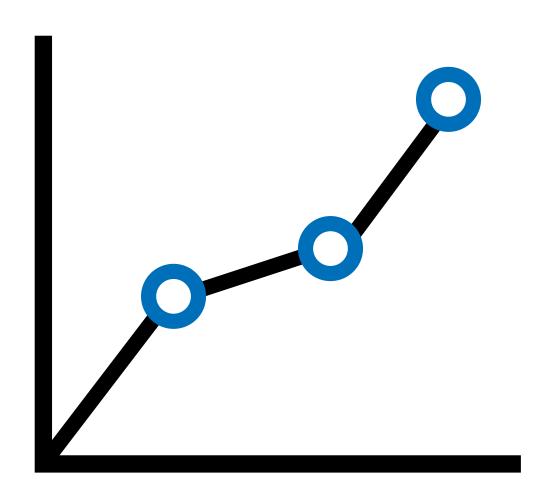
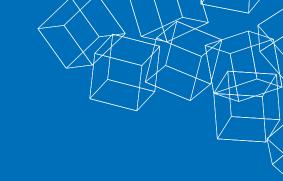
#### 2016 CONSOLIDATED FINANCIAL STATEMENTS





2016
CONSOLIDATED
FINANCIAL
STATEMENTS





### Index

A letter from CEO	4
Group Flow Chart	6
Mapei Group around the world	8
A year with Mapei	11
MAPEI GROUP CONSOLIDATED FINANCIAL STATEME	ENTS
Management Report	33
Balance Sheet	66
Statement of Income	68
Cash-flow Statement	7C
Notes to the Consolidated Financial Statements	73
Report of Independent Auditors	116
Major Projects 2016	119

# 2016: a record year



In the following pages you will find all the figures, tables and an indepth analysis of Mapei Group's performance in 2016.

But with this short note I would like to limit myself to a few brief but, hopefully, significant considerations on the general outlook.

It was undoubtedly a very positive year. The Group had a record year in terms of both total revenue (2,282 million Euros, + 4.7% compared with 2015) and net profit (88.3 million Euros, + 95.4% compared with 2015). And we achieved these results in spite of the fluctuations in the exchange rates between various currencies, which certainly didn't work in our favour. We are an international company and it is only right to acknowledge that the key to these brilliant results was the performance of our sales teams in certain areas of the world. Certain European Countries, the Far East and, above all, North America were our leading lights.

But those who know us are also well aware of one thing: Mapei never stops and will continue to invest into the future of the company. And it does so by following two main work strategies: Research & Development and internationalisation. Mapei has always invested significant resources into R&D because it knows it is the real driving force behind growth. Our 28 Research Centres are located in 17 different countries and work alongside our clients so they can listen to them and understand exactly what they need: it's our philosophy. A philosophy that creates thousands of new formulas to be tested and transformed into products, and always with improved performance characteristics, that we then offer to the market. As far as internationalisation is concerned our main tool is new acquisitions. In 2016 we made another two in strategic areas: Russia and Mexico. But other new acquisitions are being prepared as we speak and will be completed over the course of 2017. Research & Development and internationalisation have a common denominator behind both of them: sustainable development. Quality and certification, a guarantee for users and clients, is the unmistakable trademark of all Mapei products that leave our 71 production facilities every day.

And everything I have been talking about was achieved together with our collaborators and partners: an invaluable patrimony and one on which our strength is based. The number of Mapei employees also increased in 2016 and in no country around the world have we carried out a reduction in the workforce or had to make anyone redundant. Something we can declare with enormous pride.

I would also like to say a couple of words about 2017 which looks like being an interesting year.

First and foremost because Mapei is celebrating its 80<sup>th</sup> anniversary. An important milestone, another stage of our long life. And also because economic indicators are telling us that the situation of the global economy and the building industry should improve. And if this were to lead to an increase in the cost of raw materials, then we are ready. The investments we made in 2016 were also for this. To absorb potential increases and to make sure our Group's revenues and profits are kept at a high level.

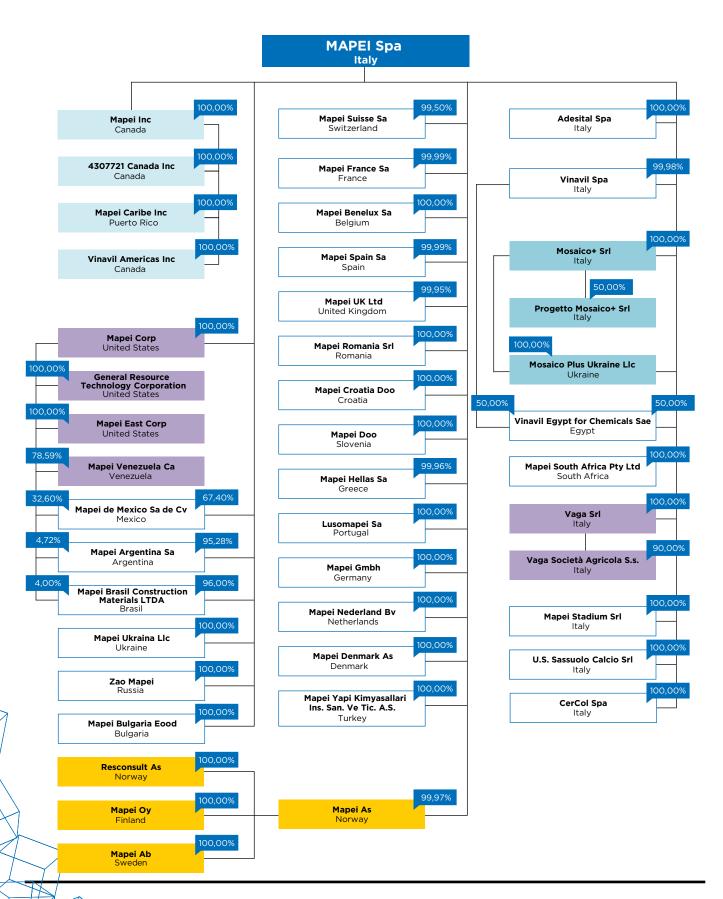
Anticipate, prevent, keep ahead. This is the determination that keeps us going. I said that 2016 had been a record year. But records are made to be broken. That is our commitment, it is in our DNA. And we have been trying, every day. For 80 years.

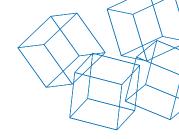
Dr. Giorgio Squinzi

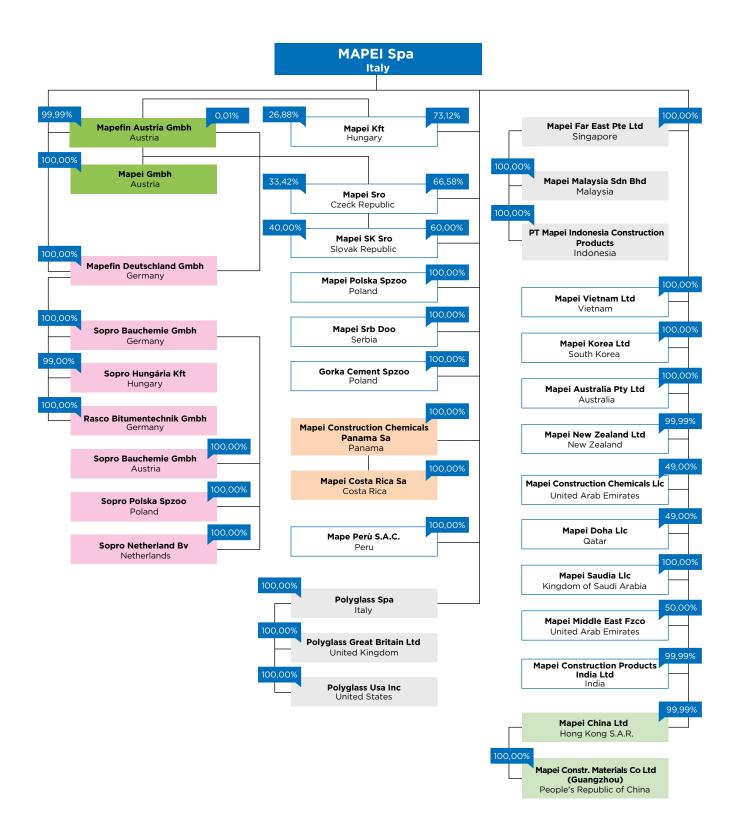
Giorgio Squiusi

#### Flow Chart

#### **December 31, 2016**

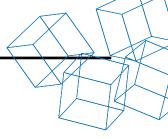


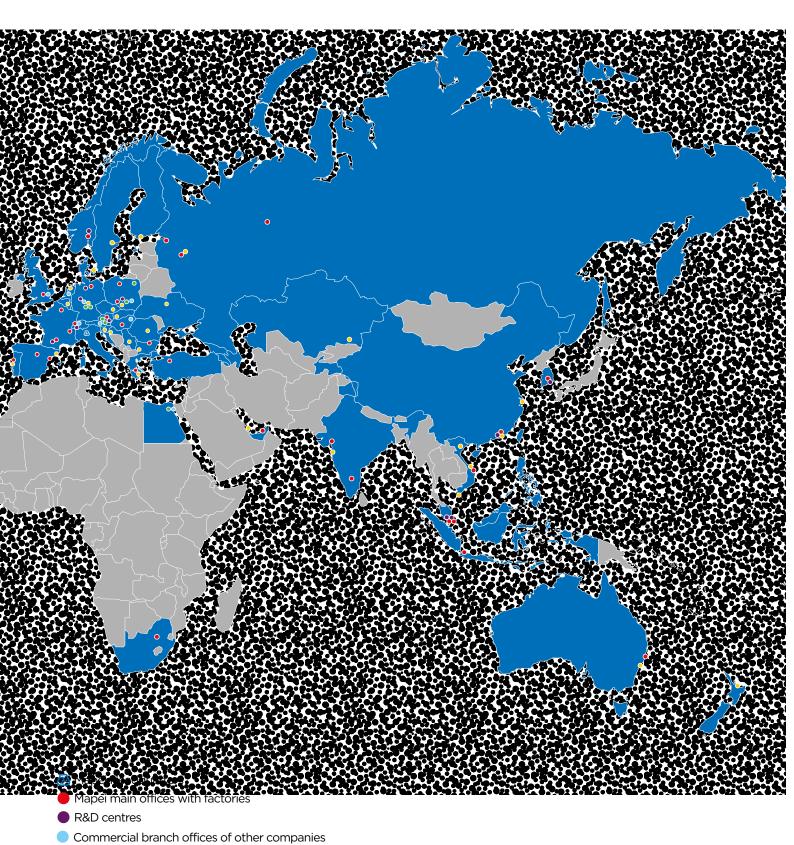




# 71 plants and 81 subsidiaries, synergy to create added value.





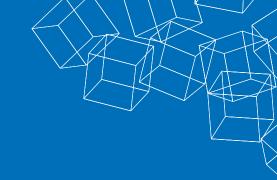


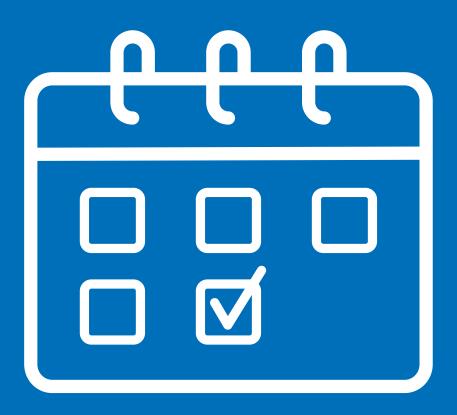
Main offices with factories of other companies

Mapei commercial branch offices



# A YEAR WITH MAPEI







# 

#### Investments in 2016

True to our vocation for internationalisation - one of the cornerstones of our success - for Mapei Group, 2016 was another year of growth with new acquisitions overseas.

#### **EUROPE**

In July ZAO Mapei - the Russian subsidiary of Mapei SpA - completed its acquisition of the Kikerino works, 80 kilometres to the south of St. Petersburg, from the Austrian company Baumit. This acquisition optimises Mapei's coverage of the territory in the vast North-Western regions, as well as guaranteeing access to the Arctic, an increasingly interesting geographical area thanks to the discovery of enormous reserves of natural gas which, because

of its particularly harsh climate, requires sophisticated construction technology. An all-encompassing reorganisation plan followed directly by the Group's engineering department is being developed for the Kikerino works, which will also enable this site to provide the market with the type of quality it has become accustomed to. The reorganisation will be carried out in two phases: the first phase will be to modernise the existing works, while the second phase will be to increase its storage capacity (the covered area will be extended from the current 1,000 m<sup>2</sup> to 5.500 m<sup>2</sup>) and the introduction of new production lines. Again in Europe, this time in Germany, Mapei GmhH has increased the capacity of its bagging and powder

products line at its Weferlingen facility.

#### Mexico is currently one of the most promising markets in Latin America and Mapei has been doing business there since 2010 through its trading company Mapei de Mexico SA de CV. Thanks to the acquisition of production facilities from the Mexican company Texturizados de Zimapan SA de CV, Texzim, Mapei Mexico now detains sufficient production capacity to follow the dynamic local market. The two facilities, located in Zimapán and Cancún, are strategically placed to provide efficient service to a large part of the Mexican territory. The range of products varies from installation materials for ceramics to wall coatings and it will soon be extended by introducing new Mapei Group products considered to be particularly suited to the Mexican market. The month of July also witnessed the strengthening of Mapei Corp&G.R.T. at the Garland facility in Texas, the commissioning of a new powder products line at the Logan facility in New Jersey, a new powder products plant at the Dalton facility in Georgia and a new production line for membranes at the Waco facility in Texas.

