WEIGHT OF VEHICLES AND CONSEQUENTLY $CO_2$ EMISSIONS GENERATED DURING USE OF THE VEHICLE.

**SPORT, FASHION AND FREE TIME**
The third sector in which Aquafil Group products are used is relegated to sport and fashion. Aquafil produces filaments (NTF) for clothing in the fields of underwear, sportswear and beachwear and polymers (EP) for sports equipment capable of ensuring the highest standard of care for most extreme activities and climatic conditions.

THANKS TO THE HIGH QUALITY OF THE PRODUCTS AND A FOCUS ON REDUCING THE ENVIRONMENTAL IMPACTS OF THE FILAMENTS, AQUAFIL IS SOON BECOMING A POINT OF REFERENCE FOR THE CREATION OF NEW SUSTAINABLE FABRICS.

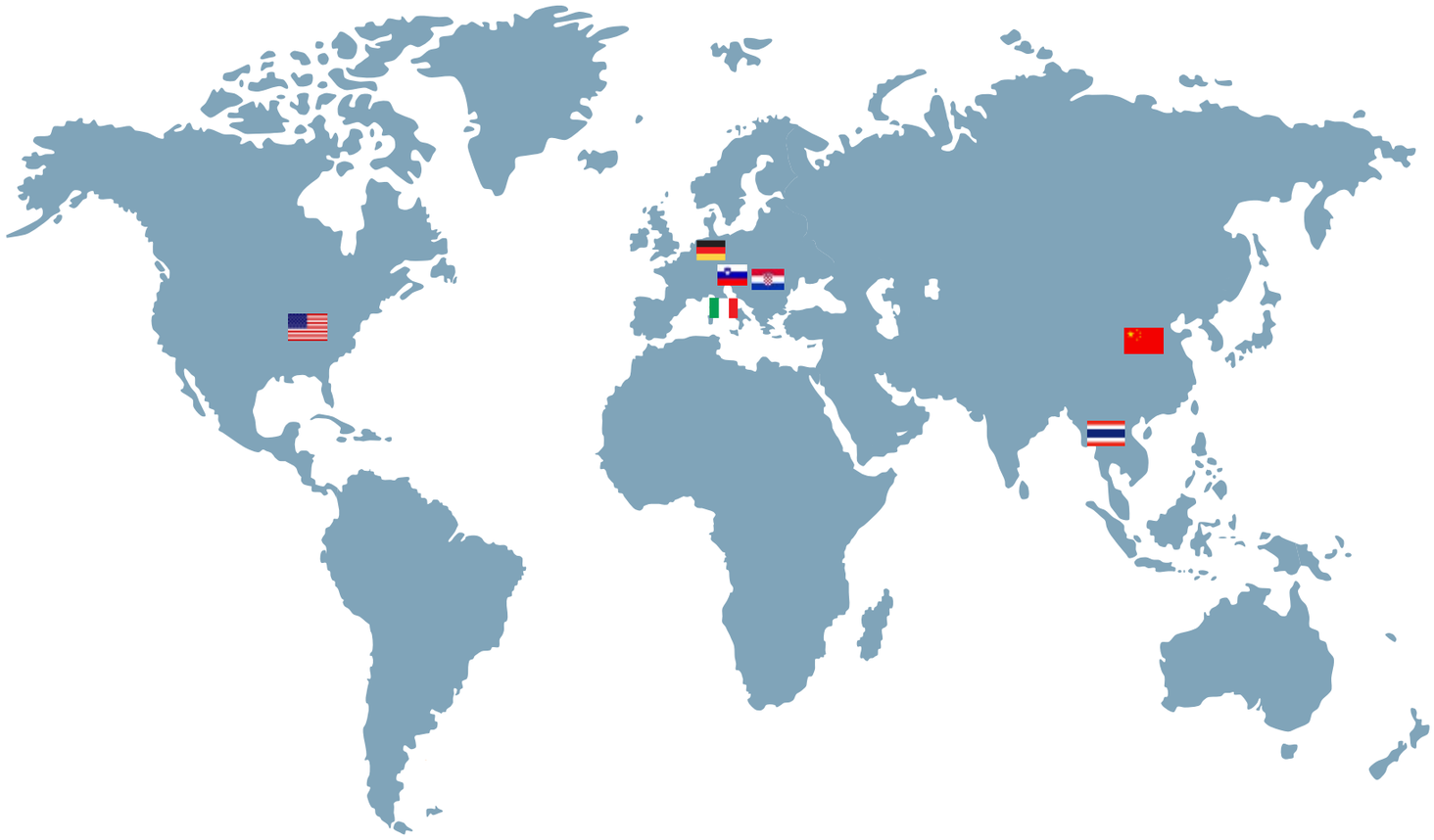
**ELECTRICAL AND ELECTRONIC EQUIPMENT**
The Aquafil Group, through research and development, produces high-tech raw materials (EP) used for the production of plastic components for electrical and electronic equipment.

THE AQUAFIL ENGINEERED PLASTICS ARE ABLE TO ENSURE MAXIMUM PERFORMANCE IN TERMS OF STRENGTH AND SAFETY.



## 1.5 PLANTS

THE AQUAFIL GROUP TOTALS 13 MANUFACTURING PLANTS AND AN ENGINEERING COMPANY (BERLIN). AT THE END OF 2012, THE GROUP HAD A WORKFORCE OF 2,114 EMPLOYEES CONSIDERING ONLY DIRECT WORKERS AND NOT TEMPORARY EMPLOYEES.



GERMANY*
› BERLINO
- ENGINEERING COMPANY

**ITALY (IT)**
› ARCO (TN)
- **BCF**
  POLYMERIZATION
  SPINNING

› ARCO (TN)
- **EP**
  POLYAMIDE
  AND MASTERBATCH
  COMPOUNDS

› ROVERETO (TN)
- **BCF**
  DYEING WITH SUPERBA
  AND SPACE TECHNOLOGY

› CARES (TN)
- **BCF**
  INTERLACING
  TWISTING

› VARALLO POMBIA (NO)
- **NTF**
  SPINNING
  TEXTURIZING

**SLOVENIA (SLO)**
› LJUBIANA
- **BCF/NTF**
  POLYMERIZATION
  BCF/TEXTILES SPINNING
  TWISTING
  TEXTURIZING
  HEAT SETTING
  WARPING
- **ERS**
  DEPOLYMERIZATION

› AJDOVSCINA
- **ERS**
  STORAGE AND
  PREPARATION OF WASTE
  OF POLYAMIDE 6

› SENOZECE
- **NTF**
  WARPING

› CELJE
- **BCF**
  TWISTING
  HEAT SETTING

**CROATIA**
› OROSLAVJE
- **NTF**
  AIR JET COVERING
  CONVENTIONAL COVERING
  TEXTURIZING

**GEORGIA (USA)**
› CARTERSVILLE
- **BCF**
  SPINNING
  INTERLACING
  TWISTING
  HEAT SETTING
- **EP**
  POLYAMIDE
  AND MASTERBATCH
  COMPOUNDS

**TAILAND (T)**
› RAYONG/BANGKOK
- **BCF**
  INTERLACING
  TWISTING
  LOGISTICS

**CHINA (CN)**
› JIAXING
- **BCF**
  SPINNING
  INTERLACING
  TWISTING
  HEAT SETTING
- **EP**
  POLYAMIDE
  AND MASTERBATCH
  COMPOUNDS

In 2012, no Joint Venture at report boundary was in place.

- **BCF** Synthetic yarns for carpeting
- **EP** Engineering plastics
- **NTF** Synthetic yarns for the clothing industry
- **ERS** ECONYL Regeneration System

* NOT INCLUDED IN THE REPORT

## 1.6 STAKEHOLDER MAP

**IN ORDER TO BETTER INTERACT WITH THE DIFFERENT STAKEHOLDERS, THE AQUAFIL GROUP PAYS GREAT ATTENTION TO THE ENTIRE CHAIN.**

**EMPLOYEES AND ASSOCIATES**
Employees and associates are the primary resource for Aquafil, a wealth of technical and scientific skills and human values essential for good operation and business growth. The Group, through its innovative capacity and strength in international markets, despite the critical situation facing the work market, has managed to retain its workforce, albeit with a slight decrease (-3%), making use in slightest degree of social welfare.

**SUPPLIERS**
The integration of Aquafil Group development policies with those of its suppliers is an important role in maintaining high efficiency sustainability projects: it is in fact no longer sufficient to seek attention on issues of sustainability. Common efforts are needed in terms of projects, investments and management. Activation of the ECONYL process ® has made it possible to create new relationships with different actors, establishing an efficient supply chain of new material: Polyamide 6 waste; relations undertaken with universities and international research centres (Georgia Tech University, Atlanta-USA) allows new solutions for the textile industry to be identified, such as the recovery of materials from apparel.

**LOCAL COMMUNITIES**
The relationship with the local community also plays an important role in Aquafil Group actions. Aware of the importance of maintaining positive relationships with the people who live in close proximity of the manufacturing plants, the Group is constantly, with great transparency, implementing concrete actions to minimise negative impacts on the natural environments surrounding the plants. Aquafil's attention for local communities is also guaranteed and supported through social projects targeted and directed towards the most vulnerable and sensitive segments of society (Jiaxing Project, China, that offers economic support for women affected by breast cancer).

**CUSTOMERS**
Against a backdrop of shared objectives and actions both productive and communicative, the relationship with customers retains a key role in the Aquafil Group. Coordinated activities make it possible to grasp and guide the market demands, creating new products that meet the needs of the market with high standards of quality and sustainability. The Group works closely with different types of customers, active in different sectors:

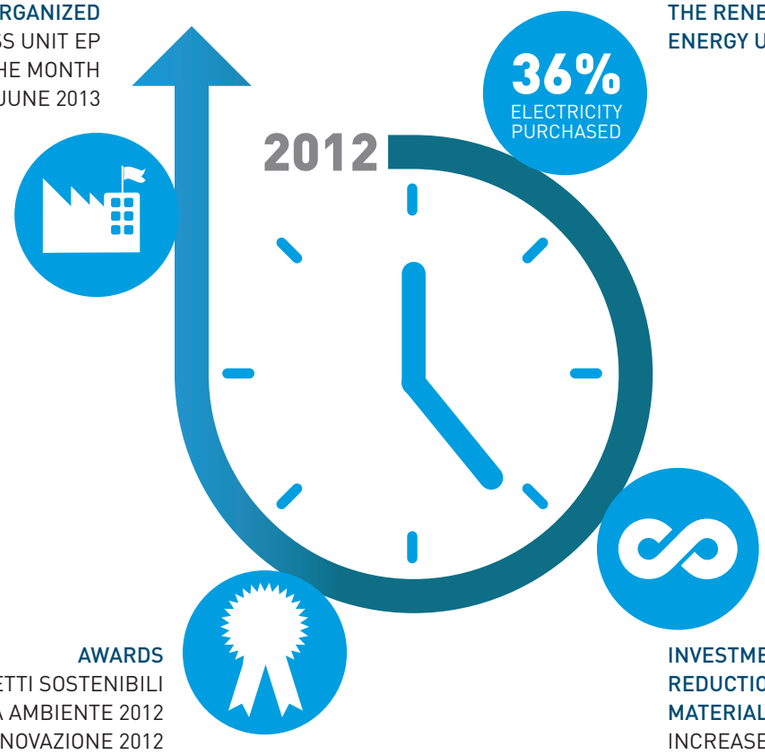
- For BCF there is active collaboration with leading world player in the production of synthetic flooring, Aquafil is indeed a point of reference for manufacturers of carpets that operate in the contract (supplies for hotels, offices and public venues), automotive (car carpets and coverings) and residential sectors, thanks also to the Aquafil Style Centre (Carpet Center) the Group is also able to actively support its customers in developing new products.
- In the field of NTF, business relationships with leading companies, producing fabrics for underwear, hosiery, sportswear, swimwear and fashion have been strengthened. Particularly important was the success of Dryarn® microfibre used for the construction of technical fabrics for racing activities and sports, especially under extreme conditions. In addition, a Joint Venture with a major customer of the industry has been established which has allowed to acquire from Dow Chemical the, trademarks and machinery of the elastomeric fibre XLA®.
- In the field of EP, the Group works with B2B (Business-to-business) business relationships, that is, with a direct relationship with companies that produce for end markets, and use Aquafil technical polymers for the realization of plastic objects by extrusion and injection moulding; the main segments served are electrical/electronic, automotive, design and décor, and leisure goods.



# 2. THE EVENTS OF 2012

**AQUAFIL IS BEING REORGANIZED**
THE BUSINESS UNIT EP IS SOLD IN THE MONTH OF JUNE 2013

**COMMITMENT FOR THE RENEWABLE ENERGY USE**




**AWARDS**
- SPROGETTI SOSTENIBILI
- IMPRESA AMBIENTE 2012
- IMPRESE PER INNOVAZIONE 2012

**INVESTMENT FOR THE REDUCTION OF RAW MATERIAL IMPACTS**
INCREASE OF THE PRODUCTION CAPACITY OF THE ECONYL® PLANT

## 2.1 IMPORTANT NEWS OF 2012

- The photovoltaic plants were commissioned for the production of electricity from renewable resources of Tessilquattro SpA in Cares (Italy) and Cartersville (Georgia); in particular, the plants in Cares made their roofs available to third parties for the development of photovoltaic systems.

- The activities related to the project, presented by Aquafil Power Srl, for the construction of a hydroelectric power plant in the province of Trento (Italy) aimed at the production of electricity from the Adige river still continue. The project, conceived in a sustainable manner to compensate for the steady increase in demand for energy in Trento, is at present in the process of applying for permits. Online blog availablewww.vallagarinaenergy.it that aims to present the project and promote constructive exchange with the territory.

- Thanks to an agreement with Dana Italia SpA, the Aquafil cogeneration plant in Arco is also used to heat buildings adjacent company with consequent environmental benefits for both companies.

- The amount of energy from renewable resources purchased by the Group increases: from September the plant of Julon also uses green energy; in 2012 22,950,000 kWh of green power were purchased corresponding to 25.1% of its consumption.

- One of the key projects for the sustainability of the Group, ECONYL® Regeneration System, has been expanded with the work on the de-polymerization reactor section in order to increase the quantity and type of treated post-consumer materials.

- The Aquafil Group has decided to give more visibility and transparency to its Sustainability Report, publishing versions of reports from 2007 to 2011 provided by the GRI on the Sustainable Disclosure Database.

## 2.2 HIGHLIGHTS OF THE FIRST MONTHS OF 2013

- In June 2013 Engineering Plastics Business Unit was transferred to Domo Chemicals with the aim to consolidate Aquafil Group leadership in the field of polyamide fibres, to concentrate the resources made available for the further development of the ECONYL® system technology and to follow the strong development of the BCF in North American and Asian-Pacific markets that are currently booming.

- The project "The Healthy Seas, a Journey from Waste to Wear" is launched, which is an international cooperation initiative involving **Aquafil** as manufacturer of synthetic fibers, **ECNC Land & Sea Group**, European leading **Dutch NGO** engaged in restoration of biodiversity and sustainability in natural environments in Europe and **Star Sock** as company engaged in the production of socks.
  The common objective is the recovery and recycling of abandoned fishing nets in the sea that will be used for the production of ECONYL filaments® **www.healthyseas.org.**

## 2.3 AWARDS

**SUSTAINABLE PROJECTS AND GREEN PUBLIC PROCUREMENT**
Aquafil receives the award created and promoted by the Ministry of Economy and Finance and by CONSIP SpA dedicated to companies who have achieved significant successes in projects and procurement processes set with environmental sustainability criteria. "Aquafil wins the Award for structured strategic approach to sustainability that is pervasive in all business functions.

**BUSINESS ENVIRONMENT**
Business environment: Aquafil received an honourable mention in the corporate environment award 2012 in the category best product, given to organisations that have developed new products capable of providing an effective contribution to sustainable development.

**BUSINESS INNOVATION**
In the Prize section, Aquafil won the award promoted by Confindustria - "Imprese per l'innovazione 2012" (Companies for Innovation 2012) for the Italian companies that want to emerge and strengthen their competitive ability, relying on their level of innovation achieved.

## 2.4 IMPROVEMENT PROJECTS

### ENERGY - PROJECT FOR THE INSTALLATION OF A HEAT RECOVERY SYSTEM

Over the years the cogeneration plant of Arco has been the subject of various improvement measures that have transformed it over time from a co-generation plant to a trigeneration plant, thus enabling air conditioning of plants and offices with huge efficiency gains. In 2012, the Group decided to invest further in the system with a specific intervention aimed at reducing the final temperature of the exhaust air emitted to the atmosphere with the benefit of a further increase in efficiency.