#### **ASIA AND OCEANIA**

In July 2016 the new Mapei Philippines Inc. commercial offices were opened and a new powder products plant was commissioned at the Baroda facility in India.

#### **AFRICA**

And lastly, a series of investments were made at the head-office of Mapei South Africa Pty LTD which inaugurated a new facility in Germiston.

# A brief overviev



#### Czech Republic Two warehouses and so much professionalism

Mapei spol. s r.o. was founded in 1991 by Zdenek Runštuk, who today still covers the role of Managing Director in Olomouc, Moravia, in the Eastern part of the Czech Republic. The Group's Czech subsidiary currently has 67 employees. The head-office with storage facilities are in Olomuc and there are branch offices and more storage facilities in Jažlovice, right in the centre of the country near Prague. These structures are strategically positioned to form a capillary distribution network extending to all four corners of the Czech Republic for Mapei solutions produced in facilities belonging to the Group in other countries (Italy, Poland, Germany, Austria and Hungary).



#### Switzerland Inauguration of the new "Seminar Centre" in Sorens

A new training centre run by Mapei Suisse was opened in March in Sorens, a small town in the Western part of Switzerland. The infrastructure was presented during the inauguration ceremony along with the numerous options on offer. Training is essential, not only to divulge knowledge about the advantages and correct use of Mapei products, but also to strengthen our relationships with clients and their trust in the Group.



# China 10 years for Guangzhou: awards and celebrations

An important event was held to celebrate the tenth anniversary of the founding of Mapei Guangzhou, which was attended by retailers, clients and the press who were all invited to take part in the event. Awards and acknowl-

edgements for retailers and clients, as well as the ideal occasion to present a highly advanced communications platform, new products and a general outline of the lines of development of Mapei products in the city.



#### Romania 10 years of record growth

Today, Mapei Romania can boast an increase of 5 times its original turnover, which amounted to more than 11 million Euros in 2016. Taking into consideration the developments in the Romanian construction market, the company set itself a target of taking over the leadership in the waterproofing and adhesives segments, as well as achieving a higher annual increase in sales than the overall rate of growth in the Romanian construction industry. The business was set up in 2006 and today has a staff of 60 professionals supplying 1,500 solutions to meet the most varied range of needs on site. The head-office is in Bucharest. Apart from opening a new warehouse in Brasov in October 2016, the Group was also granted the authorisation to build a new, dedicated concrete laboratory.



# Ukraine 10 years of great success

Mapei Group started distributing building products in Ukraine in 2000, particularly solutions for installing ceramics and stone material. Mapei Ukraine was founded in 2006 and, since then, it has enjoyed constant growth on the local market and currently supplies its clients with all the materials from the company's 15 product lines.

In 2009 the subsidiary took another important step in its expansion: Mapei Ukraine started trading on the building products market in Georgia, where it started collaborating successfully with construction companies and distributors. And in 2016, in spite of the difficult political situation and the far from rosy economic climate in Ukraine, Mapei Ukraine can consider itself extremely proud of its success story.





#### Spain 25 years and a story of success

Celebrations in grand style for Mapei's 25 years of success in Spain. Our company arrived in Spain in 1991 and, since then, it has become such an important player on the Iberian peninsula (it currently has 146 employees and a commercial network covering the entire country) that, on this festive occasion, Mapei Spain was awarded the "Faro del Mediterraneo" prize by the

Italian Chamber of Commerce. Amongst its numerous successes (including the opening of various new projects), it is worth remembering being awarded OHSAS 18001 certification in 2013 for the best Occupational Health and Safety Management System, as well as being involved in the 2014 Road World Cycling Championships held in and around Ponferrada.



#### Hungary 25 years of Mapei KFT

Numerous events were organised by Mapei KFT to celebrate its twenty-fifth anniversary of doing business, all in the name of constant growth and prestigious recognitions. The Hungarian subsidiary of Mapei Group was founded in 1991 as a manufacturer and distributor of chemical products for the building industry and today Mapei KFT is indisputably one of the key players on the Hungarian construction market. It has a production facility in Sóskút in the north of the country dedicated to the production of consumer goods for Hungary and for export to nearby countries.



# Austria 35 years and a new warehouse in Brunn

It was time to celebrate the 35 years of Mapei Austria GmbH (a subsidiary of the Group, one of the first facilities commissioned abroad), which has had an important role in Mapei's process of progressive internationalisation by managing to enter the Russian, Hungarian and Czech markets. The anniversary was celebrated last October with the opening of a new warehouse in Brunn am Gebirge where a new round-the-clock distribution structure was commissioned.







### La Scala, Milan Giorgio Squinzi joins the board

The bond with the La Scala Theatre has deep roots in the story of Mapei.

Mapei became a Corporate Subscriber in 1984 and contributed to the renovation and restoration of this prestigious Theatre by providing technical assistance and supplying numerous own brand solutions, the result of the technology and research work of its laboratories, and then became a Permanent Founding Member in 2008.

It has also sponsored numerous concerts and cultural events, many of which were dedicated to scientific research and charities, such as those organised by the Negri Weizmann Foundation for medical research, the LILT (the Italian Anti-Tumour League), the ladies' section of the Italian Red Cross and the Francesca Rava Foundation, which provides assistance for children in difficulty in Italy and around the world.

In recognition of the company's support in favour of the Theatre, Mapei has received reserved seats for public events and gala evenings have been organised for their guests and to celebrate the company's most important anniversaries. In recognition of Mapei's commitment to the La Scala Theatre, since November 2016 Giorgio Squinzi, CEO of the Company, has been a member of the Theatre's Board of Directors.





# Art & Solidarity "Piero della Francesca: investigation of a myth"

A great passion for culture and the arts combined with solidarity. Mapei was a proud participant as official partner for the exhibition "Piero della Francesca. Investigation of a myth", presented in the evocative surroundings of the Museum of San Domenico in Forlì. The event was a resounding success with the general public and received a huge amount of support for the projects promoted by the Fabbrica del Sorriso (the Factory of Smiles), an initiative of Mediafriends in favour of research into the prevention and cure of tumours in children. With the money raised from the event, IOR and IRST IRCCS (Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori - Scientific Institute for the Study and Cure of Tumours of Romagna) benefitted in particular and will be able to build a radiotherapy centre for the entire Romagna Region, including for children. "Piero della Francesca: Investigation of a myth" was a truly unique event of considerable cultural importance. Never before had anyone managed to exhibit such an array of this artist's works together in one place, extensive in terms of both quantity and rarity, for the occasion compared with the grand masters of the Renaissance period.

#### The Peggy Guggenheim Collection

The partnership between Mapei and the Peggy Guggenheim Collection of Venice, a museum which in 2015 had a record 400,000 visitors, is a continuous success. The bond between Mapei Group and the Guggenheim Foundation, which started in 2008, has been consolidated over the years, thanks to both the leading role played by the company in the restoration of two important "homes of Guggenheim art" - New York and Venice - and for its support for numerous cultural activities with the participation of Intrapresæ. In fact, since 2008, Mapei has been a part of the Intrapresæ Guggenheim Collection project for the Peggy Guggenheim Collection in Venice: the first and most widely known programme in Italy in support of a privately owned museum, with backing from the most renowned national and international companies. Companies that share a passion for art and which believe in investing to support culture, standing out from the rest for the attention they pay to cultural projects and for their belief in social responsibility.





Italy

## Cervia: the garden city in bloom

In May, Cervia hosted the 44th edition of the "Largest open-air flower exhibition in Europe". The Group has been a sponsor of this event since 2006. More than 60 cities, associations and companies from all over Europe (and for the first time this year from Canada) paid homage to the cities of Romagna Region (comprising Milano Marittima, Pinarella and Tagliata) by creating a marvellous open-air museum dedicated to the theme of hospitality. More than 350,000 plants were planted and thousands of square metres of grass were laid. Two Mapei Gardens were set up for this edition: one at the Cadorna di Milano Marittima roundabout and one opposite the Salt Stores, with products from the Color Paving System decorative concrete road surfacing system with an exposed aggregate finish used to create an important feature.

The Mapei system used to create external spaces is a complete system and meets the requirements of all those who operate in this particular sector.





#### Italy Diocesan Museum of Milan



In April Mapei sponsored a display at the Diocesan Museum of Milan entitled "DESIGN Behind DESIGN", an exhibition arranged in thematic areas (architecture, artists and designers and photography) dedicated to the Commission of the Holy Catholic Church.

The Group's interest in this important showcase is due to Mapei's involvement in numerous restoration projects to redevelop places of worship, such as the Basilica of St. Ambrogio in Milan, The Upper Basilica of St. Francesco of Assisi and the Sistine Chapel.



#### Italy Cresco Award Sustainable Cities

The Sodalitas Foundation, which promotes corporate sustainability in Italy with the backing of leading companies from various sectors, promoted the Cresco Award for Sustainable Cities. Organised in collaboration with ANCI (Associazione Nazionale Comuni Italiani, National Association of Italian Town Councils), the aim of this initiative is to promote the innovative drive of Italian town

councils and reward the most effective projects in promoting the sustainable development of the Italian territory. This recognition is part of the European campaign "Sustainable living in cities", which is promoted in Italy by the Sodalitas Foundation, the Italian partner of Corporate Social Responsibility Europe. Mapei is a supporter of the initiative with one of the ten Corporate Awards. The Mapei Award, "Technology and materials to safeguard the environment and social sustainability", which consists of specialised consultancy to identify which other initiatives may be put into motion to reduce the risks of seismic activity, was awarded to Forlì Town Council for its project "Renewal of the former buses warehouse", which transformed the warehouse into a cultural and production centre where the arts, businesses, trade, crafts and the university can all interact.



#### Italy FAI Corporate Golden Donor

Knowledge, pragmatism, coherence, independence, quality. FAI (Fondo Ambiente Italiano, Italian Environment Fund) was founded in 1975 by a group of pragmatic and determined people committed to safeguarding our artistic and natural heritage.

The Association promotes a culture of respect for Italian nature and the arts and protects a heritage which is a fundamental part of our history.

The Fund organises numerous activities to divulge knowledge of our artistic and cultural heritage and collects funds to help safeguard it. One of the most widely known and most loved of these activities are the FAI Spring Days. Mapei is one of the more than 500 companies which support and sponsor FAI and, as Corporate Golden Donor since 2003, has taken part in various restoration projects, including Villa del Balbianello and the Fountain of 99 Spouts. In fact, Mapei has always taken a particular interest in the arts, culture and the environment and shares FAI's desire and commitment to keep the traditions, roots and history of Italy alive by supporting its historical and artistic heritage.

#### Ukraine Charity in Ladanka

Mapei Ukraine takes care of children from poor families in the town of Ladanka, near Kiev. In May, a number of representatives from Mapei visited the children in the school in Ladanka, with gifts for the most needy to help them with their future studies.









#### Hungary Tour of Zalakaros: 3 events in 1...

For the second year Mapei Hungary was the main sponsor of a famous amateur cycle race which, every year, has more than 1,500 participants. The race was the perfect occasion for Mapei Hungary to organise an exclusive event for their clients which, apart from giving them the chance to take part in the race wearing the Mapei colours, included a free pass for the famous Zalakaros spa centre and a taster session of wines from the area.

To finish off, Mapei Kft sponsored a foundation called the "Small Survivor Foundation" in aid of a 13-year-old boy with brain injuries who, thanks to the help received from the Mapei staff and a number of the company's clients, was able to ride 33 km on a specially adapted bike called "viszikli".

Apart from being an unforgettable experience for the young boy, the race also raised funds for the association.



#### Belgium Mapei FamilyFun day

A day of fun for the whole family at the end of August in the Mapei Benelux complex. A small amusement park, bouncy castles, cycle races, magicians and the Mapei hotair balloon; all this was made available for Mapei's clients and their families, which proved to be a highly successful event with more than 450 guests and an excellent image booster for our Belgian branch.



## Vietnam "Mapei Soup of love"

In Vietnam, the ritual activity of donating "Mapei soup of love" continued throughout the whole of 2016. With the slogan "Mapei soup of love - free to all patients" emblazoned on the company t-shirts, not only did Mapei personnel hand out a bowl of nutritious rice porridge to the patients of the Women's and Children's Hospital in the city of Danang, thanks to this gesture of solidarity they also spread and promoted the good name of our company.



# SASSUOLO CALCIO: historical qualificatio for the Europa Leagu At the end of their third season in Serie the historic debut of Sassuolo in Eu historical qualification for the Europa League

A, Sassuolo Calcio (the team sponsored by Mapei Group) qualified for a place in the Europa League; a great success and enormously satisfying. By finishing sixth in Serie A (with 61 points), Sassuolo qualified for the third preliminary phase of this prestigious competition.

For the owner Giorgio Squinzi, leader of Mapei Group, it was a feat to be proud of, especially because the team was made up mainly of Italian players who, in so doing, made their mark at international level. The green and black's triumphant march started in the summer of 2016 with two games against the Swiss team Lucerne and the historic debut of Sassuolo in Europe: 1-1 in the first leg at the Swissporarena (with the history-making penalty by Domenico Berardi) and a convincing 3-0 home win in the return leg at the Mapei Stadium (with two goals from Berardi and one from Defrel). In the second round of the preliminary phase, the green and black's adversary was the legendary Red Star Belgrade, who at the beginning of the 1990's won the European Cup and the Intercontinental Cup for club teams.