IMPROVING OVERALL EFFICIENCY WHICH IN EARLY 2013 STOOD AT 81.5% (PLANT EFFICIENCY IN 2006 WAS 66%);

- SAVING OF NATURAL GAS WHICH LED TO AN INCREASE IN EFFICIENCY OF 2.4%.

- REDUCTION OF GREENHOUSE GASES RESULTING FROM THE REDUCTION OF $CO_2$ EMISSIONS FROM THE COMBUSTION OF METHANE, WHICH WAS ESTIMATED TO BE ABOUT 1,020 T / YEAR.

*"Recovery of the empty tubes used for the production of the filament (BCF)"*

**ENVIRONMENT – WASTE REDUCTION OF AQUAFIL ITALY REEL PACKAGING SECTOR**

In 2012, the Italian sites of Aquafil Arco, Tessil 4 and Aquaspace started a process of careful recovery of filament reel packaging materials intended principally for the production of BCF, aimed at minimizing the environmental impact associated with their management. In particular, the project aimed to reduce cardboard and wood waste used for packing and transportation of the bobbins from Arco to the various re-processing sites (by truck) of Tessil 4 in Cares, Aquaspace and Rovereto. The project aims to reduce the waste arising from the cardboard tubes used to support the filaments and from the separators in cardboard affixed between the various layers of reels, as well as from the material in wood pallets used for handling.
From the operational point of view the actions executed concerned:

- The use of recoverable and recyclable cardboard separators.
- The recovery of the empty tubes used for the production of the filament reels redeployed to reuse.
- An investment activity that has led to standardisation of the pallet in the various plants so that they can be used interchangeably in ground or shelved warehousing.

**THE ACTIVITIES HAVE LED TO A REDUCTION IN WASTE EQUAL TO 217 TONS OF PAPER AND 68 TONS OF WOOD REPRESENTING RESPECTIVELY 22.5% AND 29% OF THE WASTE PRODUCED IN THE PLANTS INVOLVED.**

*"Production in Ljubljana (SLO)"*

## SAFETY: INFORMATION AND STAFF TRAINING

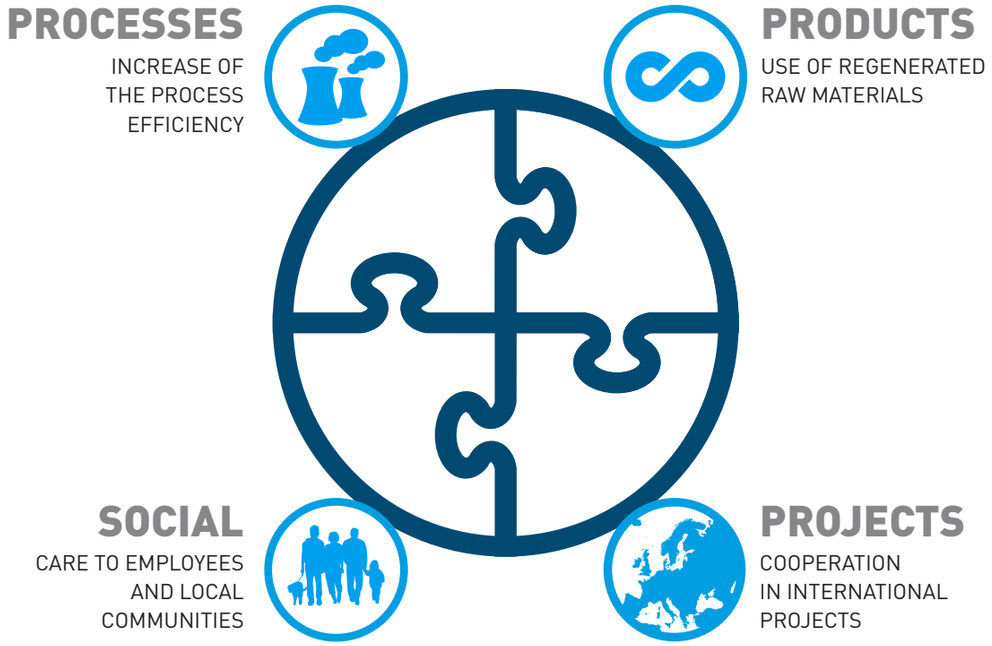
Aquafil considers security as a priority within corporate strategies. In this sense, the group is already engaged for several years in large projects which operates in line with national and international best practices, thanks to specific information and training of the workforce, can combine to continuously improve the company's performance in terms safety at work.
It is the involvement of staff the focal point on which to take action to improve the safety conditions of work and the analysis of the historical accident of the Group actually showed that the occurrence of the event is related in most cases to incorrect behavior more that causes the worker to be associated to the ski. In this context, for the Aquafil plants of the Euro Area, there is an ongoing project that requires the involvement of workers and by sharing with the staff of the following information:

- Number of all accidents that occur for each establishment.
- Event correlation to the specific department in which it occurred in order to increase the awareness and attention of workers who work in similar departments.
- Trend of injuries the previous 12 months.
- Anonymous and brief description of the incident, with the purpose to bring out clearly the event to Aquafil personnel.

**THE STRATEGY ON SECURITY OF THE GROUP HAVE NOW PROVED REWARDING LEADING TO CONSTANT IMPROVEMENT OF VARIOUS INDICES OF PERFORMANCE IN TERMS OF SECURITY, FOR FURTHER DETAILS PLEASE REFER TO THE DETAIL OF THE DATA PRESENTED IN CHAPTER PEOPLE-INDICATORS OF THE SOCIAL ASPECTS.**

*"Fishing nets"*

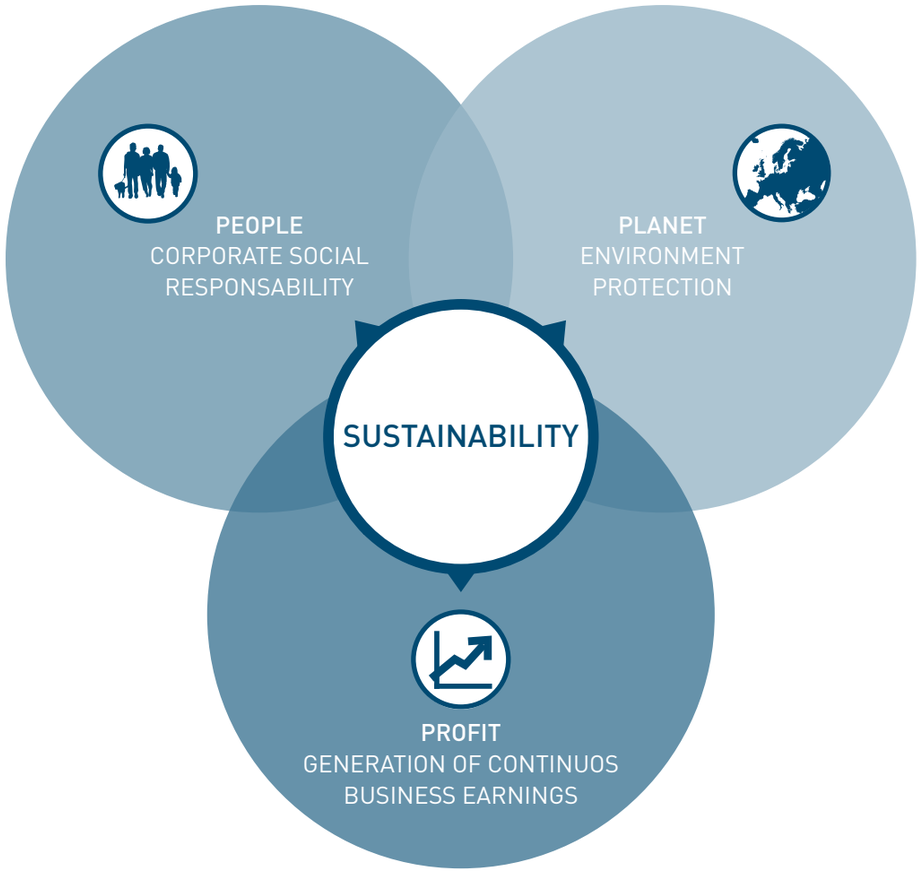
# 3. SUSTAINABILITY IN AQUAFIL



## 3.1 SUSTAINABILITY IN AQUAFIL

Sustainability in Aquafil is understood as the balance between the three essential aspects that govern the management of an ‘organization: **PEOPLE, PLANET E PROFIT**, i.e. social, environmental and financial. Aquafil group strongly believes that a real sustainability policy should be based strictly on these three aspects, only apparently separated from each other, so as to act in the long run to bring benefits to the company, stakeholders and markets. An example of this approach in reducing the consumption of fossil fuels which over the years has been achieved with a ‘combined action of improving the energy efficiency of the processes, as well as gradual transition to renewable sources of type.
This result has allowed us to improve environmental sustainability by reducing greenhouse gas emissions and, at the same time, reducing the economic costs of energy carriers.
A further example is the technological innovations developed by the Group that have reduced costs and increasing the attractiveness of products and brands, help the Group’s position on international markets, thus producing benefits for social sustainability given the increasing / maintaining strength work in different local contexts.

**STARTING FROM THE MANAGEMENT OF 2007, ALL THE ACTIVITIES RELATED TO SUSTAINABILITY ARE REPORTED UPON ANNUALLY BY THE SUSTAINABILITY REPORT ADDRESSED TO ALL STAKEHOLDERS WITH THE AIM OF EXPOSING A TRANSPARENT INVESTMENTS, ACTIONS, OBJECTIVES REGARDING ENERGY , WASTE MANAGEMENT, REDUCED EMISSIONS, WATER USE, SAFETY AND COMMITMENT TO ITS WORKFORCE AND LOCAL COMMUNITIES.**



**THE GUIDING PRINCIPLES**

- Take action to ensure the sustainability policy is widespread and concretely implemented.
- Constantly be ready to interact with customers and suppliers to improve the sustainability and innovation across the entire production chain of the chemical-textile with common actions and shared.
- Build and maintain alive the link with the local communities, where the Group is present and wants to grow in the future.
- Strengthening the roots of the company in the territory through constant attention to internal resources, their welfare and their health.

**THE CORE VALUES**

- The importance of people as customers, suppliers, colleagues or citizens of the Earth,
- Pursuit of innovation as a constant necessity, pursued by all means appropriate and available.
- Entrepreneurial spirit that expresses the desire to be at the forefront in the work, accepting all the obligations and risks assumed.

**STRATEGY**

- Develop and evolve their activities on closed-loop products that preserve natural resources and contribute to the regeneration of the environment.
- Reduce the impact of constantly improving our performance in four areas: energy, emissions, water and waste.
- Involved in sustainability strategies suppliers, employees and local communities.

**MEDIUM-TERM OBJECTIVE**

- At the onset of integration between corporate strategy and concepts of sustainability, Aquafil aimed to cut greenhouse gas emissions generated by manufacturing processes 50% by 2020. GHG emissions were down 30% at the end of the first 5 years, thus kindling ongoing efforts to achieve this goal with renewed optimism. Introduction of the life cycle thinking concept has made it possible to shift focus also on raw materials. This aspect was consolidated by implementing the ECONYL® system, for which the company's goal is to increase the use of materials obtained from post-consumer byproducts by 10%.

**Development of products**
that can improve sustainability
performance company

## 3.2 THE FIELDS OF ACTION OF AQUAFIL

- THE IMPROVEMENT OF INDUSTRIAL PROCESSES
- DEVELOPMENT OF PRODUCTS
- PROMOTE OR SUPPORTING PROJECTS
- SOCIAL

THE INTEGRATION OF THE VARIOUS ASPECTS OF SUSTAINABILITY PEOPLE, PLANET, PROFIT IN THE COMPANY'S STRATEGIES INFLUENCING ALL THE CHOICES OF THE GROUP AND ARE BASED IN FOUR MAIN AREAS OF ACTION THAT ARE CHARACTERIZED BY DIFFERENT POSSIBILITIES AND MODALITIES OF INTERVENTION.

A first aspect concerns **THE IMPROVEMENT OF INDUSTRIAL PROCESSES** in terms of production efficiency and safety. This is the context of the constant commitment to reducing environmental impact of its production activities with an increasing use of renewable energy which in some cases are used for the production of electricity such as occurs in photovoltaic systems installed in the plants of Arco (the first of photovoltaic systems) and Cartersville (Georgia), or as the intervention of optimization aims to improve the efficiency of the cogeneration plant in Arco.

The focus of Aquafil is also paid to the **DEVELOPMENT OF PRODUCTS** that can improve the sustainability performance of the company. In this context, the strategy of innovation concerned the saving of resources that takes place with the launch of projects aimed at the production of polymer reclaimed from industrial waste and / or post-consumer. In addition to the involvement of customers in the supply of waste products and actions of co-marketing and awareness (Aquafil Reclaiming Program), in this context, the most significant project is certainly ECONYL® which is dedicated a large space in this report .

When it is not possible to work directly, Aquafil is committed to **PROMOTE OR SUPPORTING PROJECTS** in various fields and in various regions of the world in order to collaborate with other stakeholders in initiatives that allow to maximize the efficiency of efforts. An example of this is the project Healthy Seas aimed to the recovery of fishing nets with the consequent recycling and creation of a products final (socks, swimwear, carpets) using the ECONYL® system.

With regard to the aspects that are not strictly operational, are to be remembered initiatives within the **SOCIAL** group Aquafil implements both to employees and to the local communities. In addition to the constant commitment to compliance with the local regulations in the countries in which the Group operates, are constantly active training programs to raise awareness of internal staff on sustainability issues. In some cases, specific initiatives have been launched to support employees as in the case of projects that have involved a round table discussion with the unions of Trento Italy for the activation of the solidarity contract, or specific projects for local communities sensitive, as the continuation Project Jiaxing, China for insurance coverage in a program of economic support for women affected by breast cancer. As part of the social aspects also include the safety of the product reaches the final consumer: in this context Aquafil and suppliers work closely together to meet the requirements of the REACH EC 1907/2006 relating to the content of chemical substances in products.

# AQUAFIL INITIATIVES

**PROJECT JIAXING, CHINA**
Continues even in 2012 the project Jiaxing. As part of its social policies and in line with the attention and sensitivity to the problems of the local communities in which it operates, the Group Aquafil finances as early as 2011 in Jiaxing (China) a program of economic support for women affected by cancer breast. In many cases, in fact, health insurance in the district of Jiaxing covers only 50-75% of the total cost of care for this disease, leaving the remaining burden on affected women. To provide assistance, the Group Aquafil has enabled the provision of a fund, intended to cover the payment of the portion not covered by health care.

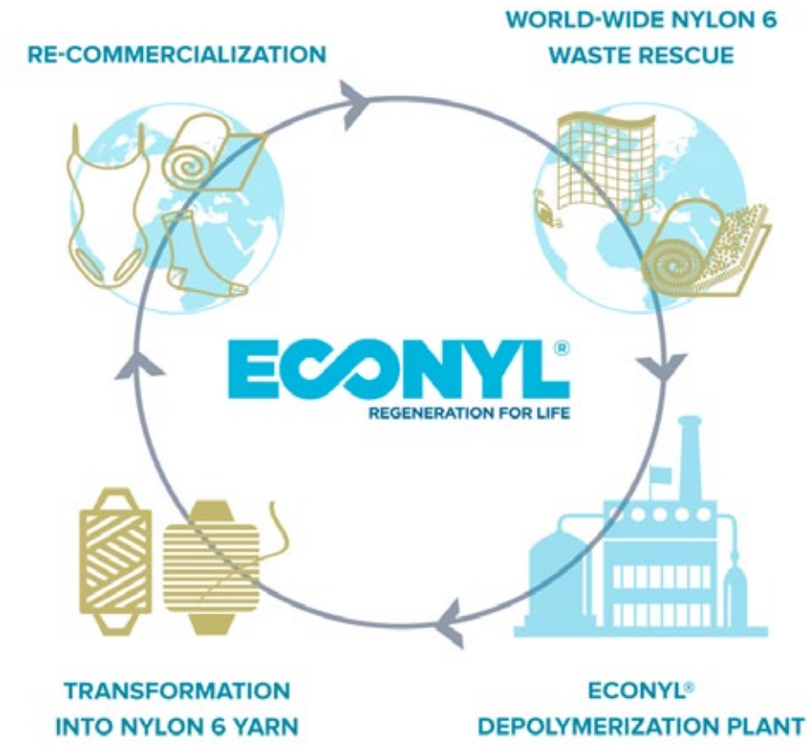
**FROM THE ENVIRONMENTAL CERTIFICATION OF ENERGY SUPPLIES TO THE EVENTS WITH ZERO IMPACT.**
The Aquafil Group, with the aim to reduce its environmental impact, has added to the certification "100% Renewable Energy" of energy supplies for the Italian production plants also that of non-industrial activities such as fairs.
It was in fact signed a framework agreement with Trenta SpA, a company of Trentino Region specializing in the supply of electricity, for the certification of zero impact on trade fairs which provides a principle of compensation which will be realized with the project of **Daegu Bangcheon-Ri Landfill gas CDM**, in South Korea, in the vicinity of the landfill Bangcheon-Ri, the project will enable thanks to a facility to recover from waste methane and bio-gas which will be used to produce thermal energy and heat through a district heating system will then be distributed to the city.

**THE AQUAFIL GROUP PARTICIPATED IN THE PROJECT WITH A SHARE THAT EXACTLY OFFSET THE EMISSIONS OF $CO_2$ FROM PARTICIPATION IN FAIRS 2012.**

**HEALTHY JOURNEY TO THE SEA FROM WASTE TO WEAR**
In the early months of 2013 is launched the international project "The Healthy Seas, a Journey from Waste to Wear'' initiative aims to reduce the waste present in the seas (MARINE LITTER) through their recovery and recycling, with the involvement of AQUAFIL, ECNC GROUP, a nonprofit organization for European biodiversity and a sporting goods manufacturer.

This initiative has the goal of retrieving fishing nets, which if left persist in the ecosystem constitutes a real danger to marine wildlife, recovering and recovered starting material in the production process of raw material regenerated is then transformed into "ECONYL® filaments". The Healthy Seas initiative consists today of three pilot projects in the North Sea (Netherlands and Belgium), Adriatic Sea (Italy Slovenia and Croatia) and Mediterranean Sea (Spain).

# 4. THE ECONYL® PROJECT



**ONE OF THE MOST SIGNIFICANT PROJECTS IN AQUAFIL GROUP, BOTH IN TERMS OF RESULTS OBTAINED BOTH FOR THE COMMITMENT OF ECONOMIC RESOURCES AND PLANNING INVESTED IN THE LAST 4 YEARS IS CERTAINLY THE ECONYL® – REGENERATION SYSTEM INTRODUCED BY AQUAFIL IN 2011.**

**TO GIVE UP THE PROJECT OF THE STRATEGIC IMPORTANCE OF ECONYL® HERE ARE SOME NUMBERS:**

**4** years of studies and system design and subsequent construction of the depolymerization.

**20 MILLION OF EURO** investment for the construction of integrated project.

**20** specialists involved.

**4** universities that participated in the project (University of Trento, Georgia Tech University, the University of Maribor and Ljubljana University).

**MORE THAN 4 MILLION** tons the amount of nylon 6 produced in the world each year and destined for landfill or incineration at end of life.

**APPROXIMATELY 16,000** tons of waste nylon 6 collections between 2011 and 2012.

The system **ECONYL® REGENERATION SYSTEM**, which is a concrete manifestation of the politics of corporate sustainability The Eco Pledge ®, is a project that has allowed us to "close the loop": starting from the recovery of waste pre- and post-consumer based on polyamide 6, the production model allows their transformation, through a chemical-mechanical process, in regenerated caprolactam (key raw material for the manufacturing operations of the Group). It is a process practically endless, allowing you to recover materials otherwise destined for landfill, incineration or abandonment in natural environments. Among the most important waste sent for recycling, there are fishing nets abandoned and often abandoned at sea with major risks to the ecosystem, parts of carpets and rugs, textiles and plastic components.

The implementation of the project ECONYL® has necessitated the definition of the international network **ECONYL® RECLAIMING PROGRAM** which in fact constitutes a new supply chain that can identify and create new channels for the recovery of pre-and post-consumer materials based polyamide 6 necessary for feeding the regeneration system.

In this context, the project has made it possible to revise the traditional way of interacting with stakeholders (Customers, suppliers, local communities, associations for the recovery of waste) that are actively involved in the phase of **post-consumer waste collection** and the "**Design for re-manufacturing**".

For the first point, for example, wider in the future will be the involvement of the Group's customers to define the precise arrangements and working to recover the material reaches the end of life, as well as the communities that use products with content Polyamide (eg fishermen) and everything revolves around them. Parallel to this, in synergy with customers, researchers and designers, the Aquafil Group is setting entirely of recycled and recyclable products, designed from the outset to be channeled into different streams of regeneration once they arrive at the end of life.

ECONYL®
REGENERATION FOR LIFE

1 World-wide PA6 waste rescue

2 Storage and preparation of pre and post consumer waste

AJDOVSCINA

3 ECONYL® depolymerization plant

LJUBLJANA

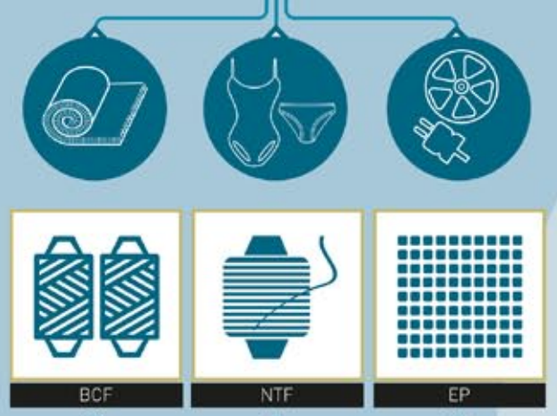
4 Polymerization

POLYMERS PA6

LJUBLJANA

5 Transformation of PA6 polymers

BUSINESS UNITS




6 Re-commercialization

## 4.1 THE PRODUCTION MODEL

Currently, the waste used as raw material by the plant ECONYL® Ljubljana are made up of 70% pre-consumer waste and 30% for products at the end of life (post consumer). Since 2013, the proportion of post-consumer will definitely increased, reaching 50% of total mix

**THE MODEL OF THE PRODUCTION PROCESS ECONYL® IS BASED ON 6 STAGES:**

**1. RECOVERY OF WASTE PA6**
Aquafil thanks to the international program ECONYL Reclaiming® Program is able to recover around the world non-hazardous waste pre-post consumer containing polyamide 6 which are used for the power of the regeneration. An integral part of this program is a group of specialists who operate within Aquafil with the aim of expanding the network of waste collection and waste at the international level through the organization of specific supply chains that allow you to recover from today several countries including the United States, Egypt, Pakistan, Thailand, Norway and Turkey. Corporations, trusts and Aquafil customers then support the company in the collection of materials such as fluff (the top of carpeting and mats), abandoned fishing nets, the special fabrics like tulle and other plastics.

**2. STORAGE AND PREPARATION**
All waste collected is transported to a warehouse situated in Slovenia Ajdovscina about 80 km from Ljubljana, contrary to what one might think, the environmental impact of logistics is very low: it represent, for example, only 3% of the total carbon footprint linked to the ECONYL® Regeneration System.
The waste collected and stored at Ajdovscina is then cleaned, separated and prepared for sending to the process at the plant in Ljubljana. These steps eliminate most of the impurities and of different materials from Polyamide 6 which would make impossible the use of waste in the regeneration. Fishing nets, for example, which constitute a very important share of waste stored at Ajdovscina, contain a large amount of organic waste residues from fishing, of metallic material, of ropes and bands in polypropylene. The polyamide 6 waste is then prepared for the treatment of plant regeneration through a process of shredding and compaction that allows the optimization of transport to Ljubljana. In 2012, the content of post-consumer waste sent for recycling process ECONYL® was 30%.

**3. PLANT DEPOLYMERIZATION ECONYL®**
Thanks to the particular characteristics of the polyamide 6, has been developed a chemical-mechanical system that, starting from the waste, is able to produce new raw material regenerated (caprolactam) with the same chemical, physical and performance of that virgin thus making the two polymers, recycled and virgin interchangeable. The development process was conducted by the Business Unit Energy & Recycling and fund R & D Group, in close cooperation with various international universities. In 2012 Aquafil has begun work on the expansion of the regeneration of Julon Ljubljana in order to optimize the use of some facilities and spaces already available.

**4. PLANT POLYMERIZATION**
Caprolactam obtained from the depolymerization process is started to the subsequent polymerization of new polymers with the same methods used for the monomer virgin.

**5. PROCESSING OF SECONDARY POLYMERS PA6**
The polymers produced with raw material ECONYL® are distributed to different production facilities of the Group in relation to the various business units of product. They are then processed again, to be transformed into BCF filaments (synthetic flooring), NTF-filaments (textiles and clothing) and into engineering polymers EP (engineering polymers for extrusion and injection moulding).

**6. REMARKETING MATERIALS**
The end products of the Aquafil Group (from waste pre-and post-consumer and not by the raw material of fossil origin) are then sold to customers, and from there, to end markets.

## 4.2 THE ENVIRONMENTAL BENEFITS OF THE SYSTEM ECONYL®

Like all processes of recycling and regeneration, the system ECONYL® requires a non-negligible use of resources, mainly energy, for each of the production steps involved. Aquafil decided to quantify the environmental benefits deriving from the implementation of a process of this kind by undertaking thorough data collection throughout the supply chain and proceeding to make LCA (Life Cycle Assessment) type comparisons with major benchmarks available.
The studies have allowed the company to highlight and monitor over time the environmental benefits for a number of indicators coming to the publication of an Environmental Product Declaration (Environmental Product Declaration – EPD) validated and recorded in the International EPD System (www.environdec. com) for two types of textile filaments made with 100% of regenerated polymer.
Thanks to this comparison between the costs and environmental benefits, it has been possible to reach overall positive considerations.

In particular, among the various available indicators, below* are some examples among the most significant benefits associated with 10,000 tons of caprolactam ECONYL®:

- 162,000 GJ OF ENERGY SAVED IN THE PROCESS.
- ELIMINATED 11,000 TONS OF WASTE.
- SAVED 70,000 BARRELS OF OIL (EXTRACTION ONLY).
- AVOIDED THE EMISSION OF 41,000 TONNES OF $CO_2$ EQ.
- THE CREATION OF PRODUCTS ECONYL® IS "WASTE POSITIVE", MEANING THAT THE AMOUNT OF WASTE REMOVED FROM THE ENVIRONMENT AND USED FOR THE PRODUCTION OF THE SAME IS GREATER THAN THE AMOUNT OF WASTE RESULTING FROM THE PRODUCTION PROCESS.

Further advantages must be factored into this scenario. Aside from no need to transfer waste into disposal systems such as landfills and incinerators, this project helps disseminate the culture for the recovery of end of life products in among communities most directly involved.
There are several projects in which Aquafil participates in this view (e.g. the project THE SEA A HEALTHY JOURNEY FROM WASTE TO WEAR).

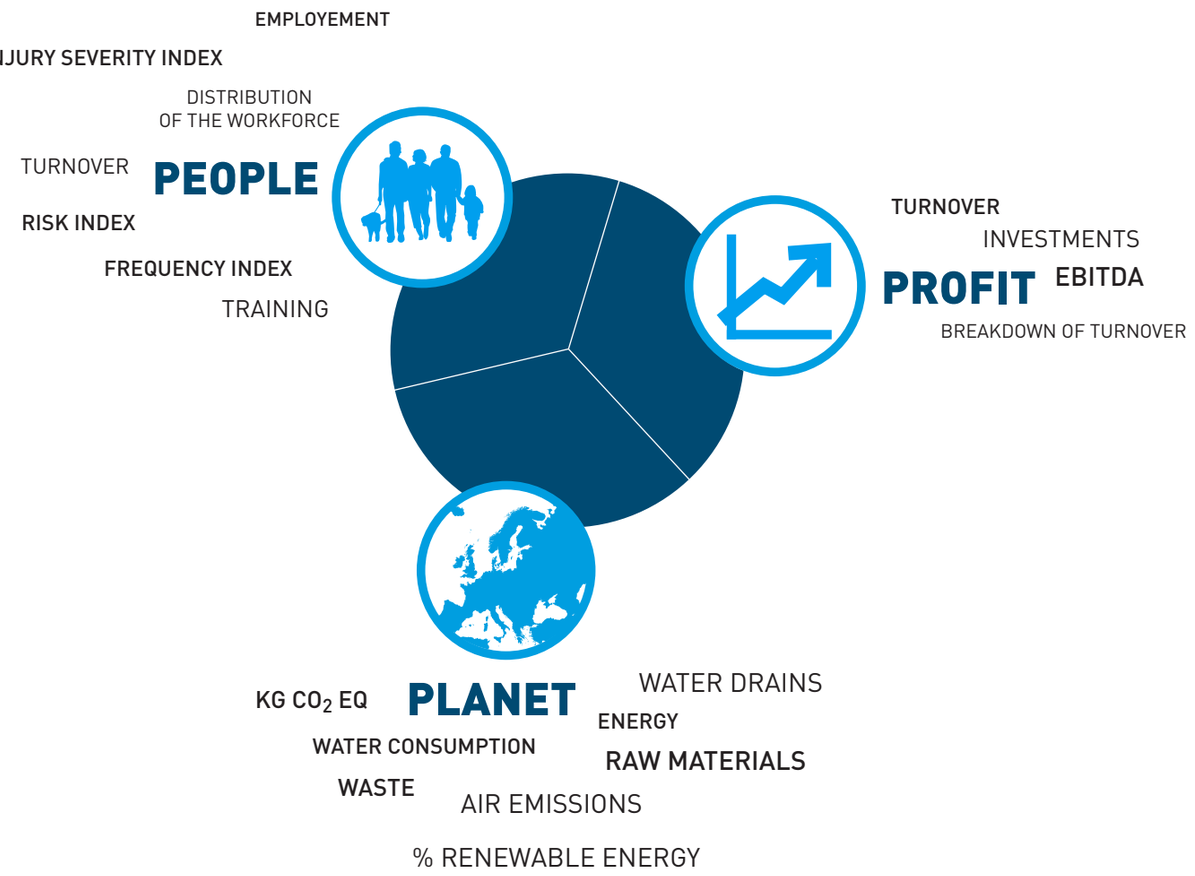
* Rounded figures that result from internal LCA data processing

Check out the website WWW.ECONYL.COM

Follow us

*“BCF yarn production”*

# 5. INDICATORS



*“Moquette by Forbo”*

**THIS SECTION OF THE REPORT ILLUSTRATES THE NUMERICAL INDICATORS THAT ALLOW OBJECTIVE REPORTING OF THE GROUP’S SUSTAINABILITY PERFORMANCE. IN PARTICULAR, THE DATA ARE ORGANISED INTO THREE ITEMS OF PEOPLE, PLANET AND PROFIT THAT MAKE UP AQUAFIL’S INTEGRATED APPROACH TO SUSTAINABILITY.**

**PEOPLE** this areas in linked to a series of data that allows us to get a better look at the Aquafil Group and its main trends associated with the workforce based on the number of employees and the organisation and specific division for the various Business Units. This section breaks down, by gender and contract, the turnover rate and the reasons thereof. In addition, visibility is given to indicators relating to safety that highlight the commitment and the main performance achieved by the Group with respect to the issue.

**PLANET** Each Report shows the evolution of the environmental performance in four specific areas: energy, emissions, waste and water. These areas allow clear representation of the sustainability policies, commitments and investments carried out by the Group over the years in order to improve its environmental performance. This section publishes the outcome trends from 2007 to date in regard to the consumption of electricity, natural gas and steam purchased, CO2 and GHG (greenhouse gas) emissions, water usage and the amount discharged, the level of internal recycling of packaging and the amount of packaging purchased and disposed of.

**PROFIT** In the financial section, the Aquafil Group communicates in the data on turnover and profitability indicator EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) expressed in millions of Euro. The results regarding profits are then broken down to percentage values relative to the three product Business Units, to the the Italy – Foreign division and to geographical areas with mist weight. The data relating to the profit section provides an opportunity for all interested stakeholders to have a complete picture of the status and progress of the Group.

In order to have a clear understanding the data it is useful to point out that the last edition of the Sustainability Report concluded the first five years of monitoring and attention to the issue of sustainability, which since 2007 has gained a larger foothold in the mentality and decision-making /management approach of the Aquafil Group. This edition marks the beginning of a new cycle, which aims to improve sustainability reporting for the purpose of tending mainly from one analytical approach to a preventive view that provides strategic support.