Another solid 3-0 home win in Reggio Emilia (with goals from Berardi, Politano and Defrel) paved the way for the return match in Serbia (1-1, with Berardi



scoring again). Once they had qualified for the group stage of the tournament, Cannavaro and company were drawn against Athletic Bilbao, the Belgian team from Genk and Rapid Vienna from Austria. Their debut match in the group stage saw another convincing 3-0 home win against the red and whites from Spain (with goals from Lirola, Defrel and Politano). Their first defeat, however, came in Belgium where the green and blacks lost 3-1 against Genk. They then had two draws against Rapid Vienna (1-1 in Austria and 2-2 at home) before suffering two more defeats that knocked Sassuolo out of the Europa League (3-2 in the away game against Athletic Bilbao and 0-2 at the Mapei Stadium against Genk). In spite of finishing bottom of the table it was a positive European debut for the team from Emilia, which will make the most of this invaluable experience in future international competitions.



#### Great women's football at the Mapei Stadium

In May, for the first time in its history, the Reggio Emilia stadium hosted the final of the EUFA Women's Champions League, which was won 5-4 on penalties by Olympique Lyonnais against the German team Wolfsburg. The game was played impeccably by both teams in a stadium fit for the "big occasion". For the Mapei Stadium it was not the first time it had been selected for an international event. In fact, on the 12th of April, it hosted a European qualifying match between the women's teams from Italy and Northern Ireland and, last July, it also hosted the men's under-21 match between Italy and Slovenia.



#### Basketball: a place of honour in the championship

Basketball is gaining more and more support amongst Mapei Group's clients and supporters thanks to Grissin Bon (Reggiana Basketball) which, yet again in the 2015-16 season, played spectacularly and obtained important results. Enormous satisfaction was gained from their victory in the Super Cup at the start of the season, and then again with their second place (for the second year running) in the championship, runners-up to the "invulnerable" Armani Milan. Important achievements and more prestigious silverware for the Reggiana trophy cabinet, confident that they can do even better.





#### Mapei Sport Research Centre

#### 20 years of research for sport with no short-cuts

Scientific research in the field of sports and multi-sector assistance for athletes to help improve their performance and promote a more rational approach to sports played at competition level and to benefit their health. With its rigorous scientific approach and total respect for vitally important ethical and sporting values, the Mapei Sport Research Centre – which in 2016 celebrated its first 20 years of activity – was founded to help divulge a culture of correctness in sport.

In the Centre's headquarters in Olgiate Olona, extending over an area of 1,400 square metres inside a four-storey steel and glass building, there are laboratories, clinics and an analysis, research, preparation and prevention centre, where sport and ethics come together to form a solid partnership. These are the foundation stones that drive the Centre of excellence in sport which Giorgio Squinzi was so determined to open in 1996, sharing the same ideas and philosophy towards sport with Prof. Aldo Sassi, the co-founder of the Centre, who passed away suddenly in December 2010. This prestigious anniversary was celebrated

with a series of events and a congress, with the world of scientific sports research as the central theme, which was held last year on the 21st of May in the beautiful surroundings of the Ville Ponti Congress Centre in Varese. "And there couldn't have been a more fitting way to celebrate the 20th anniversary of Mapei's commitment to sport – which all started with our legendary and once-ina-lifetime cycling team – than a day like this, with so many professionals coming together for a 360 degree discussion about sport in front of an audience of youngsters and sports lovers," declared the Director of the Centre, Dr. Claudio Pecci.

Its founding aim was to provide a scientifically rational and ethical approach to the members of the Mapei Professional Cycling Team - which for ten years dominated international cycling - and over the years, apart from cycling, Mapei Sport has extended the areas of sport where they operate and now dedicates its activities to other disciplines such as soccer, basketball, running, golf, alpine skiing and motor sports, but without ever losing sight of its original objectives.

#### Cadel Evans Great Ocean Race - Australia

The Cadel Evans Great Ocean Race is one of the most important events in the Australian professional and amateur cycling calendar and takes its name from the famous cyclist who used to race for the Mapei team. The second edition of the event was held at the end of

January 2016 in Geelong and was followed by more than 120,000 spectators. Once again Mapei was involved in the event in the role of "support partner". Cadel Evans visited the hospitality area where he chatted with the guests and signed numerous autographs.





#### Re Stelvio: a special relationship with Bormio

The special relationship that has bonded Mapei and the magnificent county of Bormio for a number of years was demonstrated yet again in 2016. In fact, it was an extraordinary day featuring the 2016 edition of the Mapei Re Stelvio event, with almost 3,000 participants in the four main races (two cycling and two running).

2,516 athletes were classified in the Fidal half-marathon, the amateur walking event,

the Re Stelvio classic race and in the Mapei cycle rally dedicated to Aldo Sassi, the neverforgotten Professor - and former Director and co-founder along with Giorgio Squinzi of the Mapei Sport Research Centre - and one of the active promoters and organisers of the very first Mapei Day, held twelve years ago, which brought together numerous athletes and guests of the company to spend two days together in the name of sport. Numerous friends and clients of Mapei took part again in this edition of Mapei Re Stelvio by registering through the Mapei website for this historic uphill challenge.

#### Khimik Female Volleyball Team - Ucraina

Mapei also supports sport in Ukraine by sponsoring the Khimik Female Volleyball team. Khimik won the All-Ukrainian tournament for the sixth time and, in 2017, will play in the European Champions League.

#### The Doha World Cycling Championships

The Road World Cycling Championships were held in October in Doha (Qatar) with Mapei as Main Sponsor. Mapei has a passion and a firm commitment to cycling which has been consolidated and demonstrated on numerous occasions over the years. Their commitment as sponsors comes from a shared belief in the same values, an intrinsic part of the Mapei Group DNA: effort, constant teamwork, care and attention for human resources and determination when faced with new challenges. Mapei's long-standing cycling tradition has never stopped and it is still with us today with even more commitment. After sponsoring the World Cycling Championships in 1999, with the time-trial event in Treviso and road races in Verona, since the World Championships held in Varese in 2008, every year Mapei has been a sponsor of the Road World Cycling Championships in collaboration with their subsidiary companies, thereby strengthening the Mapei brand at an international level and consolidating the bond between the company and all its numerous clients, friends and partners. The most recent editions were held in Copenhagen in 2011, in Limburg in 2012, in Florence in 2013, in Ponferrada in 2014, in Richmond in



2015 and, lastly, in Doha in 2016. As Main Sponsor of the UCI (the International Cycling Federation), the Mapei brand was once again highly visible in Doha with banners, backdrops, arches and general information materials. Also, close to the finishing line, the Hospitality Area provided a warm welcome to Mapei clients and also acted as a reference point for managers, VIPs, champions from the past and journalists. And yet again in Doha, the winners - Team Etixx-Quick Step in the men's time-trial, Italy's Elisa Balsamo in the women's junior race and the multi-champion Peter Sagan in the professional road race - were confirmation, along with the numerous other excellent results obtained by current and former Mapei team members, of the quality and excellence of the Mapei school.



# ocus on

Bologna

#### **CERSAIE AND SAIE**

# New adhesives and 5 collections for 50 new colours in the Coloured Grouts range

Mapei's booth was highly appreciated at CERSAIE 2016, the International Exhibition of Ceramic Tile and Bathroom held in September Furnishings Bologna (852 exhibitors from 43 different countries and more than 106,000 visitors). Transparency was highlighted in the "work in progress" sections: for Mapei, CERSAIE was the occasion to showcase their new Environmental Product Declarations (EPD) in compliance with ISO 14025 and EN 15804 standards, confirmation of the company's commitment to convey transparent, honest information. A commitment that Mapei promotes by implementing their own code of ethics, adopting respecting sustainable policies, listening to and dialoguing with their partners and, above all, offering products certified by impartial institutions and bodies.

CERSAIE 2016 was also the occasion to present the new range of colours in the Coloured Grouts range for ceramic tiles and stone material: 50 colours, as well as a transparent version of sealant, to meet all the requirements you are likely to encounter on site when installing tiles or the new, more complex materials, such as large-format, thin porcelain tiles.

The new range of colours, called "Set the Mood", is divided into 5 collections to help you create just the atmosphere you are looking for, both at home and in areas used on a daily basis: Serene, Traditional, Natural, Romance and Glamour.

The Coloured Grouts collections are available in different shades, from pastels to strong, trendy colours, a perfect match for today's modern tiles.

Anti-seismic measures and innovation





with a direct impact on new technologies and solutions were the themes that characterised the 52<sup>nd</sup> edition of SAIE 2016, held in October in Bologna. Mapei presented a series of panels to demonstrate their products, images from the most recent high-profile reference projects and display panels where visitors could actually see for themselves the effectiveness of the solutions employed. Numerous new products and solutions were on show for new builds and for renovating residential, public sector and industrial constructions.

From new solutions to counteract the effect of urban heatislands to solutions for the external thermal insulation of buildings and decorative, protective coatings for internal settings; from solutions specifically developed for waterproofing structures above and below ground level, to products to create seamless floors resistant to acid, wear and mechanical loads and stresses for commercial and industrial buildings.

#### Some of the new products from the main Mapei lines presented at the most important trade fairs

#### **Ceramic Line**

KERABOND PLUS - CERSAIE KERAFLEX EASY S1 - CERSAIE

#### **Resilient Line**

FLEXCOLOR 4 LVT - DOMOTEX PLANIPREP 4 LVT - DOMOTEX ULTRABOND ECO S1000 1K - DOMOTEX

#### **Wood Line**

ULTRACOAT HT SPORT - CERSAIE/SAIE ULTRACOAT REMOVER PLUS - CERSAIE/SAIE ULTRACOAT CLEANER - CERSAIE/SAIE ULTRACOAT POLISH MATT - CERSAIE/SAIE ULTRACOAT POLISH ANTI-SLIP - CERSAIE/SAIE MAPEI SPRAY MOP - CERSAIE/SAIE

#### **Sealants Line**

MAPEFLEX PU45 FT - SAIE MAPEFLEX PU70 SL - SAIE

#### **Building Products Line**

PLANITOP FINE FINISH - SAIE

#### **Masonry Repair Line**

MAPE-ANTIQUE ECOLASTIC - SAIE

#### **Finishing Products Line**

**DURSILITE GLOSS - SAIE** 

#### **Waterproofing Line**

MAPESLOPE - SAIE MAPEI WATERPROOFER - SAIE

#### **Admixtures Line**

COLOR PAVING ADMIX - CERSAIE/SAIE COLOR PAVING BINDER - CERSAIE/SAIE COLOR PAVING STONE - CERSAIE/SAIE COLOR PAVING PRONTO - CERSAIE/SAIE MAPECOLOR PIGMENT - CERSAIE/SAIE MAPEWASH PO - CERSAIE/SAIE MAPEWASH PW - CERSAIE/SAIE MAPEWASH PROTEX - CERSAIE/SAIE

#### **Marine Line**

MAPEDECK DESIGN - METSTRADE MAPEDECK TEAK DESIGN - METSTRADE MAPEDECK SOFT DESIGN - METSTRADE



#### Verona

#### Marmomacc: cutting-edge solutions

Mapei took part at Marmomacc, the international trade fair for the stone industry, with a 360 degree presentation which focused particularly on the Mapestone and Mapei Color Paving urban design systems and on the new Coloured

Grouts for ceramics and stone, as well as adhesives and complementary products for installing stone. The Mapestone System is a complete system for repairing, installing and grouting decorative stone road surfaces.

#### Bologna

#### ExpoTunnel: the importance of synergy



Mapei was a key exhibitor in October in Bologna at ExpoTunnel (the Underground and Major Projects Technology Exhibition) with a booth manned by engineers from the UTT (Underground Technology Team) to present their product systems: accelerants for shotcrete, products for mechanised drilling work, waterproofing products, injection and consolidation systems and products to repair, protect and finish concrete. The Group has proven its ability to operate on large, underground infrastructure projects thanks to its synergic cooperation with other key Italian and international players.





#### **Amsterdam** (Netherlands) Metstrade

In November Mapei took part for the first time at a trade fair dedicated to the marine industry, Metstrade in Amsterdam, with its Mapei Marine line. All Mapei's certified products and solutions for the shipbuilding industry, developed specifically for this area of use through a research process based on sustainability and care for man and the environment, were on display.



#### **Budapest (Hungary)** Construma

Construma, the most important trade fair for the Hungarian building industry, is a regular appointment on the events calendar for Mapei.

Apart from the excellent results obtained in terms of the number of visitors and contacts, the Mapei staff was extremely proud to receive the award for the "IN-NOVATIVE PRODUCT" of the year with Aquaflex Roof Plus.



#### Hannover (Germany)

#### Domotex: innovation and sustainability

With 1.441 exhibitors from 59 different countries and 45,000 expert visitors from more than 100 countries, the curtain came down in Hanover on the 19th of January last year on one of the most successful editions in the history of Domotex, the most important trade fair in the world for carpets and floor coverings. Constant attention to the design and creation of products which are safe for both mankind

and the environment was one of the strongest messages highlighted by Mapei at the trade fair. It is worth pointing that numerous Mapei products are certified EMICODE EC1 (very low emission level of volatile organic compounds), thereby complying with the requirements of various international systems on the evaluation of eco-sustainability.

# A brief overview



# Chicago (USA) Coverings: "suppliers of the year"

In April Mapei took part at Coverings in Chicago, the most important event for the North American ceramics industry, where they were named "Supplier of the Year" by the Ceramic Tile Distributors of America (CTDA). Mapei, in turn, presented an award to students from the School of Art Institute of Chicago for their ceramic and mosaic benches displayed at Coverings 2016. It was also the ideal occasion to present various products for the American market through its United States subsidiary, Mapei Corp. Particularly prominent was the new range of 40 colours for the Mapei grouts range, divided into 5 collections.