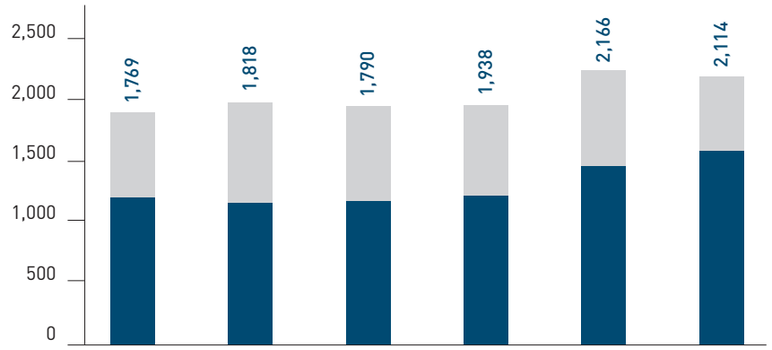
## 5.1 PEOPLE: INDICATORS OF SOCIAL ASPECTS

### EMPLOYEES

In 2012 the international employment scenario was characterised by a steep crisis of the work market that started in 2008, which over the last year has mainly affected the Euro countries. In the third quarter of 2012[2], The employment rate (ages 15-74) in the EU has in fact amounted to 57.6%, which is 1.6% below the pre-crisis rate of 2008; at the end of 2012 nearly 11 million were struggling with long-term unemployed in the EU. In this scenario, Aquafil registered a halt in increase of the employment rate in 2012, which instead had characterised the trend of the previous two years, and that, thanks to the rewarding business strategies, had enabled an 11.6% increase in 2011. In 2012, the Aquafil Group's workforce stood at 2,114 units as against 2,166 in 2011 thus recording a slight decline in the employment rate of -2.4%[3].

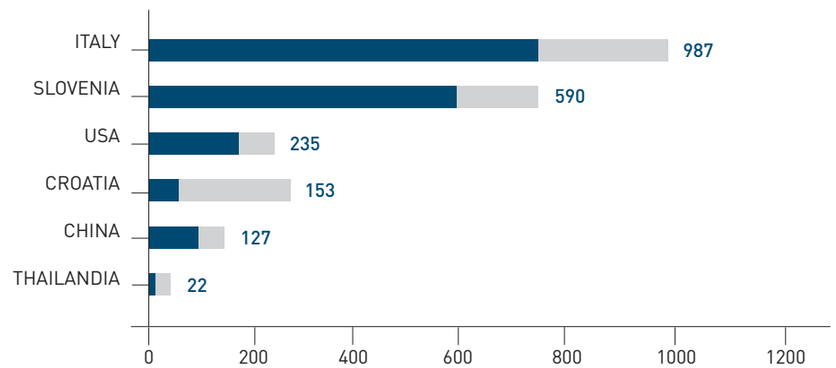
By analysing in more detail the data of the labour force in relation to the geographical areas in which the Aquafil Group operates (Fig. 2), we note that the United States with 10.3% and China with 5.8% were confirmed to be the driving areas in terms of increasing employment rate, even in Italy Aquafil, in contrast to national trends, records an increase of 1.8%, going from 970 units in 2011 to 987 in 2012; A downward trend in Slovenia with -2.8%, Thailand -4.3% and Croatia with -34.3 % is however the case, in the latter country the sharp fall in workforce -80 units is mainly due to the expiry of fixed-term employment contracts. For the purpose of the assessment is important to note that in 2013 more than 90% of the workforce that has reached the end of the contract at the plant will be reabsorbed Oroslavje with more flexible forms of employment.

› LEVELS OF AQUAFIL EMPLOYMENT 2007-2012




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| MAN | 1,201 | 1,170 | 1,167 | 1,287 | 1,448 | 1,454 |
| WOMAN | 568 | 648 | 623 | 651 | 718 | 660 |

› GEOGRAPHICAL DISTRIBUTION OF THE WORKFORCE




| | THAILANDIA | CHINA | CROATIA | USA | SLOVENIA | ITALY |
|---|---|---|---|---|---|---|
| MAN | 6 | 70 | 24 | 178 | 430 | 746 |
| WOMAN | 16 | 57 | 129 | 57 | 160 | 241 |

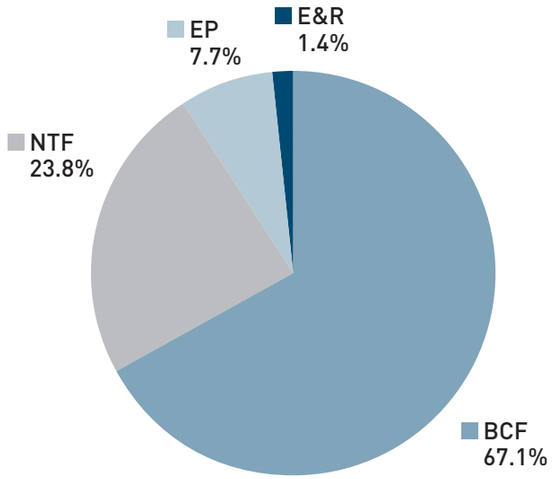
[2] Source ILO "ILO 2013 Report on the work market: EU scenario".
[3] The data refers to the average of 2012 direct personnel and exclude external consultants and temporary staff.

*"Yarn production"*

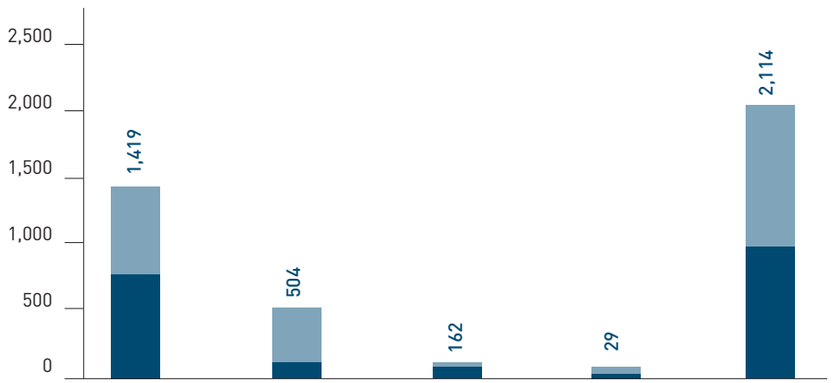
**Workforce** employed in Italy
**46.7%**

Although Aquafil operates 13 facilities in 7 countries and 3 continents around 46.7% of the workforce is employed in Italy.
67.1% of the total workforce is employed in the Aquafil Group business unit BCF, core business, 23.8% in the NTF, 7.7% in the EP and 1.4% in the business unit E&R.

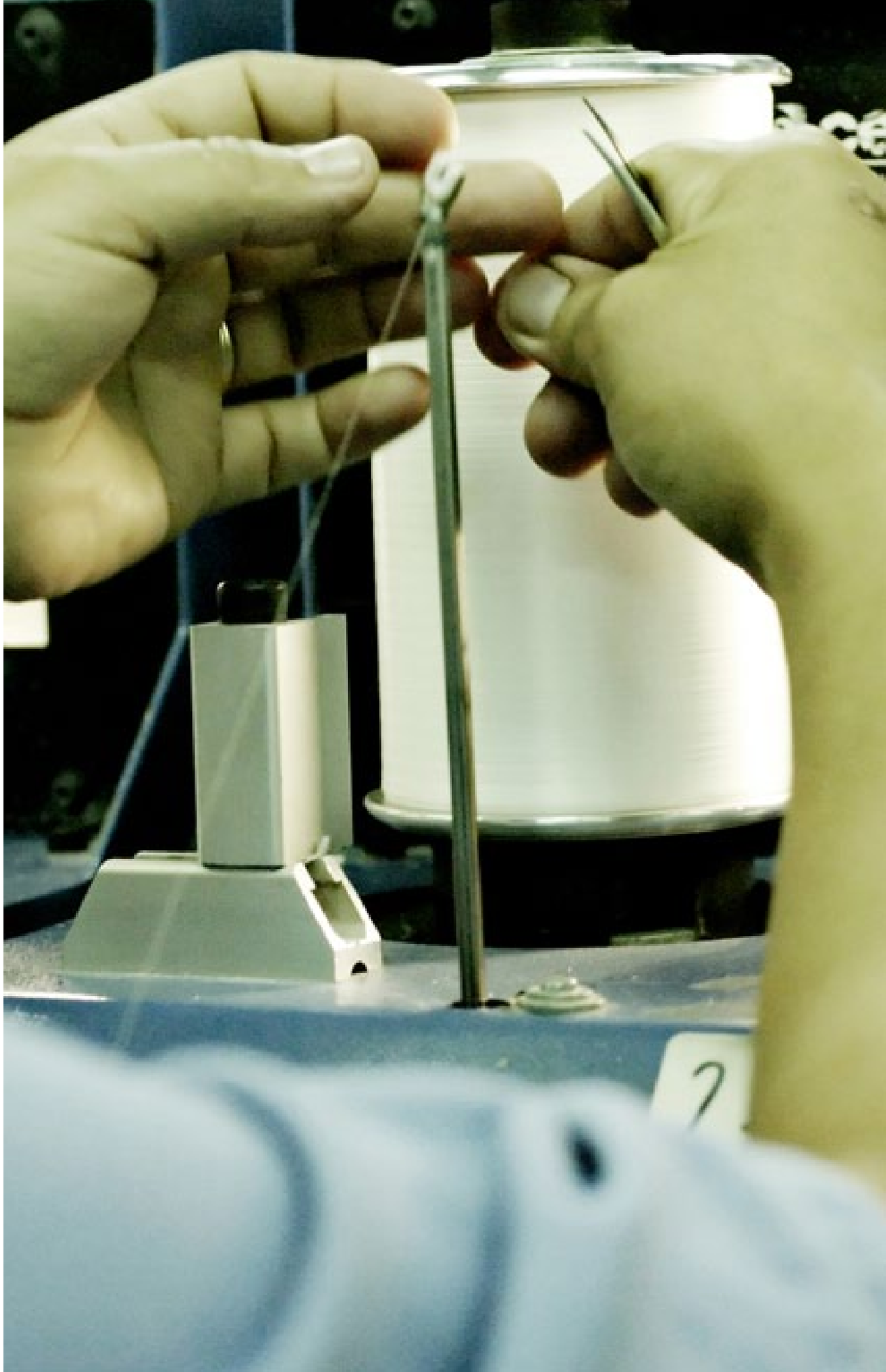
In the E&R Business Unit Aquafil employs 29 direct employees and 23 temporary employees for a total of 52 human resources dedicated to the development of technology skills and projects to support the sustainability policies of the Group.




› WORKFORCE BREAKDOWN INTO DIFFERENT BUSINESS UNITS




| | BCF | TXL | EP | E&R | TOTAL |
|---|---|---|---|---|---|
| FOREIGN COUNTRIES | 668 | 412 | 24 | 23 | 1,127 |
| ITALY | 751 | 92 | 138 | 6 | 987 |



Focusing on the composition of the workforce, wee se that in 2012 it was composed for an average of 68.8% men and 31.2% women. This percentage, however, when compared to the different geographical areas of the Aquafil plants found significant variation dependent on the type of work carried out in various plants. The presence of women in the labour force of the Aquafil Group is 24.4% in Italy, 24.3% in USA, 27.1 in Slovenia, 44.9% in China, and well 72.7% in Thailand and 84.3 % in Croatia.

## › BREAKDOWN OF WORKFORCE IN DIFFERENT COUNTRIES

| | MAN | | | | | | WOMAN | | | | | | TOTAL | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| ITALY | 637 | 653 | 661 | 697 | 727 | 746 | 216 | 245 | 232 | 230 | 243 | 241 | 853 | 898 | 893 | 927 | 970 | 987 |
| SLOVENIA | 443 | 389 | 372 | 419 | 442 | 430 | 195 | 177 | 166 | 166 | 165 | 160 | 638 | 566 | 538 | 585 | 607 | 590 |
| CROATIA | 15 | 31 | 36 | 53 | 45 | 24 | 94 | 161 | 161 | 190 | 188 | 129 | 109 | 192 | 197 | 243 | 233 | 153 |
| USA | 100 | 89 | 89 | 110 | 157 | 178 | 57 | 53 | 53 | 52 | 56 | 57 | 157 | 142 | 142 | 162 | 213 | 235 |
| THAILANDIA | 6 | 8 | 9 | 8 | 7 | 6 | 6 | 12 | 11 | 13 | 16 | 16 | 12 | 20 | 20 | 21 | 23 | 22 |
| CHINA | - | - | - | - | 70 | 70 | - | - | - | - | 50 | 57 | - | - | - | - | 120 | 127 |
| **TOTAL** | 1,201 | 1,170 | 1,167 | 1,287 | 1,448 | **1,454** | 568 | 648 | 623 | 651 | 718 | **660** | **1,769** | **1,818** | **1,790** | **1,938** | **2,166** | **2,114** |

## › BREAKDOWN OF WORKFORCE IN DIFFERENT ROLES

| | › ITALY | | | | | | | | | | | | › ABROAD | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAN | | | | | | WOMAN | | | | | | MAN | | | | | | WOMAN | | | | | | TOTAL | | | | | |
| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| TOP MANAGERS | 18 | 21 | 21 | 23 | 21 | 21 | 1 | 2 | 2 | 2 | 2 | 3 | 4 | 6 | 8 | 8 | 6 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 29 | 31 | 33 | 29 | 32 |
| MIDDLE MANAGERS | 35 | 32 | 35 | 40 | 35 | 34 | 5 | 5 | 5 | 5 | 5 | 5 | 54 | 46 | 44 | 65 | 71 | 76 | 17 | 15 | 14 | 11 | 10 | 13 | 111 | 98 | 98 | 121 | 121 | 128 |
| WHITE-COLLAR | 100 | 105 | 106 | 112 | 120 | 125 | 79 | 82 | 82 | 85 | 81 | 86 | 35 | 30 | 33 | 30 | 37 | 37 | 49 | 70 | 70 | 68 | 90 | 93 | 263 | 287 | 291 | 295 | 328 | 341 |
| BLUE-COLLAR | 484 | 499 | 499 | 522 | 558 | 566 | 131 | 152 | 143 | 138 | 148 | 147 | 471 | 435 | 422 | 487 | 606 | 586 | 286 | 318 | 306 | 342 | 376 | 314 | 1,372 | 1,404 | 1,370 | 1,489 | 1,688 | 1,613 |
| **TOTAL** | 637 | 657 | 661 | 697 | 734 | **746** | 216 | 241 | 232 | 230 | 236 | **241** | 564 | 517 | 507 | 590 | 720 | 707 | 352 | 403 | 390 | 421 | 568 | **420** | **1,769** | **1,818** | **1,790** | **1,938** | **2,166** | **2,114** |

*"Equipment control, Arco Plant"*

IN 2012, THE AQUAFIL GROUP RECORDED A TURNOVER OF -6.2% COMPARED TO 2011, 33.4% OF THE TURNOVER IS DUE AT THE END OF THE EMPLOYMENT CONTRACT.

**2012 DATA FOR COMPANY TURNOVER**

| | ITALY | ABROAD | TOTAL |
|---|---|---|---|
| Resignation | 10 | 105 | 115 |
| End of contract | 7 | 105 | 112 |
| Laid off | 2 | 85 | 87 |
| Retirement | 12 | 5 | 17 |
| Group Transfer | 2 | 0 | 2 |
| Mobility | 0 | 0 | 0 |
| Other causes | 0 | 2 | 2 |
| Total | 33 | 302 | 335 |

## WORK SAFETY

The Aquafil Group operates in line with best practice both nationally and internationally in terms of job security respecting the logic of risk prevention, placing particular attention and commitment to issues concerning the health and safety of workers, resulting in solid Group work safety policies and practices.
The path to improvements made over the years by Aquafil on safety issues, has affected both structural and organisational actions and interventions aimed at training to increase the technical knowledge and "culture of safety" within the corporate workforce.

**ANALYSING KEY PERFORMANCE INDICATORS RELATED TO SAFETY IT IS EVIDENT THAT, EVEN IN 2012, WAS CHARACTERISED BY CLEARLY POSITIVE TREND:**

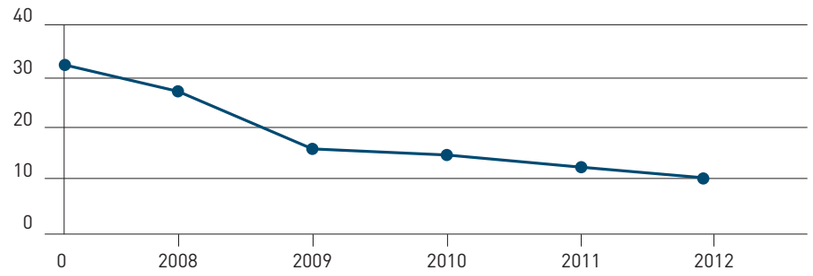
- Injury Frequency Index (IF) in 2012 stood at 10.46 against 12.97 in 2011 and 32.55 in 2007.
- Injury Severity Rate (ISR) in 2012 stood at 0.18 against 0.37 in 2011 and 0.8 in 2007.
- Risk index (RI) in 2012 stood at 1.91 against 4.80 in 2011 and 25.88 in 2007.

With a reduction in hours worked equal to 0.2% compared to 2011, in 2012 there was a 20.4% reduction in the number of workplace accidents that resulted in leave from work of more than 3 days.

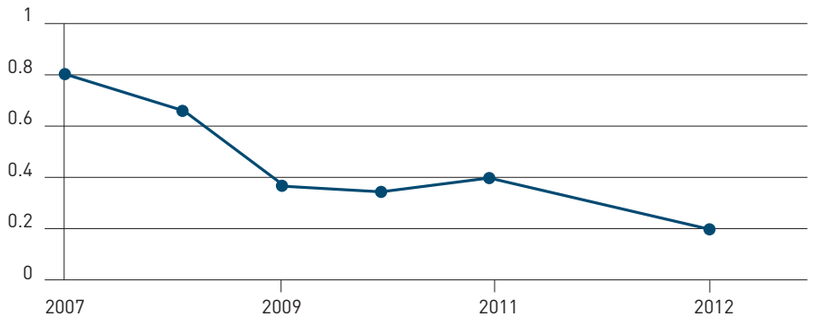
› ACCIDENT AND WORKING DAYS LOST, 2007-2012

| YEAR | HOURS WORKED (INCLUDING TEMPORARY STAFF) | INJURIES › 3 DAYS | DAYS LOST › 3 DAYS | FI | GI | RI |
|---|---|---|---|---|---|---|
| 2012 | 4,112,119.5 | 43 | 751 | 10.46 | 0.18 | 1.91 |
| 2011 | 4,163,723.5 | 54 | 1,540 | 12.97 | 0.37 | 4.80 |
| 2010 | 3,675,689.5 | 55 | 1,245 | 14.96 | 0.34 | 5.07 |
| 2009 | 3,272,860.5 | 51 | 1,181 | 15.58 | 0.36 | 5.62 |
| 2008 | 3,233,891.4 | 85 | 2,087 | 26.28 | 0.65 | 16.96 |
| 2007 | 2,887,834.0 | 94 | 2,296 | 32.55 | 0.80 | 25.88 |

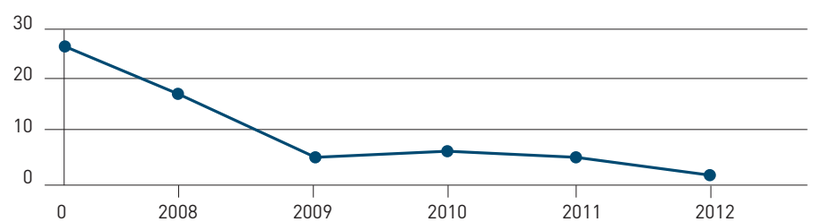
› FI – INJURY FREQUENCY INDEX: NUMBER OF ACCIDENTS WITH ABSENCE OF 3 DAYS) X 1,000,000/HOURS WORKED




› GI – SERIOUS: NUMBER OF DAYS LOST MORE THAN 3 DAYS) X 1,000 HOURS WORKED



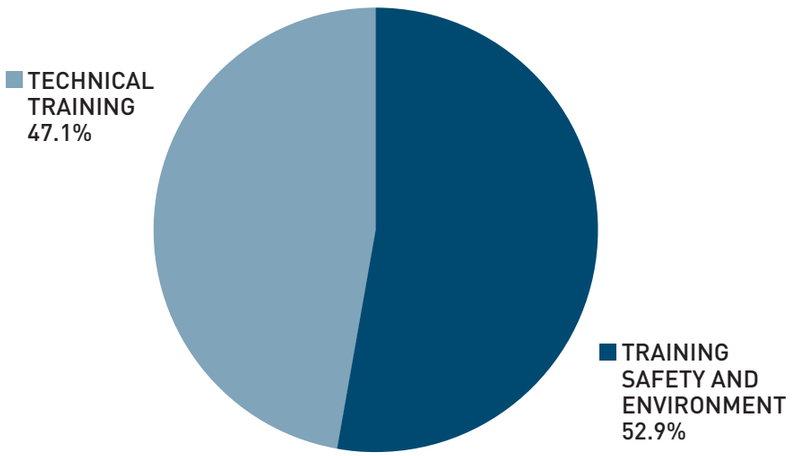

› RI – RISK INDEX: FI X GI



## TRAINING

The Aquafil Group believes that education is an essential tool for professional growth of the lobar force and for the enrichment of corporate know-how.
In 2012 the Aquafil Group held training courses aimed primarily at increasing the technical and specialist skills and at covering job security and environmental issues.

**THE GROUP BELIEVES THAT WORKPLACE SAFETY IS THE MOST IMPORTANT SECTOR IN TERMS OF TRAINING, THUS INVESTING HEAVILY, WHICH IN RECENT YEARS HAS CONTRIBUTED SIGNIFICANTLY TO THE ACHIEVEMENT OF IMPORTANT PERFORMANCE RESULTS.**




Driven by the knowledge that the cultural enrichment and dissemination of the principles of sustainability and security are a key tool to implement virtuous cycles, not only within the group but also within society, Aquafil has always given more importance to the creation of relationships with higher schools of learning, technical and vocational institutes, research centres and academia.
There has been an ongoing and active collaboration for many years with Ente Acli Istruzione Professionale (ENAIP) of Arco which aims to create training and learning course to help students enter the job market. In the same meaning, a solid relations have been fostered with the Elementary School in Cartersville, Georgia, through which Aquafil provides students with mentoring and tutoring. Aquafil is also involved in events to help promote science and culture, such as the one scheduled for 2012 at the "Career Talk with... sustainable professions" at the Ca' Foscari University of Venice.
At the Ca' Foscari Challenge School, Aquafil was a founder and supporter of the Graduate course Sustainability and Carbon Footprint Management with the aim of training professionals capable of governing the sustainability variable with a particular focus on Carbon Footprint; the Graduate course tackled business scenarios, including the Aquafl case, for training on strategic approaches, projects and initiatives set forth.

**YET ANOTHER EXAMPLE OF VIRTUOUS REALITY: IN 2012 THE AQUAFIL BUSINESS SCENARIO WAS BEEN INCLUDED IN THE BOOK "PROGRAMMAZIONE E CONTROLLO DELLE VENDITE" (PROGRAMMING AND CONTROL OF SALES)[4] AND HAS BEEN CITED AS A CASE STUDY IN THE REPORT OF THE ELLEN MACARTHUR FOUNDATION "TOWARDS THE CIRCULAR ECONOMY" FOCUSED ON THE MAIN CHARACTERISTICS OF A CLOSED-LOOP ECONOMY.**

[4] C. Mio, "Programmazione e controllo delle vendite"; Publisher: EGEA, 2013.

## 5.2 PLANET: THE NUMBERS OF THE ENVIRONMENT

In the period between 2007 and 2011, the changes in the scope of attention of the Sustainability Report were significant with particular reference to increasing production capacity (from 9 to 13 plants) and consolidation of ECONYL® Regeneration System, which allowed the Group to present to the market a product "closer" to the issue of sustainability.
With the aim of increasing the use of sustainability indicators within the fabric of corporate strategy, the analysis of environmental data has started a process of revision that for this edition of the report translates into a different organization of information inspired by the philosophy Life Cycle Thinking, or to "think about the life cycle". In fact, in recent years has joined in a consistent way of thinking company and has resulted in some projects of Life Cycle Assessment. Starting from the results of this vision of the entire supply chain, the presentation of environmental data is organized by dividing those related to the process than those relating to raw materials.

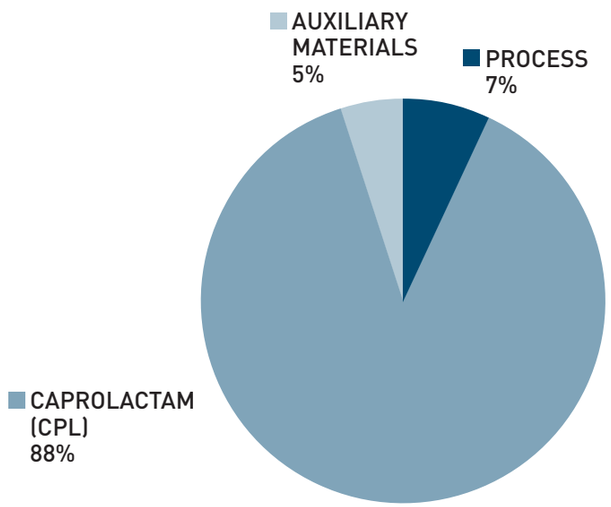
**THE IMPACTS OF THE PRODUCTION CHAIN**

The advantage of the life cycle is to offer a very broad view of the impact of the entire supply chain by focusing on global and regional indicators such as greenhouse gas emissions, energy consumption or generation of waste. With this vision is possible to estimate in a relatively simple way which is the environmental load of each stage in the chain, with particular reference to the raw materials and the production process that certainly represent the most significant ones. An example would be the allocation of greenhouse gas emissions, which allows to highlight how the phase of production of raw materials is responsible for about 80-90% of total emissions.

This type of approach is useful both to improve the understanding and analysis of the data presented, both to support more clearly the company in the planning of actions for environmental improvement. In other words it is clear that improvement projects are all the more significant as more able to act on the phases highest impact, as the raw material fact. But it is also true that the objective possibilities of action are certainly more to the relative phase of the process that is managed directly by the Group. These considerations will form the guide in reading the environmental data of the Sustainability Report 2012 as well as the basis for the setting of activities to support the coming years.

While action to reduce the impacts of raw materials are mainly attributable to the system ECONYL® just put Aquafil that allows you to obtain important results, up to 50% of greenhouse gas emissions in the least, the company's commitment to the process is instead witnessed by the many improvement projects aimed mainly at reducing consumption of energy as well as the reduction of emissions into the environment, in particular that of COD (Chemical Oxygen Demand, a parameter that allows us to estimate the level of pollution of natural waters and unloading).

› ESTIMATION OF THE ALLOCATION OF GREENHOUSE GAS EMISSIONS IN THE VARIOUS STAGES OF THE SUPPLY CHAIN




Estimation of the allocation of greenhouse gas emissions in the various stages of the supply chain. The data were calculated in a preliminary way by taking into consideration the environmental aspects of the consolidated group in terms of use of basic raw materials, of which the caprolactam constitutes the fundamental, auxiliary materials that become part of the product and manufacturing process in terms of electricity and natural gas.

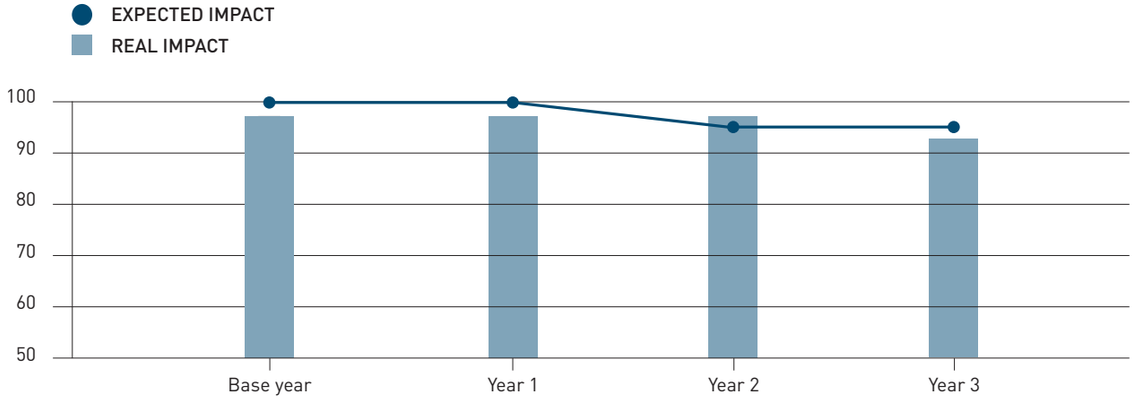
**DATA PRESENTATION METHOD**

The methods of data presentation, and above all trend analysis, are of fundamental importance to understand and judge the performance of an organistion.
For an industrial group characterised by complex, diversified and distributed activities in plants of different size and types, as is Aquafil, absolute data (defined as consumption or as total annual emissions) do not allow effective assessment of past trends: reduction of overall emissions may, for example, be the result of a decrease in volumes produced rather than of virtuous behaviours.
Yet another issue to solve for reporting performance in an objective manner concerns the variation of the composition of the products manufactured by the Group, which curtails the importance of observations on annual trends per ton of product manufactured. In other words, an increase in the data per ton produced overall does not necessarily represent poor performance but likely depends on increased volumes related to more complex products that may have undergone greater processing.
As mentioned in the President's letter of introduction, next year will mark the introduction of new indicators to help measure the effectiveness of individual activities and single industrial processes by stating a percentage offset from the benchmark for optimal performance.
The company shall commit to achieving said benchmark year after year for each plant and industrial process.
As economics uses "spread" as indicator of the performance of a country and that of a role model country, or as in sports you measured the distance between the result of an athlete and that of the faster competitor, Aquafil will identify for each of its major industrial operations indicators that measure the "optimal" impacts that can be achieved in each site. Each year, Aquafil will report:

- The percentage deviation between the actual result and the "optimal" benchmark.
- The actions (projects) that will allow us over the following years to set a more challenging goal and the results that each project sets out to achieve.

This approach, based on what the company defines as "standards", shall allow us to define the performance expected and assess the quality of that reached, regardless of the combination of items that that made up the production mix of the year in question.
Since this system is still on the drawing board, no consolidated data is available and the presentation is limited to a graphic example that allows us to highlight how the information will be accounted for in the next edition of the Report.

› EXAMPLE OF ANALYSIS WITH THE USE OF THE NEW APPROACH




Example of analysis with the use of the new approach. The expected impact in year 2 has decreased from 100 to 95 following a technological improvement that allows for the reduction of energy consumption. The actual impact is decreasing but is greater than expected in year 2: this is an important signal for Aquafil that an abnormality has been found in management or planning and requires immediate action.

## PROCESS DATA, TRENDS AND OBJECTIVES

This section summarizes the main indicators are useful to understand the environmental impacts of processes Aquafil Group. The reading of these data, which show overall impacts of the group, must be made with the limits already described above with regard to the trends of the normalized values to the net production.
The absolute values of input and output shown in the order of reporting since 2007 allow the sizing of the Aquafil Group, but as mentioned their development over time is not to be taken into account for the evaluation of business performance.