#### Las Vegas (USA) TISE and NAHB International Builders' Show

Last January Mapei, through its United States subsidiary Mapei Corp., took part in two events at the same time: The International Surfaces Event (TISE, which incorporated the trade fairs Surfaces, StonExpo/ Marmomacc Americas and TileExpo) and the NAHB International Builders' Show, all part of the third edition of "Design & Construction Week". The events were held from the 19th to the 22nd of January in Las Vegas and was attended by 10% more visitors than the 2015 edition. Managers and engineers from Mapei Corp. responsible for various product lines were on hand to demonstrate new and consolidated solutions for installing ceramics and stone material to visitors.

# Las Vegas (USA) World of Concrete: beyond all expectations

The figures for the 2016 edition of World of Concrete (WOC), the most important trade fair in the United States for the concrete industry and concrete technology, went beyond all expectations. From the 2<sup>nd</sup> to the 5<sup>th</sup> of February, 60,110 experts from the sector (there were 55,779 in 2015) were given the chance to see for themselves the best on offer from the 1,532 exhibitors over more than 69,000 m² at the Las Vegas Convention Center. It proved to be the most successful edition of the last seven years. Mapei Corp., Mapei's United States



subsidiary, was present again this year at the important appointment. A booth was set up in the South Hall where they could exhibit the effectiveness and reliability of various solutions, such as protective and decorative coatings.



#### San Francisco (USA) **World Tunneling** Congress

The annual congress about the design and execution of large underground projects, with participants from all around the world, was held this year in San Francisco, with Mapei acting as Gold Sponsor. The Group's UTT division presented its own line of accelerants for shotcrete, admixtures and products for drilling, waterproofing, injecting and consolidating to the international community participating at the congress.

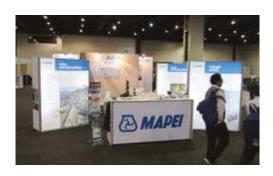
#### Panama Capac EXPO

Capac Expo Habitat is the most important trade fair for the construction and house-building sector in Panama: organised by CAPAC (the Construction Association), it registered more than 45,000 visitors. Mapei took part in the trade fair with a highly professional presentation to promote product lines for various applications and sectors, such as construction work, mortars and ceramics, sealants and waterproofing products.

#### Mexico City (Mexico) CIHAC

With a 60 m² booth, Mapei de Mexico made its debut at Cihac, the most important trade fair for the Mexican construction industry. For the Mapei engineers it was a chance to present the complete range of products for the building industry, with the support of practical demonstrations that proved to be a great success with the public.





colleagues, presented the line of concrete admixtures, waterproofing products and mortars and sealants for constructing new dams and repairing existing dams.

#### Johannesburg (South Africa) I-Cold

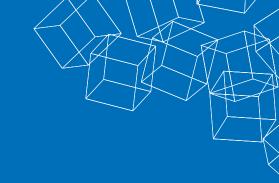
This travelling exhibition is organised by the International Dams Commission and, this year, was held in South Africa where Mapei took part as sponsor, as well as having its very own important booth. Italian engineers, with the help of their South African

#### Abu Dhabi (UAE) AICCE 21

Mapei took part in the 21st edition of the Arab International Cement Conference and Exhibition, which was held in November in Abu Dhabi, with their C-ADD (Cement Additives) division. The aim of Mapei's highly qualified Technical Services team for cement manufacturers is to help in the production of cement to provide improved performance characteristics and optimise production costs.



# MANAGEMENT REPORT







#### **Management Report**





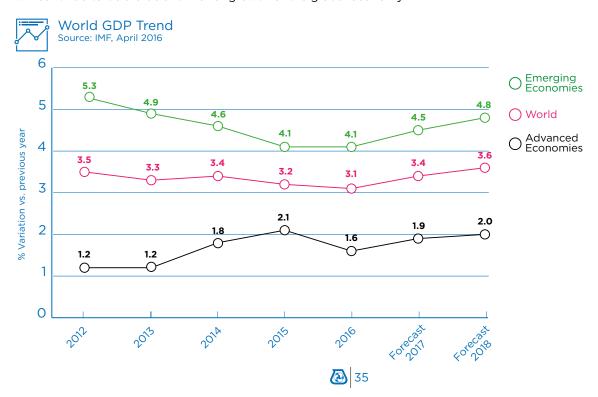
#### Report to the sole shareholder year ended December 31th, 2016

The consolidated financial statements of the Mapei Group as of December 31st, 2016, which we hereby submit for your approval, show a consolidated net profit of € 88.3 million, compared to a net profit of € 45.2 million in 2015, after amortisation/depreciation and impairment losses of € 93.4 million (€ 94.6 million in 2015).

The net profit of the Group is € 88.2 million (€ 45.6 million in 2015).

#### Global economic trends

In 2016, the growth of the global economy stood at 3.1%, registering a slight slowdown compared to the previous year, in which global GDP increased by 3.2%. In developed countries, real economic growth was 1.6%, while the increase reached 4.1% in emerging economies. As shown in the graph, years between 2012 and 2015, recorded a realignment of growth rates in both emerging and mature economies. On contrary, the gap between the growth rates of the 2 groups of countries started to grow again in 2016. The increase in GDP in emerging markets remained constant, while there was a clear deterioration in the economic situation in advanced countries. The International Monetary Fund believes that, over the next two years, the gap between the growth rates in both mature and emerging markets will continue to widen, and the latter group of countries will continue to be a crucial driver of growth of the global economy.



The year 2016 was characterised by a moderate increase in the economy of Western Europe, where GDP recorded growth of 1.6%. As regards the main countries in the region, the biggest growth was recorded by Spain, where the variation in GDP stood at 3.2%. The economic situation was also positive in the UK in 2016, which closed with an increase of 2%. Last year, the German economy recorded a growth aligned with the continental average, growing by 1.7%. GDP growth was modest in France, sitting at 1.3%. Italy recorded the lowest economic growth from all the major economies in the region; where, GDP rose by 0.9%.

During 2016, Eastern Europe recorded a significant improvement in the economic situation compared to 2015, which closed with substantial stagnation in GDP. In fact, the economy of the region increased by more than 1%.

As regards the other advanced economies, growth stood at 1.6% in the United States in 2016, recording a moderate decrease compared to the previous year, in which GDP had risen by 2.6%. On contrary, the economic situation improved in Canada, where 2016 closed with an increase of 1.3%, 0.9% higher than 2015.

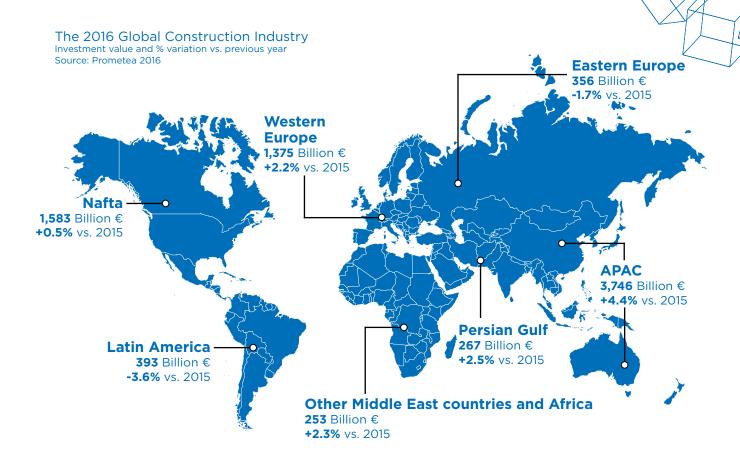
Amongs emerging markets, the highest economic growth rate was recorded in China, where GDP rose by 6.7% in 2016. Despite maintaining high rates of growth, the Chinese economy slowed in recent years, dropping from 7.4% in 2014, to 6.9% in 2015, down to 6.7% last year.

Based on the IMF figures, GDP in India rose by 6.6% in 2016. Also in this case, GDP growth rate recorded a slight downturn compared to 2015 results.

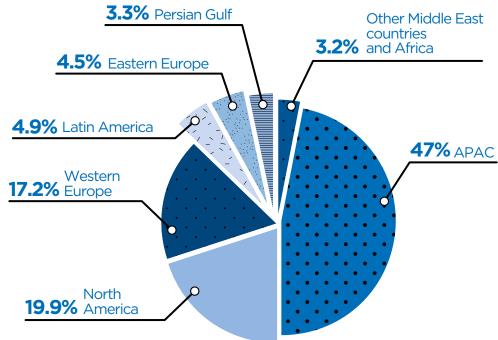
The economic crisis of the Latin America region had a negative impact on GDP trend, which in fact decreased by almost 2%. The economic result of the area was impacted by the drop in GDP in Brazil, in Argentina and the severe recession which hit Venezuela. The overall increase in GDP in Persian Gulf countries stood at 2.6%, compared to 2% of the previous year.

In 2016, in North Africa, the ongoing political crisis in Libya and the widespread instability in many countries in the region has adversely impacted the economic growth rate, which stood at 2.5% (a slight drop compared to 2015). In the Sub-Saharan region, 2016 recorded growth of 1.6%, significantly lower than 2015 (+3.4%).

In 2016, the world market value of building stood at almost € 8,000 billion, marking an increase of just over 2%, which is lower than the world economy. Last year, the trend in investments in construction was highly differentiated between the different regions. The following chart summarises the estimated size and trend in investments by geographic macro-areas.







# **Group economic trends**

Preliminarily, please take note that, 2016 Consolidated Financial Statements include, as in the two previous years, U.S. Sassuolo Calcio Srl and Mapei Stadium Srl on a line-by-line basis, in compliance with accounting standard OIC 17.

In order to perform a proper economic and financial analysis of the Group, which allows us to highlight the results of our core business, also in 2016 we have prepared a Mapei Group pro-forma Consolidated Profit & Loss Statement and Balance Sheet, in which U.S. Sassuolo Calcio Srl and Mapei Stadium Srl are evaluated by using the equity method.

For Groups consolidating a sport activity, non core business activities, it is a common practice to present pro-forma consolidated financial statements, which allow a more meaningful presentation of the prevalent activity which marks out the Group's "core business".

It should be also noted that, in 2016, the Italian accounting standards were amended and updated as part of the review process launched by the OIC (Italian Accounting Organisation), as a result of the acknowledgement into national law, of Directive 2013/34/EU (so-called "Accounting Directive"). For the purposes of a homogeneous comparison, the data relating to 2015 were re-stated according to the new accounting standards.

We have highlighted the standards in the Notes that were revised and the effects of their application.

The following table summarises the main Group financial indicators according to the Consolidated Financial Statements and the Pro-Forma report.

PROFIT & LOSS (m€)	2016	2016 P.F.	2015	2015 P.F.	DIFF.%	DIFF.% P.F.
REVENUES	2,282.1	2,232.0	2,179.7	2,144.5	4.7%	4.1%
EBITDA	267.9	258.5	223.1	226.0	20.1%	14.4%
% on revenues	11.7%	11.6%	10.2%	10.5%		
EBIT	165.8	174.9	111.7	132.0	48.4%	32.5%
% on revenues	7.3%	7.8%	5.1%	6.2%		
Profit before tax	142.9	138.4	114.4	111.7	24.9%	23.9%
% on revenues	6.3%	6.2%	5.2%	5.2%		
Net result	88.3	88.3	45.2	45.2	95.4%	95.4%
% on revenues	3.9%	4.0%	2.1%	2.1%		
BALANCE SHEET (m€)						
Net Invested Capital	1,084.8	1,046.8	1,052.8	1,042.1	3.0%	0.5%
Group shareholders' equity and minority interests	791.4	791.4	675.7	675.7	17.1%	17.1%
Financial position (Surplus)/Deficit	293.4	255.4	377.1	366.4	-22.2%	-30.3%
HEADCOUNT	8,636	8,493	8,098	7,983	6.6%	6.4%

All the comments, comparisons and economic ratios in this report on operations are analysed by comparing the 2016 pro-forma financial statements with the 2015 proforma financial statements.

In 2016, Mapei Group increased its pro-forma turnover by 4.1%, despite a negative exchange rate effect (excluding the exchange rate effect real growth of around 6%), with a growth in all geographic areas and in almost in all product lines. The consolidated pro-forma turnover is € 2,232.0 million, compared to € 2,144.5 million in 2015, with an increase of € 87.5 million. The profit for the year is € 88.3 million, compared to € 45.2 million in 2015, with an increase of 95.4%. We should consider that 2015 financial statements had been negatively impacted by the settlement of two ongoing disputes with the Italian Tax Authorities, concerning 10 financial years, as a result of a settlement agreement signed by Mapei Spa, whose cost net of the allocation, had amounted to around € 25 million, and was booked to the Profit and Loss Statement in 2015.

The growth in turnover was achieved primarily with internal growth, given that Mapei Perù Sac, consolidated for the first time, generated a modest contribution.

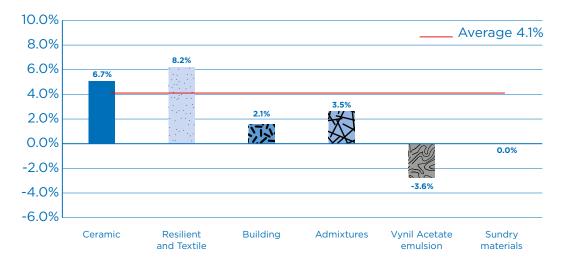
# **Report on Group operations**

Turnover in almost all the main product lines recorded growth over the previous year. Ceramic products rose by 6.7%, flooring adhesives, resilient and textile coverings by 8.2%, building products by 2.1% and concrete and cement admixtures by 3.5%. Solely vinyl acetate resins, despite growth in volumes, registered a decrease of 3.6%, due to a raw material price decrease which generated a reduction in sale prices. The sundry materials remained unchanged.

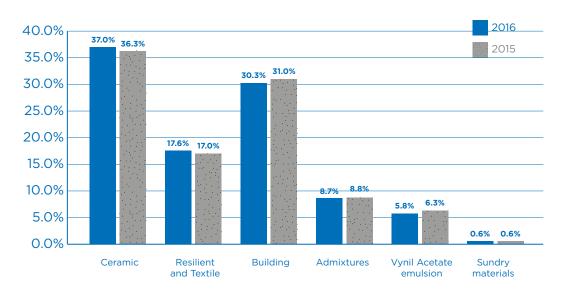
The chart below shows the trend in selling lines in 2016:



#### % increase in selling lines in 2016



The chart below highlights the weight of each single selling line in 2016, in comparison with the prior year: the importance of the ceramic and resilient and textile coverings lines increase, while the building, admixtures and vinyl acetate resins lines show an opposite trend.



The geographic areas that recorded an increase in turnover are Oceania, the Americas, Western Europe and Asia. Africa, Italy and Eastern Europe registered an opposite trend. The chart below shows the percentage change in the various areas compared to the previous year:

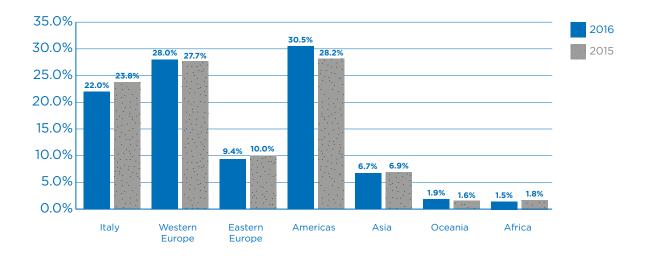
#### % increase in the macro-areas in 2016 compared to 2015



The table below summarises the turnover of the 2016 Group pro-forma financial statements, split by macro-areas, with an indication of the increases or decreases compared to the previous year and the incidence of each single area on total sales:

	2016	2015	% increase	% incidence
Italy	490.9	510.4	-3.8	22.0
Western Europe	625.7	595.1	5.2	28.0
Eastern Europe	209.1	214.1	-2.3	9.4
Americas	679.7	604.6	12.4	30.5
Asia	150.1	148.7	1.0	6.7
Oceania	41.3	34.0	21.5	1.9
Africa	35.2	37.6	- 6.4	1.5
TOTAL	2,232.0	2,144.5	4.1	100.0

The incidence by geographical area on total Group turnover changed significantly. The main area is the Americas, which accounted for 30.5% of the total, followed by Western Europe (28.0%) and Italy (22.0%).



The Mapei Group is made up of 81 operating companies. It is present in five continents with 46 manufacturing companies in 71 plants, each one equipped with a quality control laboratory, 27 trading companies, 8 services companies and 28 R&D labs. We will now analyse Group company sales and profitability results in the macro areas in which we are present, together with some highlights related to the economy of the area, with a special focus on the building industry sector.



#### **Group Companies:**

Adesital Spa

Cercol Spa

Mapei Spa

Mapei Stadium Srl (\*)

Mosaico+ Srl

Polyglass Spa

Progetto Mosaico+ Srl

U.S. Sassuolo Calcio Srl (\*)

Vaga Srl

Vinavil Spa

(\*) Companies excluded from the pro-forma financial statements

# Italy

Turnover in the Italian area of our Group fell slightly. In fact, we recorded a drop from € 510.4 million in 2015, to € 490.9 million in 2016, with a decrease of 3.8%.

Our Group is present in Italy with 10 companies: 6 manufacturing companies with 8 plants, 2 trading companies and 2 services companies. 5 R&D labs are also located in Italy.

The profitability of the area is stable, given that healthy profits recorded by Vinavil Spa and Cercol Spa absorb the losses of Adesital Spa, Mosaico+ Srl and Polyglass Spa. In particular the negative results of the latter two companies were due to the sales volumes recorded which have not allowed to reach the break-even position. In terms of turnover, the best performances in this area were obtained by Adesital Spa (+9.6%) and Vaga Srl (+3.6%).

In 2016, Italian GDP recorded a growth of 0.9%. Therefore, the growth rate improved slightly from +0.7% in the previous year. Once again, the Italian growth rate was the lowest among the major economies of the European Union, which, on the whole, registered growth of 1.9% (1.7% for countries in the Euro Area). Last year was characterised by a slight decrease in the unemployment rate, which stood at 11.7%.

Growth in the Italian economy should remain unchanged in 2017 and, in fact, is estimated to grow by 0.9%. The current year should be characterised by a net improvement in the inflation rate (1.4%); this is a common factor in all EU countries. No significant improvements are forecasted in the labour market in 2017, and the percentage of unemployed should drop by just 0.1%, against a reduction in the expected unemployment rate of 0.4% for countries in the European Union.

Last year, the Italian building industry recorded low growth. The estimates for investment growth rates vary depending on the source, but it is believed that building output may have grown by around 1%. Therefore, in 2016, the building segment recorded a performance in line with the one registered by the economy as a whole.

# Western Europe

This area recorded a good increase in turnover, up from € 595.1 million in the previous year to € 625.7 million in 2016, with an increase of 5.1%.

Western Europe is the area with the highest number of companies in our Group, with some 22. There are 12 manufacturing companies with 16 plants, 7 trading companies and 3 services companies. In this area we also have 7 R&D labs.

This area maintained excellent profitability as usual, up by approximately 9% compared to the previous year. The excellent economic results achieved by Mapei Suisse Sa, Sopro Bauchemie Gmbh (D) and Mapei Uk Ltd stand out. In terms of turnover, the companies that recorded the best performances in 2016 were Mapei Nederland Bv (+19.2%), Mapei Denmark As (+19.1%), Sopro Nederland Bv (+14.3%) and Mapei Spain Sa (+12.4%).

Last year, Euro area economies recorded modest growth, estimated at 1.6%, slightly decreasing from 2015, which closed with GDP growth of 1.9%. Compared to the other main advanced economies, in this region growth was in line with the United States, while it remained higher compared to Canada.

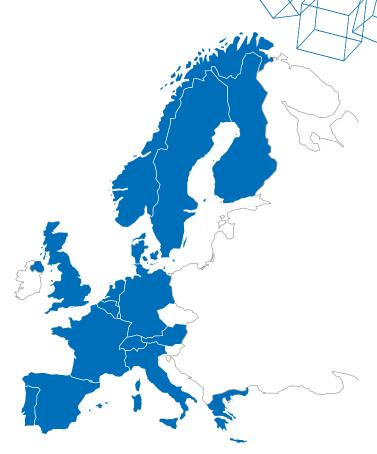
In Germany, in 2016, the economy is estimated to have grown by 1.7%, an higher increase than the previous year and which should remain constant in 2017 too.

French GDP recorded moderate growth last year, estimated at 1.3%, unchanged with respect to 2015. Also in this case, economic growth in 2017 should not change significantly with respect to the previous year.

Among the main economies in Western Europe, Spain recorded the highest growth rate: in fact, GDP rose by 3.2%, replicating the growth of the previous year.

Despite the risks connected with Brexit, the economic situation was positive in the UK in 2016, and GDP saw an increase of 2%, slightly below 2015 (+2.2%). Growth of 1.5% is estimated for the UK economy in 2017, which should therefore be in line with the Western European average.

In 2016, the value of the building market in Western Europe recorded total growth of 2.2%. Development in the building sector was therefore clearly above the general economic growth reported in the area.



Lusomapei Sa
--------------

Mapefin Austria Gmbh

Mapefin Deutschland Gmbh

Mapei Ab

Mapei As

Mapei Benelux Sa

Mapei Denmark As

Mapei France Sa

Mapei Gmbh (A)

Mapei Gmbh (D)

Mapei Hellas Sa

Mapei Nederland Bv

Mapei Oy

Mapei Spain Sa

Mapei Suisse Sa

Mapei UK Ltd

Polyglass Gb Ltd

Rasco Bitumentecknik Gmbh

Resconsult As

Sopro Bauchemie Gmbh (A)

Sopro Bauchemie Gmbh (D)

Sopro Nederland Bv



Group	Com	panies:
CICUP	COIII	Pullic3.

Gorka Cement Spzoo

Mapei Bulgaria Eood

Mapei Croatia Doo

Mapei Doo

Mapei Kft

Mapei Polska Spzoo

Mapei Romania Srl

Mapei Sk Sro

Mapei Srb Doo

Mapei Sro

Mapei Ukraina Llc

Mapei Yapi Kimyasallari Ins.San. Ve Tic. As

Mosaico Plus Ukraine Llc

Sopro Hungaria Kft

Sopro Polska Spzoo

Zao Mapei

# **Eastern Europe**

Mapei is present in Eastern Europe with 16 companies: 7 manufacturing companies with 10 plants and 9 trading companies. We also have a R&D lab in this area.

The turnover of this area decreased from € 214.1 million in 2015 to € 209.1 million during 2016, with a drop of 2.3%. This decrease is due primarily to the significant decrease in turnover of Mapei Yapi Kimyasallari Ins.San. Ve Tic.As due to the well-known local political problems.

The area's EBIT fell slightly, albeit remaining at good levels. Positive results were performed by Mapei Polska Spzoo, Gorka Cement Spzoo, Mapei Kft and Mapei Sro.

The companies with the greatest increase in turnover were Mapei Srb Doo (+47.4%), Mapei Romania Srl (+12.7%) and Mapei Ukraina Ltd (+12.6%).

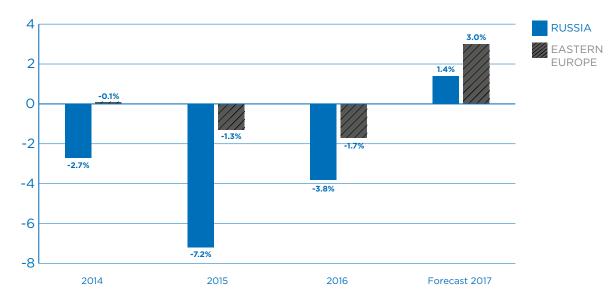
In 2016, the economy of this region recorded modest growth of 1.2%, following the stagnation of 2015. The improvement in the area's economy is due to the slowdown of the recession in Russia (which went from -3.8% in 2015 to -0.7% in 2016), the region's main market. As regards to the other major economies in the area, Poland, Turkey, Hungary and the Czech Republic recorded GDP growth rates of between 2% and 3%, while the Romanian economy registered growth of around 5%. Also in Ukraine, following years of serious crisis, GDP showed a recovery, increasing by 1.5%.

During the current year, the economic situation in Eastern Europe is expected to register a significant improvement, with growth estimated at 2.4%.

The general trend in the building market in Eastern Europe in 2016 was adversely impacted by the recession in Russian buildings. The graph shows the estimated changes for building investments in the Russian Federation and in the eastern region.



Construction investments trend in Russia and Eastern Europe - Variation % vs. previous year



During the last few years, the overall decrease in the area's market has been checked by the strong performance of countries in Central-Eastern Europe, which have seen a phase of expansion in investments, connected in particular with the infrastructure segment.

# **Americas**

The turnover recorded by our Group in the Americas exceeded  $\leqslant$  679.7 million, compared to  $\leqslant$  604.6 million in 2015, with an increase of 12.4%, despite the negative effect of the Euro/Dollar exchange rate.

We operate in the area with 15 companies: 9 manufacturing companies with 26 plants, 3 trading companies and 3 services companies. 8 are the R&D labs operating in the area.

The significant increase in sales helped boost the profitability of the area, which is now heading to the top position in our Group. This effect was generated predominantly by Mapei Corp and by Polyglass Usa Inc..

The companies with the biggest increase in turnover in this area were Mapei Mexico Sa de Cv (+37.8%), Mapei Brasil Constr.Mat. Ltda (+33.4%) and Mapei Corp (+15.2%). In 2016, the GDP growth rate in the US decreased, sitting at +1.6%, compared to +2.6% in the previous year. The US economy was adversely impacted, in particular, by the weakness of investments. Increased income and employment, by contrast, continued to support vigorous house-



#### **Group Companies:**

4307721 Canada Inc

General Resource Technology Corp

Mapei Argentina Sa

Mapei Brasil Construction Materials Ltda

Mapei Caribe Inc

Mapei Contruction Chemicals Panama Sa

Mapei Corp

Mapei Costa Rica Sa

Mapei East Corp

Mapei Inc

Mapei Mexico Sa de Cv

Mapei Perù Sac

Mapei Venezuela Ca

Polyglass Usa Inc

Vinavil Americas Inc

hold spending. The slowdown in US GDP is only believed to be temporary, and the economy will start to grow again in 2017 by more than 2%, and therefore at higher rates than those of other advanced economies.

In 2016, in Canada, the economic growth rate was +1.3%, strengthening with respect to 2015, when growth stayed under 1%. As in the United States, a significant increase is expected in 2017, when GDP should grow by 2%.

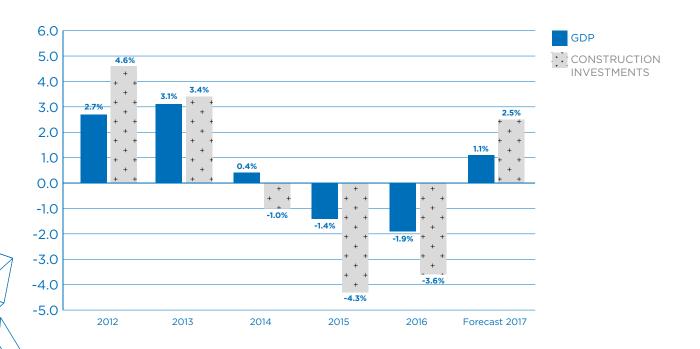
Mexican GDP growth is closely related to the economic situation in the US, and therefore, in 2016, Mexico also recorded a slowdown in the economic growth rate, sitting at +2.2%, compared to +2.6% in the previous year. Another slight slowdown is expected in the current year.