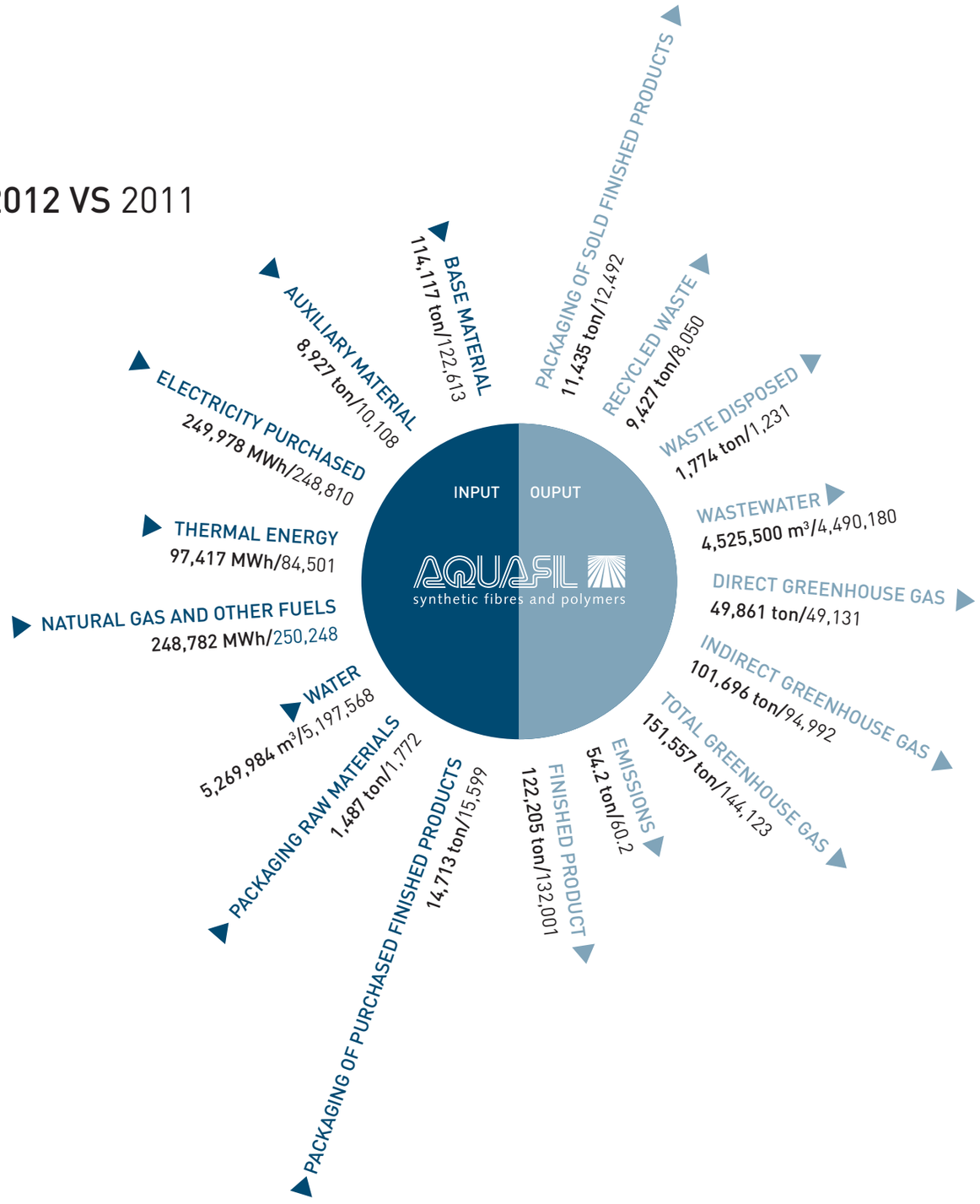
### › CONSOLIDATED ENVIRONMENTAL BALANCE, 2007 -2012

| | ENVIRONMENTAL ASPECT | UNIT OF MEASURE | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|
| INPUT | Base materials [5] | ton/ton | 0.921 | 0.932 | 0.928 | 0.923 | 0.929 | 0.934 |
| | Auxiliary materials | ton/ton | 0.076 | 0.068 | 0.067 | 0.075 | 0.077 | 0.073 |
| | Electricity purchased | kWh/ton | 1,860 | 1,809 | 1,740 | 1,792 | 1,885 | 2,046 |
| | Steam purchased | kWh/ton | 709 | 674 | 662 | 590 | 640 | 797 |
| | Natural Gas purchased | kWh/ton | 2,144 | 2,154 | 2,126 | 1,919 | 1,896 | 2,048 |
| | Water including condensate from steam | $m^3$/ton | 46.6 | 45.9 | 40.9 | 37.1 | 39.3 | 43.1 |
| | Packaging raw materials | ton/ton | 0.011 | 0.017 | 0.007 | 0.015 | 0.013 | 0.012 |
| | Packaging of purchased finished products | ton/ton | 0.11 | 0.11 | 0.10 | 0.11 | 0.12 | 0.12 |

| | ENVIRONMENTAL ASPECT | UNIT OF MEASURE | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|
| OUTPUT | Packaging of sold finished products | ton/ton | 0.085 | 0.085 | 0.077 | 0.085 | 0.095 | 0.094 |
| | Recycled waste | kg/ton | 47.1 | 53.7 | 47.9 | 52.2 | 63.9 | 77.1 |
| | Waste disposed | kg/ton | 12.5 | 8.6 | 9.3 | 7.9 | 11.9 | 14.5 |
| | Wastewater | $m^3$/ton | 39 | 39 | 35 | 31 | 34 | 37 |
| | Direct greenhouse gas | kg/ton | 439 | 426 | 423 | 382 | 372 | 408 |
| | Indirect greenhouse gas | kg/ton | 1,107 | 1,120.8 | 1,076.4 | 681.3 | 720 | 832 |
| | Overall GHG | kg/ton | 1,546 | 1,547 | 1,500 | 1,063 | 1,092 | 1,240 |
| | Emissions | gr/ton | 574 | 581.3 | 486.1 | 467.7 | 456.2 | 443.6 |

[5] Monomers, polymers and waste for the process ECONYL® REGENERATION SYSTEM.

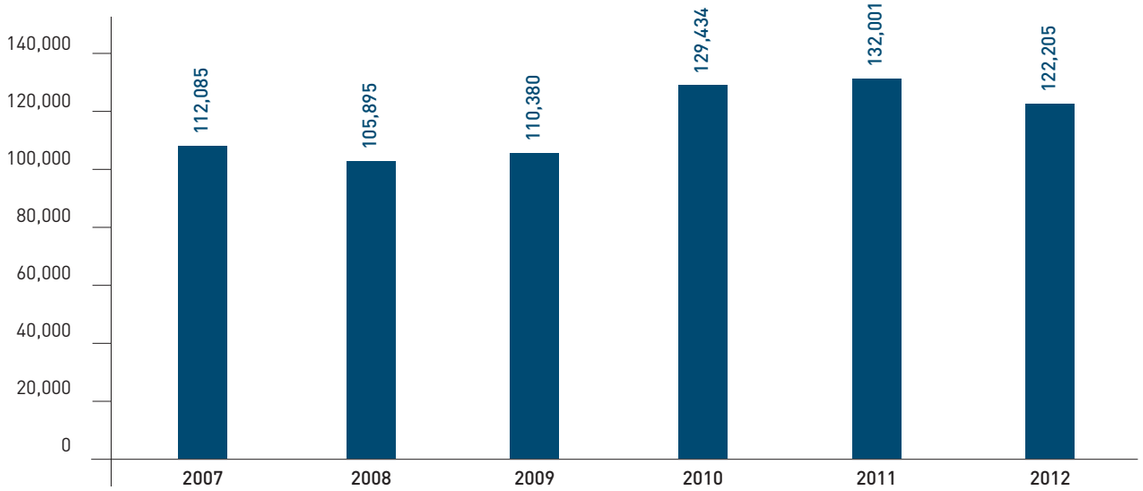
### › 2012 VS 2011



*“Production, Arco (Italy)”*

The trend of net production, understood as the product sold, it is very fluctuating and since 2007 there have been periods of growth and periods of decline in overall volumes. In fact this information is biased because in the assessment of impacts should be considered as the total amount of the production is made in terms of product categories.

› PRODUCTION TREND (ton/year)



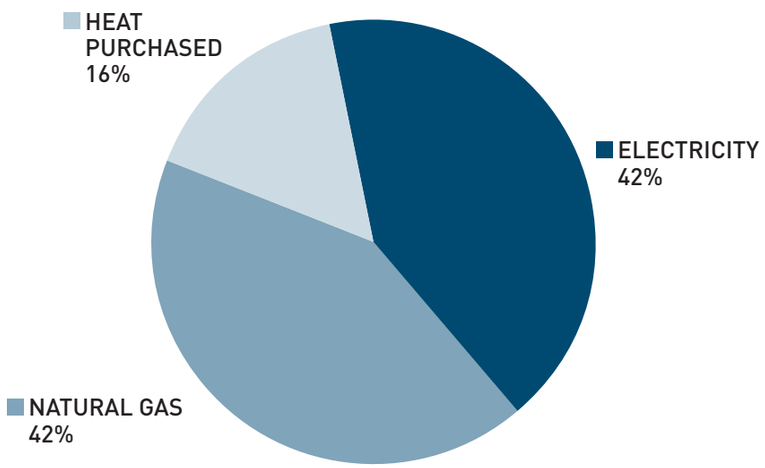



## TOTAL ENERGY CONSUMPTION

The Aquafil Group process require mainly electricity and heat that can be purchased or self-produced by the network, the allocation of consumption over the years has remained fairly constant in 2012 amounted to about 42% of electricity purchased, 42% of gas, 16% of thermal energy acquired in the form of incoming steam from third party plants. Other fuels (diesel and gas technicians) complete energy needs but in almost negligible proportions.

The trend in total consumption over the years has been influenced by two key actions, the increase process efficiencies on the one hand led to a reduction in energy requirements per unit of product, on the other hand the acquisition of new equipment, commissioning a regime of new processes (ECONYL ® on all) and the shift to ranges of products at increased technological value instead have resulted in the inevitable inefficiencies that in some cases have resulted in increasing overall consumption.

› DISTRIBUTION OF TOTAL ENERGY CONSUMPTION OF THE AQUAFIL GROUP PROCESSING BASED ON 2012 DATA



*"Photovoltaic system in Arco (Italy)"*

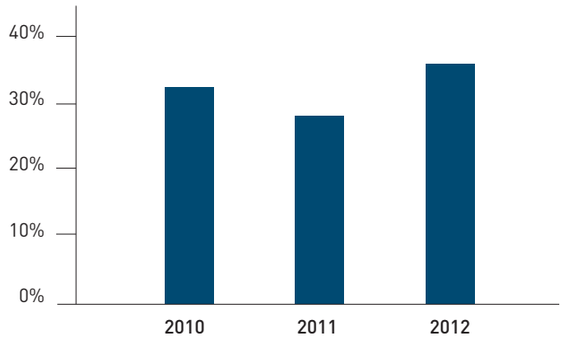
## EMPHASIS ON RENEWABLE ENERGY

Data only relating to the consumption of energy is not enough to have an overall view of the environmental impacts, the sum figure should in fact be associated with details concerning sources used for the procurement.
In particular, it is necessary to remember that at the end of 2012 36% of electricity purchased by the Aquafil Group came from renewable resources, thus allowing a significant reduction of greenhouse gas emissions. These results were made possible thanks to two integrated programs involving the purchase of renewable energy by following RECS procedures and investing in manufacturing plants owned.

Regarding investment, emphasis on renewable energy is manifested by a number of projects including:

- Photovoltaic system installed in the Arco plant (290 MWh produced in 2012).
- Photovoltaic system installed in the Cartersville (Aquafil USA, USA) plant (274 MWh produced in 2012).
- Concession of the roofs of the Cares plant (Tessil4, Italy). In this case the electrical energy is not accounted for in the energy balance because the plant is owned by third parties.
- Participation with a quota of shares in the ReEnergy Capitol fund (active in the field of renewable energy and environment) which provided grants for two solar fields built in Brindisi in 2009 by Aquafil Solaris.

### › PERCENTAGE OF ELECTRICITY NEEDS COVERAGE FROM RENEWABLE SOURCES




**The figure includes the self-production and purchase of "green" energy from producers using renewable sources used by Aquafil since 2010.**

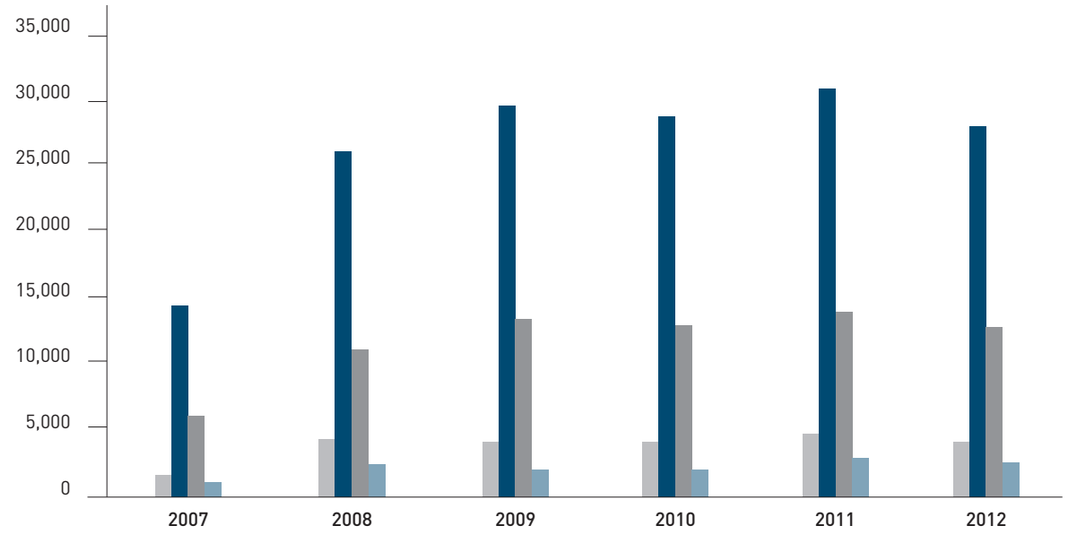
## COGENERATION

Another important line of study put in place by BU Energy & Recycling that supports the entire Group regards investment planning and financial services for the use of cogeneration. The case concerns Arco where an active co-generation plant capable of producing both electricity and heat has been running since 2006, thus increasing the overall conversion efficiency of natural gas used. Over the years, the co-generation plant has been transformed into a trigeneration plant, thus enabling the air conditioning of the HQ plants and offices during summer months, with a further increase of the efficiency of the entire system. A heating system was also commissioned in 2011 which ensures the supply of thermal energy company to the company Dana Italy Spa, allowing for exploitation of hot water at medium temperature, not suitable for industrial use, thus increasing the efficiency of the system and defining a network fundamental relationships within the local knit-work.

**DURING 2012, HIGH PLANT EFFICIENCY MADE IT POSSIBLE TO SUPPLY 1,400 MWH TO THE GRID, WITH CONSEQUENTIAL ENERGY SAVINGS AND LOWER OVERALL GHG EMISSIONS.**

› SAVINGS TREND ACHIEVED BY THE OPERATION OF THE COGENERATION PLANT AT ARCO

The economic advantage is not related to the process Aquafil but is intended as a further reading of benefit to the community of the cogeneration plant, for this calculation was considered a price of 100 $ / barrel. The decrease for the year 2012 is due to the stops that were necessary for interventions to improve efficiency.




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| TEP* | 1,934 | 3,666 | 4,194 | 4,106 | 4,392 | 4,026 |
| BBL** | 13,516 | 25,621 | 29,311 | 28,696 | 30,694 | 28,136 |
| ton $CO_2$ | 6,189 | 11,731 | 13,421 | 13,139 | 14,054 | 12,883 |
| k$ | ~1,350 | ~2,560 | ~2,930 | ~2,870 | ~3,070 | ~2,800 |

* Tons of crude oil equivalent

* * BBL: equivalent barrels of crude oil

*"Esternal view, Ljubljana plant "*

Release
organic substances
**-20%**

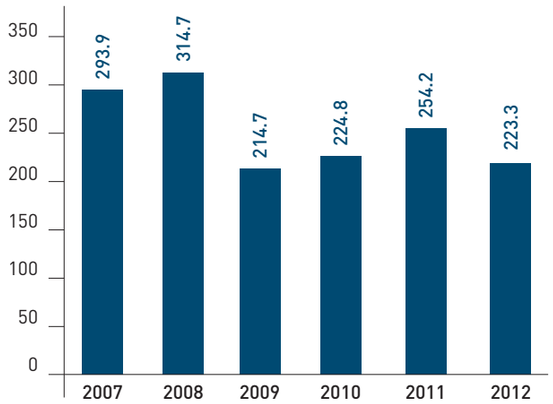
**OPEN AIR EMISSIONS**

AIR EMISSIONS FROM THE PROCESSES OF THE AQUAFIL GROUP CAN BE DIVIDED INTO TWO LARGE FAMILIES:

- Emissions of other substances derived from chemical processes, and in part by the combustion.
- Emissions of greenhouse gases, mainly $CO_2$, resulting from the use of energy and transport.

Those which are not caused by energy use are mainly made from organic substances released in the polymerization processes and the dust generated in industrial processes for the realization of the "Yarn". Of all the substances, the most significant environmental aspect is certainly that consists of organic substances for the reduction of which over the years have been made the largest investments popular with small improvements in the factories of the group. The release of organic substances, total (TOC), which includes the sum of caprolactam, oils and volatile substances, was reduced by over 20% during the 6 years of monitoring.

› TOC (grams/ton)



As for the emissions of greenhouse gases, due mainly to the use of energy and transport, for the purposes of this report are considered:

- Emissions released directly from Energy Units installed in the Aquafil factories (direct emissions): 85% of these emissions are produced by the cogeneration plant of Arco.
- Emissions generated during the production of the electricity used by Aquafil and purchased from external suppliers (indirect emissions).
- Emissions generated by the use of fuel is used for the handling of goods between the various companies of the Group as well as the transport of waste to the storage warehouse Ajdovscina (emissions of handling).