In South America, GDP recorded the worst performance at global level last year, suffering an estimated contraction of almost 2%. The area was negatively impacted by the severe recession in the Brazilian economy, whose GDP fell by 3.5%. As regards the main economies in the region, Venezuela (which is suffering from political and social instability) reported one of the worst recessions at global level, with the International Monetary Fund putting the drop in GDP at 10%. In 2016, the Argentinean economy also faced a recession, with GDP down 2.3%. The growth in GDP in other markets, such as Colombia, Chile and Peru, could only check the overall recession in economic activity in Latin America.

The graph below summarises the trend in building investments in Latin America and the comparison with the GDP changes:



GDP and construction investments trend in Latin America - Variation % vs. previous year



### **Asia**

Following years of double-digit increases, this area registered moderate growth of 0.9%, moving from € 148.7 million in 2015 to € 150.1 million this year.

We are present with 12 companies: 7 manufacturing companies with 8 plants and 5 trading companies. In this area we have 6 R&D labs.

The profitability of this region stayed at good levels, thanks to the excellent results of Mapei Constr. Chemicals Llc, Mapei Malaysia Sdn Bhd and Mapei Far East Pte Ltd. The best results in Asia in terms of sales were obtained by Mapei Korea Ltd (+47.4%) Mapei Malaysia Sdn Bhd (+16.1%) and Mapei Constr. Products India Ltd (+14.3%). In 2016, emerging Asian economies were the main drivers of global GDP growth, posting an increase the International Monetary Fund estimates at 6.3%. The rate of economic growth in these countries, albeit high, slowed down with respect to 2015, which had closed with growth of 6.7%.

In 2016, the rate of increase in Chinese GDP stood at 6.7%, slightly below 2015 (+6.9%). The slowdown in economic growth was more evident in India, a country in which the GDP rose by 6.6%, compared to 7.6% in the previous year.

The economies in Malaysia and Vietnam recorded a slight downturn in 2016, countries characterised, by significant growth of +4.2% and +6.0% respectively.

In 2016, in the Middle East, Saudi Arabia, the principal economy in the area, suffered the fall of the oil price. In fact, the GDP growth rate was equal to 1.4%, well below the 4.0% recorded in 2015. By contrast, the slowdown in the economy in the UAE was lower, in which GDP growth fell from 3.8% in 2015 to an estimated 2.3% last year.



#### **Group Companies:**

Mapei China Ltd

Mapei Constr. Chemical Llc

Mapei Construction Materials Company Ltd (Guangzhou)

Mapei Construction Products India Ltd

Mapei Doha Llc

Mapei Far East Pte Ltd

Mapei Indonesia Construction Products Pt

Mapei Korea Ltd

Mapei Malaysia Sdn Bhd

Mapei Philippines Inc

Mapei Saudia Llc

Mapei Vietnam Ltd



#### **Group Companies:**

Mapei Australia Pty Ltd

Mapei New Zealand Ltd

### Oceania

We are present in Oceania with Mapei Australia Pty Ltd, a manufacturing company with a quality control laboratory and 1 R&D lab, and with the trading company Mapei New Zealand Ltd.

Turnover recorded a significant increase of 21.5%, the best area increase in our Group, reaching € 41.3 million, compared to € 34.0 million in 2015.

The profitability of the two companies continues to stay at excellent levels, with an increase of 65% compared to the previous year. Mapei Australia Pty Ltd recorded an increase of 24.3% in sales, while Mapei New Zealand Ltd registered an 8.6% increase.

In 2016, the Australian economy achieved estimated growth of 2.6%, an improved economic performance compared to 2015 (2.4%). Australia confirmed its position as one of the strongest economies at global level and, in the last few years, has never suffered a crisis, a phenomena which, by contrast, has severely impacted other advanced countries. The graph shows a comparison between the trend in Australian GDP and the GDP of advanced economies and the forecasts for 2017.



Australian's GDP trend compared to advanced economies' average GDP - Variation % vs. previous year

Source: IMF and European Commission, January 2017



In New Zealand, the other main market in the area, the GDP growth rate in 2016 was 2.8%, compared to an increase of 3.0% in 2015. As with Australia, the New Zealand economy is coming from a very long expansionary phase.

### **Africa**

Turnover in this area fell slightly, from € 37.6 million in 2015 to € 35.2 million this year, marking a decrease of 6.4%, essentially due to political problems in the area.

We are present in the African continent with two manufacturing companies and 2 plants. The first, Vinavil Egypt for Chemicals Sae, produces vinyl acetate resins, and trades throughout the area of North Africa and the Middle East. The second, Mapei South Africa Pty Ltd produces chemicals for the construction industry and trades in South Africa and the neighbour countries.

Profitability in Africa highlighted two different trends: Vinavil Egypt for Chemicals Sae performed extremely well, while Mapei South Africa Pty Ltd did not perform as well. In terms of turnover, the two companies recorded a slowdown: Vinavil Egypt for Chemicals Sae closed the year with a decrease of 5.7%, due exclusively to the devaluation of the Egyptian Lira, while Mapei South Africa Pty Ltd recorded a drop of 10.4%.

In 2016, the overall variation in GDP in North Africa was estimated at 2.5%. The main economies in the region recorded different trends. Egypt and Algeria achieved an estimated economic growth rate of around 4%. The estimates for 2017 point to an improvement in the macroeconomic situation, which could return to growth of 4.0%. Economic growth in Sub-Saharan Africa in 2016 stood at 1.6%, marking a significant slowdown compared to 2015, which had closed with a 3.4% increase in GDP.



#### **Group Companies:**

Mapei South Africa Pty Ltd

Vinavil Egypt for Chemicals Sae

# Disclosure according to Article 2428 of the Italian Civil Code and Legislative Decree no. 32/2007

In order to better describe our Group performance trend, the table below shows the values of the financial statements as at December 31st, 2016, those of the pro-forma financial statements as at the same date, compared with the correspondent data as at December 31st, 2015, through a reclassified Balance Sheet by functional areas and a Profit & Loss Statement by relevant management criterion:

RECLASSIFIED BALANCE SHEET AS AT DECEMBER 31 <sup>ST</sup>	2016	2016 PF	2015	2015 PF
NET FIVED ASSETS				
NET FIXED ASSETS	107.5	F7.0	106.8	Г 4 7
Intangible assets	107.5	53.8		54.3
Tangible assets	550.0	539.0	525.2	515.5
Financial assets  Total	4.0 <b>661.5</b>	27.1 <b>619.9</b>	3.4 <b>635.4</b>	19.6 <b>589.4</b>
lotai	001.3	013.3	033.4	303.4
NET WORKING CAPITAL				
Inventory	295.0	295.0	279.6	279.6
Trade receivable	586.2	543.7	571.6	549.4
Other current assets	10.0	7.0	9.0	6.2
Trade Payables	-380.7	-339.7	-361.4	-308.1
Other current liabilities	-14.0	-6.4	-11.1	-4.6
Total	496.5	499.6	487.7	522.5
SUNDRY RISK PROVISION AND STAFF SEVERANCE FUND				
Sundry risks provisions	-61.9	-62.0	-58.9	-58.9
Staff Severance Fund	-11.3	-10.7	-11.4	-10.9
Total	-73.2	-72.7	-70.3	-69.8
NET INVESTED CAPITAL (NIC)	1,084.8	1,046.8	1,052.8	1,042.1
NET FINANCIAL POSITION				
Cash and cash equivalent	-173.7	-172.7	-87.5	-86.6
Short-term borrowings	110.2	88.7	192.5	185.9
Medium/long-term borrowings	356.9	339.4	272.1	267.1
Total	293.4	255.4	377.1	366.4
SHAREHOLDERS' EQUITY	791.4	791.4	675.7	675.7
TOTAL SOURCES OF FINANCING	1,084.8	1,046.8	1,052.8	1,042.1

A comparison of the reclassified pro-forma Balance Sheets for 2016 and 2015 shows a significant improvement in the net financial position from € 366.4 million in 2015 to € 255.4 million as of December 31st, 2016, mainly due to profitability increase of our Group.

In particular, medium/long-term borrowings rose from € 267.1 million to € 339.4 million, due to the new agreements signed under particularly advantageous conditions. Short-term borrowings fell consequently from € 185.9 million to € 88.7 million, due also to the repayment of the bond at maturity. Lastly, cash on hand and banks rose from € 86.6 million to € 172.7 million, owing to temporary bank funds.

All items are further detailed in the Notes to the Financial Statements.

RECLASSIFIED PROFIT AND LOSS AS AT DECEMBER 31 <sup>ST</sup>	2016	2016 PF	2015	2015 PF
Revenues	2,282.1	2,232.0	2,179.7	2,144.5
Internal production	8.9	8.9	7.0	7.0
VALUE OF PRODUCTION	2,291.0	2,240.9	2,186.7	2,151.5
External operating costs	-1,489.6	-1,499.3	-1,468.4	-1,479.8
GROSS MARGIN	801.4	741.6	718.3	671.7
Personnel costs	-533.5	-483.1	-495.2	-445.7
EBITDA	267.9	258.5	223.1	226.0
Amortisation/depreciation and provisions	-102.1	-83.6	-111.5	-94.0
EBIT	165.8	174.9	111.6	132.0
Other revenues/costs	-2.5	-20.6	8.1	-15.0
Financial Income	0.8	1.3	0.7	1.0
ADJUSTED EBIT	164.1	155.6	120.4	118.0
Extraordinary items	-	-	1	-
EBIT WITH FINANCIAL INCOME	164.1	155.6	120.4	118.0
Financial expenses	-21.2	-17.2	-6.1	-6.3
PROFIT BEFORE TAX	142.9	138.4	114.3	111.7
Income taxes	-54.6	-50.1	-69.1	-66.5
NET RESULT	88.3	88.3	45.2	45.2

# **Financial ratios**

We hereby report some financial ratios generally accepted and used to assess a company performance and ability to pay back its liabilities. The ratios are determined on the basis of the values disclosed in the pro-forma financial statements, since representative of the Group core business, and compare the results for the year with the results of the previous year.

a) Capital ratios	2016	2015
Equity to Fixed Assets ratio		
(Equity/Fixed assets)	1.28	1.15

The increase in this ratio is attributable to the improved Equity Balance in our Group. Shareholders' Equity is more than sufficient to finance fixed assets.

<u>Fixed Assets Coverage</u>		
[(Equity + Consolidated liabilities) / Fixed assets]	1.94	1.72

This ratio shows fixed assets coverage in relation to Shareholders' Equity and medium/long-term borrowings.

b) Leverage ratios	2016	2015
Total debt-equity ratio		
[(Consolidated liabilities + Current liabilities) / Equity]	1.07	1.24
Financial debt-equity ratio		
(Net financial position / Equity)	0.32	0.54

These two ratios highlight the improvement in the Net Financial Position when compared to the increase in Shareholders' Equity.

c) Profitability ratios	2016	2015
Net ROE		
(Net profit/Equity)	11.2%	6.7%
Gross ROE		
(Profit before tax/Equity)	17.5%	16.5%

Both ratios highlight the substantial improvement in Group profitability.

ROI		
[EBIT/(NIC - Operating liabilities)]	16.0%	13.1%
ROS		
(EBIT/Revenues)	7.8%	6.2%

These two ratios also highlight the notable improvement in the Group operating results.

d) Liquidity ratios	2016	2015
<u>Current ratio</u>		
(Current assets/Current liabilities)	2.34	1.85

Quick ratio		
[(Trade and other receivables + Cash		
and cash equivalents) / Current liabilities]	1.66	1.29

The improvement in these two ratios highlights the considerable increase in cash on hand and banks and the reduction in short-term debt.

# **Capital Expenditure**

In 2016, the capital expenditure has been approximately  $\in$  80.1 million. Here below the investments by geographical area.

In Italy, main investments refer to:

- Mapei Spa, which invested € 5.7 million primarily for the purchase of two buildings in Latina and for the expansion of the Mediglia and Sassuolo sites.
- Vinavil Spa, which invested € 4.0 million mainly in initiatives to rationalise and improve the Ravenna production site, to enhance a line at the Villadossola site and for safety regulation adjustment works.
- Polyglass Spa, around € 2.2 million for the purchase of an industrial building neighbouring the Ponte di Piave facility, as well as for the completion of bituminous production line.

In Western Europe, the following investments should be noted:

 Mapei As invested € 1.6 million, essentially for the renovation and extraordinary maintenance of both Sagstua facilities and buildings.

In Eastern Europe, we note the following:

- Mapei Polska Spzoo invested approximately € 2.0 million, mainly related to the extraordinary maintenance and the purchase of equipment at the production site in Barcin, as well as for the extension of the liquids plant and the purchase of equipment for the Gliwice site.
- Zao Mapei invested around € 3.0 million, mainly for the purchase of assets from the company Baumit in the Kikerino Saint Petersburg area.
- Mapei Yapi Kimyasallari Ins San Ve Tic Asha made investments of € 1.2 million to extend the Polatli production site.

The most relevant production investments in the Americas were made by:

- Mapei Corp, € 16.0 million for a new powder plant in Dalton, the purchase of a land in Virginia, the construction of a new production site in New Jersey, the renovation and extraordinary maintenance of the plant in Chicago and the extension of the warehouse in Garland.
- Mapei Mexico Sa de Cv, € 2.1 million for the purchase of assets from the company Texzim relating to the Zimapan and Cancun production sites.



- General Resource Technology Corp, € 1.0 million primarily for the improvement of the Garland and Logan production sites.
- Polyglass USA Inc, € 9.7 million primarily for the construction of the new production site in Waco, the extraordinary maintenance of the Winter Haven plant and the purchase of equipment for the Hazleton plant.
- Mapei Argentina Sa invested € 1.3 million for the renovation of the Buenos Aires production site.

In Asia, main investments refer to:

- Mapei Malaysia Sdn Bhd, € 3.1 million, mainly for the purchase of a land in the Johor area
- Mapei Construction Products India Ltd for € 2.3 million, primarily for the new production site in Vadodara (Gujarat).
- Mapei Constr.Chemicals Llc for € 1.8 million for the renovation of the production site and the extension of both the warehouse and the offices in Dubai.

The main investments in Africa were made by:

- Mapei South Africa Pty Ltd, € 7.0 million for the purchase of a building and the renovation of offices in Johannesburg.
- Vinavil Egypt for Chemicals Sae, € 1.1 million for the purchase of a new acrylics plant.

The remaining  $\in$  15.0 million investments were made our subsidiaries involving a unitary amount of less than  $\in$  1.0 million, and refer mainly to the renovation and extraordinary maintenance of offices and production sites.

Disposals for the year amount to  $\in$  1.0 million, net of accumulated depreciation, and refer to Buildings, Plant & Machinery, Equipment and Other Assets of various companies, for assets which are no longer used in the production processes.

The capital expenditure value as at December 31st, 2016 is also affected by exchange rate effect, reporting an increase of € 8.5 million mainly referred to the revaluation of the US Dollar, the Canadian Dollar, the Norwegian Krone and the Russian Ruble, net of the devaluation of the British Pound Sterling and the Egyptian Lira.

# **Research & Development**

Research, scientific development and technological progress help to generate new prospects of well-being and have significant impacts on the entire society.

Mapei, which bases its corporate mission statement on these pillars, by offering the most innovative products for the building industry, is aware that improvements cannot be made in this domain unless it constantly raises the bar for innovation just a little higher.

Only by doing this, it is possible to supply products with high technology content, with an excellent quality-price ratio. Particular attention is given to sales and technical assistance services at global level, characterized by innovative solutions and skilled assistance to satisfy all project requirements.

With this in mind, all our laboratories, which are equipped with cutting-edge tools, work in close synergy with one another and constantly collaborate with universities and scientific and industrial research institutes.

In order to cater increasingly better for customers' needs and make the interaction with local markets immediate, in 2016 the number of laboratories in which our Group performs Research and Development activities, coordinated and managed by the Central Laboratory of Milan, rose from 18 to 28.

Their locations are summarised below:

#### In Italy:

- Milan (Mapei Spa)
- Villadossola (Vinavil Spa)
- Ponte di Piave (Polyglass Spa)
- Fiorano Modenese (Adesital Spa)
- Sassuolo (Cercol Spa)

#### In Western Europe:

- Sagstua (Mapei As)
- Saint Alban (Mapei France Sa)
- Traismauer (Mapei Gmbh-A)
- Wiesbaden (Sopro Gmbh-D)
- Feldbach (Sopro Gmbh-A)
- Sorens (Mapei Suisse Sa)
- Augustdorf (Rasco Bitumentechnik Gmbh)

#### In Eastern Europe:

• Tzerbinia (Gorka Cement Spzoo)

#### In the Americas:

- Deerfield Beach (Mapei Corp)
- Dalton (Mapei Corp)
- West Chicago (Mapei Corp)
- Winter Haven (Polyglass Usa Inc)
- Laval (Mapei Inc)
- Eagan (Grt Inc)
- Zimapan (Mapei de Mexico Sa de Cv)
- Buenos Aires (Mapei Argentina Sa)

#### In Asia:

- Dubai (Mapei Constr.Chemicals Llc)
- Nilai (Mapei Malaysia Sdn Bhd)
- Canton (Mapei Constr.Mat.Co. Ltd)
- Baroda (Mapei Constr.Products India Ltd)
- Singapore (Mapei Far East Pte Ltd)
- Jicheon (Mapei Korea Ltd)

#### In Oceania:

Brisbane (Mapei Australia Pty Ltd).

Our primary commitment in terms of research is targeted at the sustainable development of products and industrial processes. All our materials are designed to reduce energy consumption and the emission of volatile organic substances, are safe for the environment, for production personnel, applicators and end users.



# Environment, health and safety

The monitoring of performance indicators for accidents recorded at Group sites (accident frequency rate and accident severity rate) continued in 2016 too; these indicators were collected from roughly 80 plants and warehouses worldwide.

At national level, a falling trend in the accident frequency rate was confirmed, which is in line with that of the entire chemical sector.

Also for European areas, the frequency rate recorded a downward trend for the threeyear period under observation.

A new version of regulation UNI EN ISO 14001 governing environmental management systems was published in 2015; the regulation will become effective in September 2018. Therefore, Group sites wherean environmental management system is implemented compliant with the previous revision (and still in force) of the aforementioned regulation, moved to identify the necessary process of adjustment in 2016.

As part of the plan to implement an Organisational Model compliant with the requirements of Legislative Decree 231/01, also extended to Italian sister companies, 2016 saw the completion of the implementation process for Adesital Spa and for Polyglass Spa, and the start of implementation of the Model for the other subsidiaries (Vinavil Spa, Cercol Spa). In 2016, these companies completed the Gap Analysis related to safety and environmental aspects; through this activity we could measure the level of compliance to the requirements of the Organisational Model. The work done also highlighted that certifications of environmental management systems (UNI EN ISO 14001) and/or safety management systems (BS OHSAS 18001) are an extremely important tool to apply the principles of safety prevention and environmental protection.

The Corporate HSE department has been effective since June 2014. Since its formation, this department has identified the HSE performance indicators (such as accident rates, those connected to waste production, consumption of water and energy resources, training activities), and has organised their collection from all Italian sites through the preparation of a monthly report; the collection of solely safety indicators was also implemented for all other sites worldwide. The broadening of the collection of environmental and training indicators is also planned for these sites in 2017. In this way, it will be possible to further increase benchmarking activities between all Group companies.

# **Quality Management**

With reference to the growing awareness of Quality in terms of the durability of works, compliance with regulations, efficiency and effectiveness of processes within the building environment which Mapei's products and services are intended for, we report a summary of the activities performed in 2016, grouped together into four areas.

#### 1) Coordination and development of quality management systems (SGQ)

With the support of the certification institute Certiquality, the programme of Gap Assessment of the SGQ with respect to the requirements of regulation UNI EN ISO 9001:2015 was implemented at the Parent Company and at some important Group companies, with the objective of identifying priority situations and actions for improvement.

Meetings were organised with managers, in order to share and plan a common approach for adjustment of the SGQ (Quality Management System), into line with the company objectives and the requirements of regulation UNI EN ISO 9001:2015, to be completed by 2018.

At the end of 2016, there were 40 Group companies certified according to the UNI EN ISO 9001 standard.

#### 2) Compliance with binding and voluntary product regulations

The company reorganised the management of certifications and of voluntary product markings, particularly the environmental ones (e.g. GEV, Blue Engel), of European companies, by centralising them at Mapei Spa, with the implementation of dedicated procedures.

The year 2016 saw the company obtain the international ICCS certification for carbon fibre-based products for structural reinforcement, which involves both Mapei Spa and the associated companies in the United States and Singapore.

#### 3) Handling of Customer reports

The implementation of the reporting system from the individual companies coordinated at corporate level continued. This involves a list of activities in support of the sales process, especially important in our sector, which involves the various company departments, with the goal of increasing customer loyalty and improving the company's image.

The software used to support the process (CMS) will be adopted almost by the whole Group by the end of 2017.

#### 4) Processes and supporting documentation

The Company Documentation Portal (Quality Area) was introduced, into which all the documentation related to Company Management Systems flows. This application, developed together with the IT department, enables company procedures and forms to be archived and researched more effectively, not only in situ but in any location in the world.

Activities continued which involved the updating and development of the documentation relating to Corporate processes, by incorporating, where relevant, the specific characteristics due to the implementation of the new Group ERP, Microsoft Dynamics AX. This activity required the involvement of various central departments.

# Information Technology

Parallel to the activities in support to the launch of Mapei Spa's new Microsoft Dynamics AX system, Mapei Core Model was completed during the year, in order to allow it to be used in the other companies of the Group with different production and/or business processes from the Parent Company.

In this area, with reference to the operating method implemented for Mapei Spa and, therefore, with the involvement of all Corporate Departments, a detailed plan was prepared to allow the application of the Mapei Core Model to all Italian associated companies.

Therefore, the analyses and functional modifications for the remaining Italian manufacturing companies in our Group were completed in 2016: Adesital Spa, Cercol Spa,

Polyglass Spa, Vaga Srl and Vinavil Spa went live with the new Microsoft Dynamix AX system from January 2017.

In view of the expected "go-lives" in 2017 and for the next few years, specific technical applications were created to support parallel start-up processes. Worth to be mentioned, the development of tools for facilitating and controlling the migration of data from old systems, and a "copy" system for making the initial set-up of the Mapei Core Model easier, aimed at automating the entire "go-live" plan. These systems have been developed on the basis of the experience gained over the last few years in the preparation and definitive deployment of Mapei Spa's Core Model.

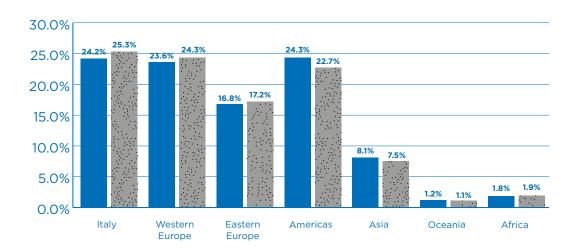
In the second half of 2017 and at the start of 2018, installations have already been planned in about fifteen of our Group companies.

# **Human resources**

Also in 2016, the Mapei Group invested strongly in Human resources. The overall increase in the headcount compared to the previous year was 6.4%, equal to 510 employees, focused in particular on the American and Asian regions.

	BLUE- COLLARS	WHITE- COLLARS AND DIRECTORS	TOTAL AS AT 12.31.16	TOTAL AS AT 12.31.15	INCREASE %
Italy	858	1,201	2,059	2,018	2.0
Western Europe	612	1,396	2,008	1,936	3.7
Eastern Europe	400	1,022	1,422	1,372	3.6
Americas	1,038	1,023	2,061	1,816	13.5
Asia	191	499	690	602	14.6
Oceania	16	82	98	90	8.9
Africa	102	53	155	149	4.0
TOTAL	3,217	5,276	8,493	7,983	6.4

The following chart compares the headcount percentage incidence by geographical macro-areas in the last two financial years:



Also this year, particular attention has been put on salary policies. In the Americas and in Asia, and not only, remuneration is becoming an increasingly strategic element in identifying adequate resources, in line with increasing expectations within the Group. Group policies, related to the management of MBO (Management By Objectives) systems and remuneration in general, are not only applied to local General Managers, but also to members of the Management Teams, in compliance with the local contexts. Therefore, we continue to pledge significant commitment to harmonising current incentive systems, to ensure we can offer some of the highest and most attractive total rewards.

Also in 2016, we continued to focus on the analysis of organizational structures and related operational processes, in order to facilitate key strategic decisions and the evolution of our business. Within the organisational set-up of subsidiaries, special attention was placed on the professional evolution of key positions and on the recruitment of highly experienced HR Managers.

Particular interest was dedicated to advanced tools for global training such as e-learning: the Group will be strongly committed to this activity in the next few years.

The entire Group continued to invest in international mobility projects, as an effective tool for nurturing talents within the organisation and strengthening Mapei culture and technological know-how. As a consequence, during the last years, we have not only increased expatriations to subsidiaries, but we have also enhanced inbound and training activities in our corporate structures.

Lastly, it should be noted that the activities of implementing and disseminating the Mapei Code of Ethics Group wide have continued all along 2016. In particular, a project of implementation has been activated and finalized in North America.

Finally, we feel committed to thank all Mapei employees and collaborators who, with their commitment and work, contribute to the success of our Group on a day-to-day basis.

# Risk management

The Group operates in the building sector and is subject to generic risks and factors of uncertainty typical of this sector. We have identified the main areas of risk, attempting to define the suitable tools to mitigate them.

#### Financial requirements and cash management risks

These risks are constantly monitored by the Corporate Treasury, in collaboration with the operating units of the individual companies, so that immediate action can be taken if necessary, with the objective of ensuring that the resource requirements of all subsidiaries are adequately managed.

At the reporting date, the main sources of financing of the Mapei Group were not only the use of cash flows generated by operations but short-term bank loans, medium and long-term bank loans, loans from non-banking European and global credit institutions, mainly issued by the Parent Company, which are used to support the development of our business. Some of these loans are subject to covenants. Any available cash is held temporarily in the bank current accounts in order to be immediately available.

In the Notes to the financial statements, paragraph "Payables due to banks", we have underlined the exposure to the financial system, broken down by company. We should also note that, as at the end of the financial year, the Group holds cash on hand and

banks amounting to € 172.7 million, as well as credit lines amounting to more than € 468 million, not drawn down but which can be used immediately if necessary, provided by leading credit institutions.

#### **Interest rates risks**

This is the risk resulting from any significant increase in financial charges on floating rate loans. We believe that in this period, this risk is fairly remote. For this reason, our Corporate Treasure decided to use mainly loans, both short and medium/long-term, at floating rates which enable us to obtain a lower cost of borrowing.