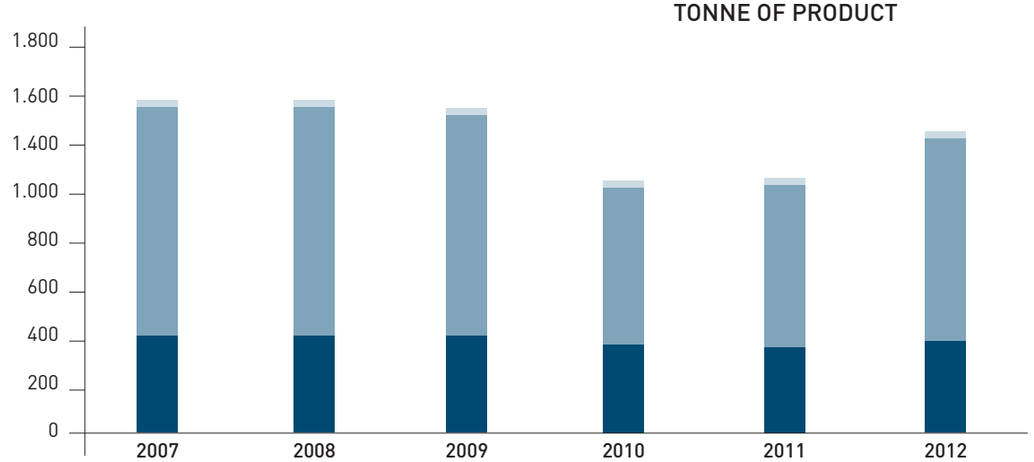
The control and reduction of these emissions can be achieved either through actions to improve the efficiency of processes, whether through policies that prioritize the purchase of electricity to that produced from renewable sources. The combined action of these two approaches has resulted in an overall reduction of greenhouse gas emissions of around 20% from 2007.

**ARCO AND EMISSIONS TRADING**

The Arco plant falls within the scope of the Emission Trading Directive for the presence of the cogeneration plant. This requirement imposes the establishment of a system for control and monitoring of emissions that need to be constantly compared with the amount assigned by the supervisory authority.

**STARTING IN 2006, THE YEAR FROM WHICH THIS DIRECTIVE WAS PUT IN FORCE, SYSTEM MANAGEMENT HAS ALLOWED THE GROUP TO ACHIEVE A LEVEL OF EMISSIONS ALWAYS LESS THAN THE ALLOCATED ALLOWANCES.**

› TREND OF $CO_2$ EQUIVALENT PER TONNE OF PRODUCT




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| TRANSPORTATION | 20 | 25 | 21 | 21 | 23 | 25 |
| INDIRECT | 1,107 | 1,121 | 1,076 | 681 | 720 | 832 |
| DIRECT | 440 | 426 | 423 | 382 | 372 | 408 |

## WATER: CONSUMPTION AND WASTE

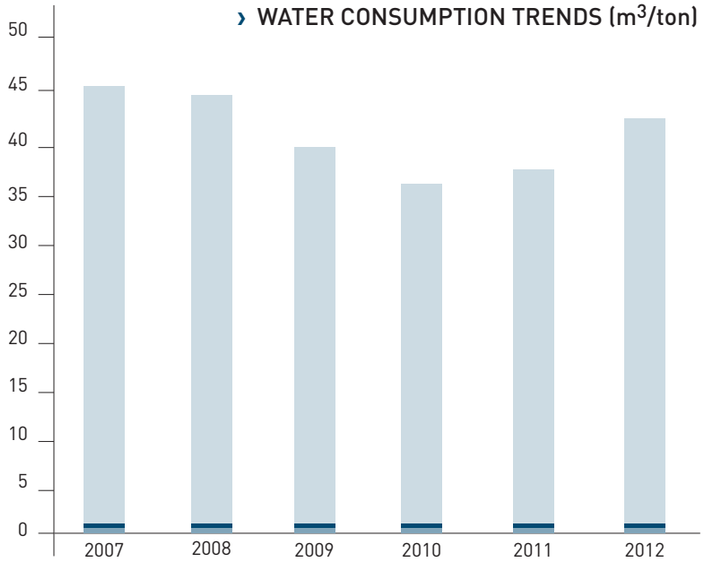
Due to the nature of the processes that take place in Aquafil, the Group's plants require a large amount of incoming water and generate discharges that should be treated accordingly as it is often characterized by a high content of organic substances (COD).
Thanks to a precise plan of limiting consumption, based primarily on the reuse in closed cycles within the different stages of production Aquafil Group has recorded a very positive trend, with a decrease between 2007 and 2012, 7% of consumption and consequently volumes downloaded. This trend has occurred despite the expansion of production facilities, which occurred in 2011. In particular, it is necessary to consider that the plant regeneration Slovenia is activated in a chemical plant to all effects that includes several cycles of heating and cooling resulting in water consumption. In addition to the "closed cycle", the commitment of Aquafil is constantly turned to the activation of systems of measurement and verification, which allow the implementation of corrective actions very fast, even in the face of small variations in the volumes treated. Finally, it is to be observed that the majority of consumption (over 94%) comes from the well.

The use of water involves both the consumption of the resource, on the other hand the release of waste water into the environment. The format, destination and the pollution load of these discharges is extremely important for the characterization of environmental impacts.
At group level, most of the wastewater occurs in surface water (about 85%) while a small proportion (15%) is directed to industrial processing.
One of the pollutants potentially significant in terms of impact in the waste water of the Aquafil Group is represented by organic substances that are measured for monitoring and control in terms of COD. In all cases the level of pollutants in discharges is consistently lower than the limits established by law in different countries and at different points of discharge. Although the focus is always very high in all plants, in particular when the discharge occurs in surface waters as in the case of the plant in Arco, are active control systems with continuous measurements of the pollution load in order to avoid even the slightest pollution risk of water courses concerned.

## FOCUS ON THE ACTIVITIES OF ARCO COD

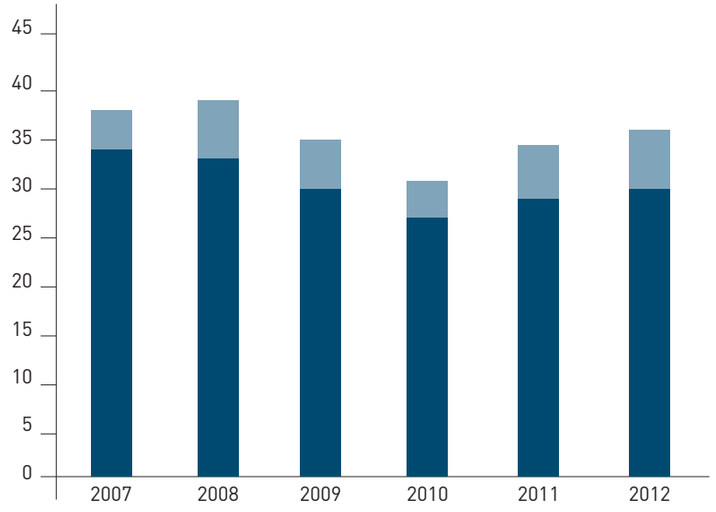
The site of Arco is a clear example of the operational strategies implemented by Aquafil times to monitor and control pollutants potentially significant water discharges to surface waters that, in the specific case of this system, leading to the northern part of Lake Garda.
In the establishment of Arco the attention to water discharges, and in particular for monitoring COD, is realized by means of a continuous sampling of wastewater with detection system equipped with alarm threshold, that threshold for corporate choice is set to a value significantly lower than the regulatory limit foreseen; such continuous monitoring is also associated with a control sample average of the monitored parameters for each working shift every days.
In the event that the monitoring system detects, for the monitored parameters, the variation of the trend set by the internal thresholds, the company procedures require a check on all the relevant process aimed at restoring the parameters that must be constantly
maintained below the threshold fixed cautionary.

### › WATER CONSUMPTION TRENDS ($m^3$/ton)




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| POZZO | 44.4 | 43.5 | 39 | 35.3 | 36.7 | 39.9 |
| FIUME | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 |
| ACQUEDOTTO | 0.8 | 1.1 | 0.9 | 1.0 | 1.6 | 2.1 |

### › WATER DRAINS AND DESTINATIONS ($m^3$/ton)



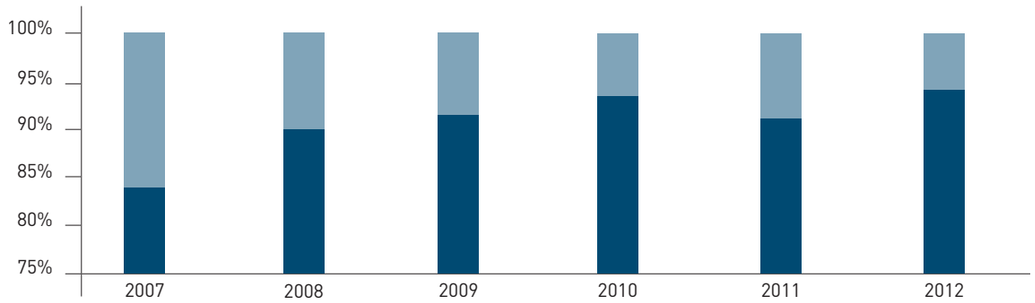

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| TO TREATMENT | 5.3 | 5.9 | 5.0 | 5.0 | 5.8 | 5.9 |
| IN SURFACE DRAINAGE | 34.3 | 33.4 | 30.2 | 26.9 | 28.2 | 31.1 |

*"Production process waste"*

## WASTE

With regard to the production of waste, Aquafil Group continues its commitment to reducing the volumes and the improvement of management procedures. Analyzing the trend of reference is, however, to keep in mind that the system ECONYL® generates an increase in the quantities of waste produced as the regeneration of materials involves waste (which in many cases would be allocated to abandonment). The improvement of management procedures is rather easily demonstrated by the fact that the materials managed in an undifferentiated way in 2012 were slightly more than 5% showing a great improvement than the more than 15% in 2007.

› SUBDIVISION OF WASTE BETWEEN SORTED AND UNSORTED (kg/ton)




| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|
| UNSORTED WASTE | 9.8 | 6.1 | 5.1 | 4.3 | 5.7 | 4.9 |
| SORTED WASTE | 49.8 | 55.9 | 53.9 | 57.3 | 66 | 87.9 |

## 5.3 PROFIT: ECONOMIC SUSTAINABILITY

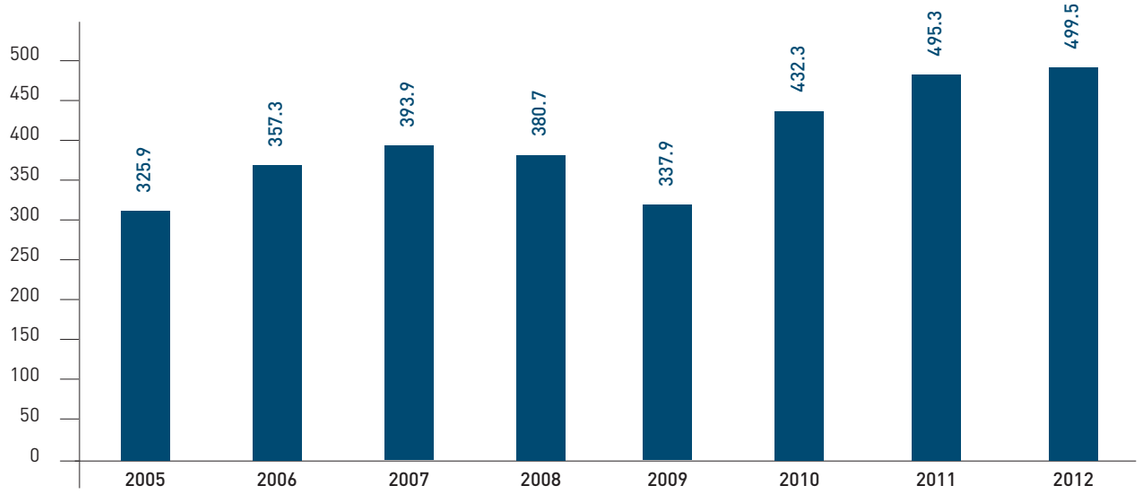
In 2012, the state of the international economy experienced difficulties in recent years has further enhanced, creating globally a general phase of economic weakness dependent on primary measure, the lack of leverage available, excess capacity and by the increasing unemployment rate. The Eurozone countries are those that have suffered the most from this period of crisis, marked by a deep recession, a result of the high contracting domestic demand and overcapacity. In this context, the Italian situation is further weakened by the country specific issues related to political instability and high public debt.
In this difficult macro-economic scenario the Aquafil Group has achieved in 2012 a turnover of 499.5 million euro reporting a 0.8% growth compared to 2011. EBITDA instead dropped to 52.08 million euro compared to 53.40 of 2011, a decrease of -2.5%.

**REVENUES FROM SALES AND SERVICES CONSOLIDATED GROUP INCREASED BY 4.2 MILLION EURO COMPARED TO 2011.**

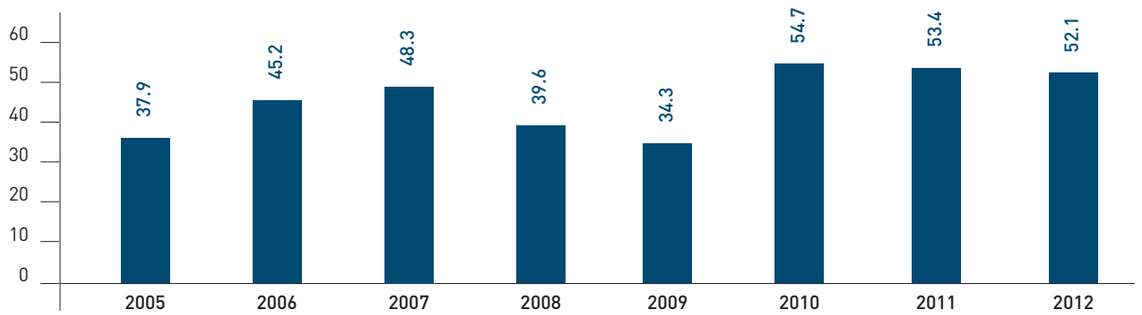
In 2012 Aquafil was characterised by highly dynamic business thanks to a path towards consolidation of its strategic position in the international framework that has allowed the Group to maintain, thanks to the promotion of new sustainable and regenerated products, the same volume of sales as in 2011.
Analysing the performance of the individual business areas the percentage breakdown of the turnover keeps the same trend of 2011, against the internal dynamics of the three units have experienced different trends.

- The BCF which constitutes the "core" business enterprise with the production and sale of threads of polyamide 6. In 2012 the turnover of the business unit grew by about 4% compared to 2011, this increase is also due to sales of a mixture containing a higher proportion of products ECONYL®.
- For the NTF there has been a decrease in turnover of around 6% correlated to a decline in sales volumes. The cause of this decrease is the result of both the decline in demand from the market and it is the policy of careful selection of the final customers of the group.
- The EP business unit in 2012 has maintained almost the same turnover as in 2011 without recording any significant change.

› NET REVENUES 2005-2012 (million euro)




› EBITDA 2005-2012 (million euro)



The purchase price of caprolactam, a key raw material for the company work, and that strongly influences the prices and revenues, remained the same as the 2011 levels. At the end of 2012, the price has slightly decreased due to a surplus of production capacity in the Euro area, related to the decrease of demand from China. In fact, the later has started to cover it domestic demand with the launch of new plants for the production of caprolactam in the area.
The orientation towards foreign markets and the way of productive undertaken by Aquafil, becoming a "global" producer, led in 2011 to the opening of new production sites in emerging countries with the highest rates of growth. In view of the winning strategy undertaken in the course of 2012 Aquafil has further consolidated its presence in overseas markets including the U.S. and China, a condition that has allowed us to reach the budget target of turnover and profitability.

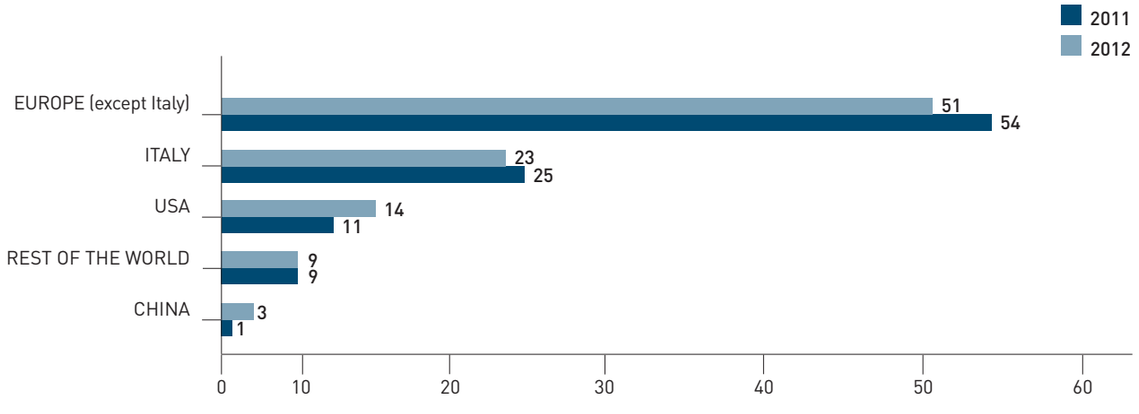
Over the year the rate of investment by Aquafil in environment, safety and energy will stay the same, in fact, approximately 2.3 million Euro investment are also confirmed for 2012.
The largest share of investments, amounting to 46%, is in the energy sector, where they are concentrated economic efforts aimed to increasing energy efficiency and the production of energy from renewable sources; worthy of relevance is also the increase of investment in the environmental field which increased from 13% in 2011 to 23% in 2012.

The Aquafil's investments are a clear manifestation of the attention and commitment that the Board of Directors devotes, in the terms of development strategies and investment plans, to the issue of climate change and the risks and opportunities associated.

This Commitment translates in sustainable business strategies such as:

- Offer new products and services suitable to face the challenges connected to climate change.
- Realize technological improvements related to the climate change aimed to reach competitive advantages.

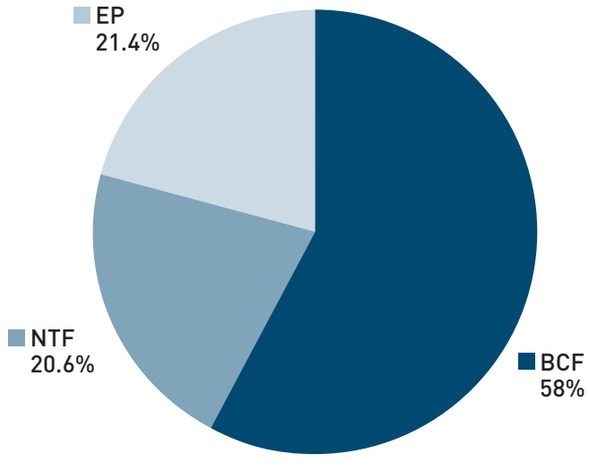
### › PERCENTAGE BREAKDOWN OF SALES BY GEOGRAPHICAL AREA



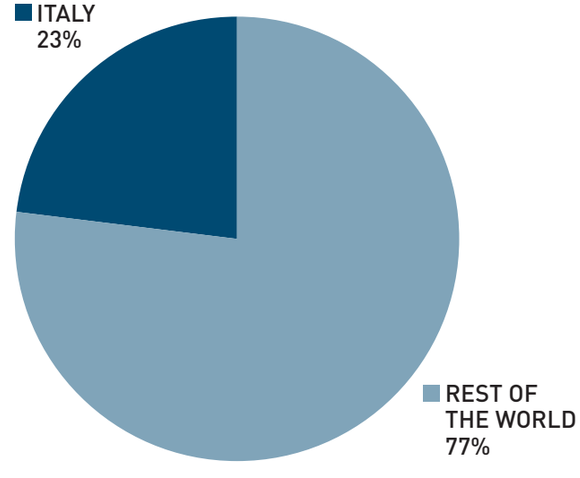

### › INVESTMENTS 2012

| SECTOR | EURO | % |
|---|---|---|
| ENVIRONMENT | 508,664 | 23% |
| SAFETY | 719,339 | 32% |
| ENERGY | 1,028,876 | 46% |
| TOTAL | 2,256,880 | 100% |

### › BREAKDOWN OF NET SALES IN 2012 BY BUSINESS UNIT




### › TURNOVER 2012, ITALY OVERSEAS



› THE SUMMARY OF THE GROUP'S INCOME STATEMENT AQUAFIL IS ILLUSTRATED IN THE FOLLOWING TABLE (IN THOUSANDS OF EUROS)

For further information on Aquafil Group has published on its website www.aquafil.com in the "Finance" section of the Consolidated Financial Statements 2012.

(IN THOUSANDS OF EUROS)

| Rif. | Description | 2012 | 2011 |
|---|---|---|---|
| AI | Revenues from sales and services | 499,484 | 495,302 |
| A2 | Change in inventories | (111) | 18,957 |
| A4 | Capitalisation of internal construction costs | 4,282 | 1,684 |
| A5 | Other revenues and income | 4,691 | 4,478 |
| **A** | **Value of production** | **508,346** | **520,421** |
| B6 B11 | Raw material, supplies, consumables and merchandise | (284,948) | (301,926) |
| B7-8, B13-14 | Service and other operating costs | (93,711) | (88,568) |
| B9 | Personnel costs | (77,605) | (76,526) |
| | **EBITDA** | **52,082** | **53,401** |
| B10a-b | Amortisation and Depreciation | (27,833) | (24,918) |
| B10c-d, B12 | Provision and write-downs | (2,722) | (1,052) |
| | **EBIT** | **21,527** | **27,431** |
| C | Net financial income and charges | (18,926) | (15,712) |
| D, E20-21 | Extraordinary income and charges | (699) | (1,192) |
| | **Profit before taxes and minority interest** | **1,902** | **10,527** |
| E22 | Income tax | (645) | (4,586) |
| | **Net profit before minority interest share** | **1,257** | **5,941** |
| 23 | Minority interest profit | 62 | - |
| 24 | Group net profit | 1,195 | 5,941 |
| | **Group Cash Flow (profit + deprec.)** | **29,028** | **30,859** |

| RECLASSIFIED LIABILITIES AND NET EQUITY (Euro thousands) | | 31/12/2012 | 31/12/2011 |
|---|---|---|---|
| | **Shareholders' equity** | | |
| AI | Share capital | (19,686) | (19,686) |
| AII-VIII | Reserve | (50,484) | (52,585) |
| AIX | Net profit for the years (loss) | (1,195) | (5,941) |
| AX | **a) Group Net Equity** | **(71,365)** | **(78,212)** |
| | **b) Minotity interest equity** | **(696)** | **(613)** |
| | **1. Total shareholders' equity** | **(72,061)** | **(78,825)** |
| | **Net financial position:** | | |
| CIII, CIV, BIII2 | Medium/long term securities, liquidity | 130,444 | 41,907 |
| D4 (v. N.I.) | Bank and financial institutions – short term | 45,876 | (89,567) |
| D4 (v. N.I.) | Bank and financial institutions – medium/long term | 17,402 | (120,307) |
| D7 (v. N.I.) | Leasing payables | (84,338 | (26,612) |
| | **a) Total net financial position – third parties** | **(154,122)** | **(194,579)** |
| BIII2, CII4, D11 | Receivables from holding companies | 30,980 | 37,395 |
| D3 | Shareholder payables – medium/long term | (62,814) | (55,785) |
| | **(a+b) = 2. Total net financial position** | **(185,956)** | **(212,969)** |
| | **(1+2) = 3. Total of sources** | **(258,017)** | **(291,794)** |

| RECLASSIFIED FIXED ASSETS (Euro thousands) | | 31/12/2012 | 31/12/2011 |
|---|---|---|---|
| | **Fixed assets** | | |
| BI | Intangibles assets | 11,443 | 11,049 |
| BII | Property, plant & equipment | 171,245 | 180,571 |
| A, BIII (v. N.I.) | Financial and other fixed assets | 4,351 | 1,772 |
| | **1. Fixed assets** | **187,039** | **193,392** |
| | **Net working capital** | | |
| CI | Inventories | 130,444 | 135,246 |
| CII1-4 | Trade receivables | 45,876 | 62,034 |
| CII4bis-5, D | Other receivables | 17,402 | 15,704 |
| D6, D7 (v. N.I.), D9-10 | Trade payables | (84,338) | (73,843) |
| D12-14, E | Other payables | (23,219) | (24,961) |
| | **2. Net working capital** | **86,165** | **114,180** |
| C | Employee leaving indemnity provision | (7,981) | (8,371) |
| B | Provisions for risks and charges | (7,206) | (7,407) |
| B, C | **3. Provisions** | **(15,187)** | **(15,778)** |
| | **(1+2+3) = 4. Net capital employed** | **258,017** | **291,794** |

*"ECONYL® plant in Ljubljana"*

# 6. APPENDIX

## 6.1 GLOSSARY

**$CO_2$** CARBON DIOXIDE
Gas-naturally present in the atmosphere originated from combustion, respiration and by the decomposition of organic material for the oxidation of carbon.

**COD** CHEMICAL OXYGEN DEMAND
Oxygen consumed to oxidise the organic and inorganic substances contained in the water in solution and in suspension. This parameter is mainly used for the estimation of the content of oxidisable compounds and therefore, the potential level of pollution of natural waters and exhaust.

**COGENERATION**
Production process combined electricity / mechanical energy and thermal energy (heat) produced in special plants using primary energy.

**CPL**
Caprolactam.

**LCA** LIFE CYCLE ASSESSMENT
Collection and evaluation of inputs, outputs and potential environmental impacts of a product-system along its life cycle through an objective procedure of evaluation of energy and environmental loads relative to a process or activity, which is performed through the identification and quantification of energy, materials and waste released into the environment.

**REACH** REGISTRATION, EVALUATION, AUTHORISATION AND RESTRICTION OF CHEMICALS
Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, which aims to increase security, protect both the health of people the environment, compared to the risks arising from the use of chemicals.

**TOC** TOTAL ORGANIC CARBON
Total Organic Carbon. Amount of carbon in an organic compound. This parameter is used as an indicator of water quality and verification of the content of organic matter in the flue gas.

# 6.2 GRI Context

› INDEX OF TOPICS

| Topic | | Total/partial | Paragraph | Page no. |
|---|---|---|---|---|
| **Strategy and analysis** | | | | |
| 1.1 | Statement by the President or Chief Executive Officer | Total | Letter of the President | 3 |
| **Company profile** | | | | |
| 2.1 | Company name | Total | Aquafil in Italy and in the world | 7 |
| 2.2 | Brand, products or services of tip | Total | Activities and products | 9-11 |
| 2.3 | Corporate operational structures | Total | Aquafil in Italy and in the world- Governance<br>Plants | 6-8<br>12 |
| 2.4 | Localization of the Headquarters | Total | Aquafil in Italy and in the world | 7 |
| 2.5 | Countries where the company operates | Total | Activities and products | 12 |
| 2.6 | Nature of ownership and legal form | Total | Aquafil in Italia e nel mondo | 7 |
| 2.7 | Markets served | Total | Le attività ed i prodotti | 10-11 |
| 2.8 | Company size | Total | Plants<br>Profit:Economic Sustainability | 12<br>49-50 |
| 2.9 | Significant changes during the period of Report | Total | Important news of 2012 | 15 |
| 2.10 | Awards received during the period of Report | Total | Awards | 16 |
| **Report Parameters** | | | | |
| **Report profile** | | | | |
| 3.1 | Report Time frame | Total | The RS AQUAFIL | 4 |
| 3.2 | Date of previous report | Total | The RS AQUAFIL | 4 |
| 3.3 | Reporting cycle | Total | The RS AQUAFIL | 4 |
| 3.4 | Contacts | Total | The RS AQUAFIL | 4 |
| **Report scope and boundaries** | | | | |
| 3.5 | Report definition of the contents | Total | The RS Aquafil<br>Stakeholder map<br>Sustainabiliy in Aquafil | 4<br>13<br>21-23 |
| 3.6 | Report boundaries | Total | Aquafil in Italy and in the world<br>Plants | 7<br>12 |
| 3.7 | State any specific limitations on the scope or boundary of the report | Total | Aquafil in Italy and in the world<br>Plants | 7<br>12 |
| 3.8 | Base for the Report in regard to Joint Venture, subsidiaries, Basis for reporting on joint ventures, plant leasing and outsourced operation | Total | Aquafil in Italy and in the world<br>Plants | 7<br>12 |
| 3.10 | Explanation of the effect for redefinition of all information submitted | Total | Letter of the President – The RS Aquafil<br>Data Presentation Method | 3-4<br>39 |
| 3.11 | Changes in the Report in relation to scope, border and measurement methods | Total | Letter of the President – The RS Aquafil<br>Data Presentation Method | 3-4<br>39 |
| **GRI contents index** | | | | |
| 3.12 | Identification of the location of the Standard Disclosures in the report | Total | GRI Context | 55 |
| **Governance, commitments and engagement** | | | | |
| **Governance** | | | | |
| 4.1 | Structure of Governance | Partial | Governance | 8* |
| 4.2 | Higher office | Total | Governance | 8 |
| 4.3 | Members of the higher management of corporate governance | Total | Governance | 8 |
| 4.4 | Mechanisms for shareholders to contact the Board | Partial | Governance | 8* |
| **Stakeholders involvement** | | | | |
| 4.14 | List of stakeholders | Total | Stakeholder map | 13 |
| 4.15 | Basis for identification and selection of stakeholders | Total | Activities and products<br>Stakeholder map | 11<br>13 |

*** We do not report this disclosure item as the information is proprietary**

## › INDICATORS

| Topic | | Total/partial | Paragraph | Page no. |
|---|---|---|---|---|
| **Economic indicators** | | | | |
| **Economic performance** | | | | |
| EC1 | Direct economic value generated and distributed... | Partial | Profit: Economic sustainability | 49-52 |
| EC2 | Financial implications and other risks and opportunities for the organization's activities due to climate change | Total | Improvement Projects<br>Profit: Economic sustainability | 17<br>50 |
| **Environmental Indicators** | | | | |
| **Materials** | | | | |
| EN1 | Materials used by weight or volume | Total | Planet :The numbers of the environment | 40 |
| EN2 | Percentage of materials used that are recycled input materials | Total | The ECONYL® project | 25-29 |
| **Energia** | | | | |
| EN3 | Direct energy consumption broken down by primary energy source | Partial | Planet: The numbers of the environment | 40; 43-44 |
| EN5 | Energy saved due to conservation and efficiency improvements | Total | Improvement Projects | 42-44 |
| EN6 | Initiatives to provide energy services and energy-efficient or renewable energy based, and reductions in energy requirements as a result of these initiatives | Total | The ECONYL® project<br>Planet: The numbers of the environment | 17;<br>43-44 |
| **Water** | | | | |
| EN8 | Total water taken by source | Total | Planet: The numbers of the environment | 47 |
| EN9 | Water sources significantly affected by withdrawal of water | Total | Planet: The numbers of the environment | 47 |
| **Emissions to air and water, waste** | | | | |
| EN16 | Total direct and indirect greenhouse gas emissions by weight | Total | Planet: The numbers of the environment | 40 |
| EN18 | Initiatives to reduce greenhouse gas greenhouse effect and the results achieved | Total | Planet: The numbers of the environment<br>Profit: Economic sustainability | 43-44;<br>50 |
| EN20 | NOx, SOx, and other significant air emissions by type and weight | Partial | Planet: The numbers of the environment | 45 |
| EN21 | Total water discharge by quality and destination | Total | Planet: The numbers of the environment | 47 |
| EN22 | Total weight of waste by type and disposal method | Partial | Planet: The numbers of the environment | 40; 48 |
| **Products and services** | | | | |
| EN26 | Initiatives to mitigate environmental impacts products and services, and extent of mitigation of impact | Partial | Improvement Projects<br>The ECONYL® project | 17-19;<br>25-29 |
| **Employment indicators** | | | | |
| **Employment** | | | | |
| LA1 | Total workforce by type of use, contract and region, broken by genre | Total | People: Indicators of social aspects | 32-34 |
| LA2 | Total number and rate of both new hiring that employee turnover | Partial | People: Indicators of social aspects | 35 |
| **Health and safety on working place** | | | | |
| LA7 | Rates of injury, occupational illness, lost days and number of work-related accidents | Partial | People: Indicators of social aspects | 36-37 |
| **Diversity and equal opportunity** | | | | |
| LA13 | Composition of corporate governance, broken down by genre | Partial | Governance<br>People: Indicators of social aspects | 8;<br>32-35 |

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Global Reporting Initiative™

## Statement
## GRI Application Level Check

GRI hereby states that **Aquafil SpA** has presented its report "Sustainability Report 2012" to GRI's Report Services which have concluded that the report fulfills the requirement of Application Level C.

GRI Application Levels communicate the extent to which the content of the G3.1 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3.1 Guidelines. For methodology, see www.globalreporting.org/SiteCollectionDocuments/ALC-Methodology.pdf

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

Amsterdam, 26 July 2013

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative

GRI REPORT
GRI CHECKED

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synthetic fibres and polymers

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