At the end of the year, Mapei Group had three derivative contracts in place, entered into with leading banks, aimed at reducing the risk of variations in interest rates. These hedging contracts are related to the utilisation of the short and medium-term credit lines. All financial income and expenses, charged or credited to banks, relating to these contracts, have been booked in the financial statements of the year. As at December  $31^{\text{st}}$ , 2016, the notional value of these contracts amounted to € 67.3 million, of which € 64.2 million pertaining to Mapei Spa and € 3.1 million to Polyglass Spa, compared to € 91.2 million at the end of the previous year.

#### **Currency fluctuations risks**

This risk is limited for our Group, because all our foreign companies, operating outside the Eurozone, benefit from a natural hedging, given that transactions are mostly carried out in the local currency of the legal entities that perform them and, therefore, are not impacted by currency fluctuations. For loans in foreign currency, our Corporate Treasury, together with the Financial Divisions of the companies, constantly monitor currency fluctuations in order to take prompt action if necessary.

#### **Credit management risks**

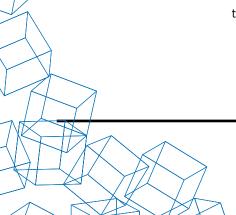
This risk is considered highly significant and is monitored through procedures implemented by all the Credit Managers of the Group companies, targeted at evaluating customer solvency through the granting of credit limits established on the basis of internal ratings. The maximum exposure to this risk is equal to the value of Trade receivables, as stated in the financial statements.

In this extremely difficult period on several markets, especially European ones, we have intensified our collaboration with companies specialised in the evaluation of credit in the building sector. With regard to this risk, nonetheless, the Group's business operations are considered to have a good credit quality.

It should also be noted that, by working with a high number of customers, our Group does not show significant credit positions which imply an excessive credit concentration.

#### **Environmental risks**

Our Group has particular attention to the protection of the environment and to workers' health and safety in workplaces, in compliance with all environmental and safety regulations. Group companies have departments dedicated to managing these issues. At Corporate level, the HSE (Health, Safety and Environment) department is operational, with the task of coordinating the operations of the individual companies.



#### **Legal litigation risks**

In 2011, Flag Spa, a subsidiary of the French group Soprema, a competitor of our company Polyglass Spa, initiated a legal action against Polyglass Spa and Mapei Spa, for the claimed violation of confidential information and fair competition principles related to the construction of the first synthetic membranes plant. The company S.A.T. Engineering di Francesco D'Ursi & C Sas subsequently attenned in the pending proceedings, in its role as holder with Flag Spa of an Italian invention patent related to a "heating system" allegedly similar to the one used in the plant involved in the proceedings, and part of the know-know whose protectability is being laid claim to.

The Court of Milan, with sentence of June 11th, 2015, rejected Flag Spa's claims against both Polyglass Spa and Mapei Spa and also the claims of the participants against the other parties, ordering Flag Spa to repay the legal costs. Both Flag Spa and S.A.T. Engineering di Francesco D'Ursi & C. Sas objected the decision and our companies crossappealed the costs of the proceedings, which were paid to a lower extent than due.

The Court have considered the appeals presented and, at the hearing on February 7<sup>th</sup>, 2017, with the conclusions having been clarified, the cause was adjourned for a decision, with the granting of the customary terms for filing a defence. The judgment should be issued in the next few months.

Although the level of uncertainty regarding these proceedings, we believe that no significant liabilities should emerge for the companies, at least not to the extent requested by the counterparty, which, nonetheless, cannot be quantified at present, considering that valid defensive arguments were presented in court and that the court-appointed expert did not ascertain any valid know-know pertaining to Flag Spa.

Some other legal disputes with counterparties of our companies are also monitored through our legal representatives. Where necessary, the appropriate insurance policy is taken out. In most other cases, based on experience gained over the years, we believe that no significant liabilities will be charged to our companies and, therefore, no provisions have been allocated to the financial statements.

# Transactions with subsidiaries, associated companies and related parties

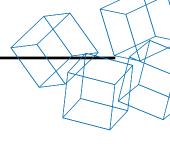
All shareholdings with subsidiaries and associated companies are described in the Notes to the Financial Statements.

There were no significant transactions with related parties.

# Transactions involving company shares or shares of controlling companies

Mapei Spa and the other subsidiaries and/or associated companies neither hold shares of the Parent Company nor, during the year, bought or sold any shares of said company. As at December 31st, 2016, subsidiaries and/or associated companies did not hold any shares of Mapei Spa.





The extraordinary shareholders' meeting of Mapei Spa of July 22<sup>nd</sup>, 2016 resolved the removal of 3,060,000 own shares in the portfolio, with the subsequent reduction in share capital from € 50,560,000 to € 47,500,000.

The same meeting, resolved a share capital increase of € 100,000,000 in the following form:

- for € 25,000,000 through the issuing of 25,000,000 new shares, with the full use of the reserve pursuant to Law 266/2005 (€ 13,550,399), and the partial use of the reserve pursuant to Law 2/2009 (€ 11,449,601);
- for € 27,500,000 in paid form through the issuing of 27,500,000 new shares offered under option to the sole shareholder Emme Esse Vi Srl.

Following the above-mentioned transactions, the share capital of Mapei Spa at year-end totalled € 100,000,000, represented by 100,000,000 shares, held by the sole shareholder Emme Esse Vi Srl.

# Significant events subsequent to the close of the financial year

In February, we acquired 100% of the shares of the Colombian company Productos Bronco Sa with registered office in Medellin. The company specialises in the production of waterproof products, sealants and finishes and occupies a prestigious spot in the market owing to the quality of its products. The company name was subsequently changed to Mapei Colombia Sas. This acquisition will enable us to strengthen our presence in the South American market.

No other significant events occurred after the close of the year, whose effects could require changes or additional comments with respect to our company's economic, equity and financial position as at December 31st, 2016.

# 2017 Business Outlook

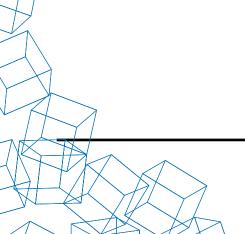
In the first four months of 2017, Group sales rose by 6.3% compared to the previous year. Our American companies (+14.4%) and Eastern European companies (+11.6%) recorded excellent performances.

Our Group has also performed reasonably well in terms of profitability. We believe that will be able to close the year with a result in line with 2016.

Milan, May 25th, 2017

Managing Director

Mr. Giorgio Squinzi





# BALANCE SHEET AND STATEMENT OF INCOME



# **BALANCE SHEET**

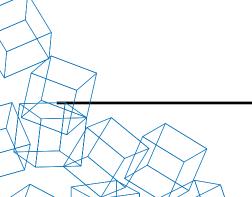
ASSETS	12.31.16	12.31.15	difference
B) Fixed Assets			-
I Intangible assets			
Establishment and broadening costs	0	335,948	(335,948)
3) Industrial patents	12,555,413	825,543	11,729,870
4) Government concessions, know-how, licenses, trade-marks and similar rights	3,945,290	3,896,611	48,679
5) Goodwill	27,841,810	32,584,211	(4,742,401)
Assets in progress and payments in advance	3,093,574	8,903,562	(5,809,988)
7) Other intangible assets	60,080,072	60,221,212	(141,140)
Total intangible assets	107,516,159	106,767,087	749,072
II Tangible assets			
1) Land and buildings	362,145,772	343,974,034	18,171,738
2) Plants and machinery	119,893,681	128,352,848	(8,459,167)
3) Industrial and commercial equipment	13,014,009	9,546,476	3,467,533
4) Other tangible assets	19,789,209	17,109,000	2,680,209
5) Assets in progress and payments in advance	35,117,508	26,268,638	8,848,870
Total tangible assets	549,960,179	525,250,996	24,709,183
III Financial assets	,,	, ,	, ,
1) Investments in:			
a) subsidiaries	221,053	90,779	130,274
d) other companies	256,945	256,828	117
2) Financial credits towards:			
d) others	2,204,668	1,781,991	422,677
3) Term securities	1,348,971	1,295,044	53,92
Total financial assets	4,031,637	3,424,642	606,995
Total B) Fixed Assets	661,507,975	635,442,725	26,065,250
C) Current Assets  I Inventories  1) Raw materials, packaging and supplies	133,653,413	127,466,193	6,187,220
Work in progress and semi-finished goods	11,123,199	12,188,371	(1,065,172)
Work in progress on a contract basis	889.178	102,444	786,734
Finished products and merchandise	149,346,197	139,404,118	9,942,079
5) Advances to suppliers	10,222	405.092	(394,870)
Total inventory	295,022,209	279,566,218	15,455,99
II Receivables		2,0,000,2.0	10, 100,00
Trade receivables (net of allowance for doubtful credits)	469,004,337	458,583,444	10,420,893
5 bis) Receivables towards tax offices	34,225,968	28,687,268	5,538,700
5 ter) Deferred tax assets	25,505,237	24,503,955	1,001,282
5 quater) Other receivables	57,496,377	59,798,278	(2,301,901
Total receivables	586,231,919	571,572,945	14,658,974
III Other current assets		, , ,	
6) Marketable securities	6,755	6,424	33
Total other current assets	6,755	6,424	33
IV Cash on hand and banks	,	,	
1) Bank & postal current accounts	171,299,572	83,367,186	87,932,386
3) Cash	2,373,156	4,142,316	(1,769,160)
Total cash & bank	173,672,728	87,509,502	86,163,226
Total C) Current Assets	1,054,933,611	938,655,089	116,278,522
D) Accruals and Pre-Payments	9,984,630	8,962,682	1,021,948
			· · · · · · · · · · · · · · · · · · ·
Total Assets	1,726,426,216	1,583,060,496	143,365,720

# **BALANCE SHEET**

LIABILITIES & NET WORTH	12.31.16	12.31.15	difference
A) Net Worth			
I Share capital	100,000,000	50,560,000	49,440,000
III Revaluation reserves	53,687,539	78,687,539	(25,000,000)
IV Legal reserve	10,112,000	10,112,000	0
VI Other reserves	26,536,289	21,707,900	4,828,389
Translation reserve	9,192,455	8,900,183	292,272
Consolidation reserve	1,198,890	1,493,976	(295,086)
VII Reserve for cash flow hedge	(716,355)	(812,091)	95,736
VIII Accumulated profit/(loss) brought forward	502,861,270	510,679,829	(7,818,559)
IX Net profit	88,217,386	45,564,943	42,652,443
X Own shares negative reserve	0	(51,515,113)	51,515,113
Total Net Worth	791,089,474	675,379,166	115,710,308
Minority Capital and Reserves	266,548	683,778	(417,230)
Minority Profit (Loss)	40,661	(353,208)	393,869
Total A) Net Worth & Minority Interests	791,396,683	675,709,736	115,686,947
B) Sundry Risk and Other Funds			
1) Pension funds	22,775,787	21,618,908	1,156,879
2) Taxation	17,822,574	17,257,960	564,614
3) Financial derivatives	928,096	936,369	(8,273)
4) Others	20,342,453	19,080,484	1,261,969
Total B) Sundry Risk and Other Funds	61,868,910	58,893,721	2,975,189
C) Staff Severance Reserve	11,349,178	11,355,715	(6,537)
D) Liabilities			
1) Bonds			
a) repayble within 12 months	0	46,000,000	(46,000,000)
4) Banks			
a) repayble within 12 months	96,481,181	144,498,186	(48,017,005)
b) repayable after 12 months	350,449,138	266,321,845	84,127,293
5) Other financial institutions			
a) repayble within 12 months	13,736,520	2,025,472	11,711,048
b) repayable after 12 months	6,446,105	5,737,715	708,390
6) Advances from customers	2,187,464	3,260,806	(1,073,342)
7) Trade payables	248,301,675	219,095,357	29,206,318
8) Draft and promissory notes	1,529,359	1,114,182	415,177
12) Due to tax office	32,623,289	32,959,777	(336,488)
13) Social security contributions	12,362,234	11,369,028	993,206
14) Other payables	83,740,467	93,615,130	(9,874,663)
Total D) Liabilities	847,857,432	825,997,498	21,859,934
E) Accruals and Pre-Payments	13,954,013	11,103,826	2,850,187
Total Liabilities and Net Worth	1 706 406 016	1,583,060,496	143,365,720

# **STATEMENT OF INCOME**

	12.31.16	12.31.15	difference
A) Value of Production			
1) Net sales	2,282,098,738	2,179,676,544	102,422,194
<ol> <li>Increase/(decrease) in stock of work in progress, finished and semi-finished products</li> </ol>	7,358,059	6,147,377	1,210,682
3) Changes in work in progress	614,000	85,200	528,800
4) Capitalised costs	957,395	803,916	153,479
5) Other revenues	38,552,301	41,266,646	(2,714,345)
Total A) Value of Production	2,329,580,493	2,227,979,683	101,600,810
B) Production Costs			
6) Purchase of raw materials, packaging and suppliers	(1,040,466,695)	(1,024,682,373)	(15,784,322)
7) Purchase of services	(422,655,834)	(409,504,709)	(13,151,125)
8) Rentals and Leasing	(33,829,581)	(32,242,516)	(1,587,065)
9) Labour costs			
a) wages and salaries	(418,903,990)	(392,697,461)	(26,206,529)
b) social security contributions	(73,589,978)	(66,498,066)	(7,091,912)
c) provision for staff severance	(8,510,000)	(7,573,678)	(936,322)
d) provision for pension funds	(5,701,417)	(4,923,944)	(777,473)
e) other labour costs	(26,773,819)	(23,517,119)	(3,256,700)
Total Labour costs	(533,479,204)	(495,210,268)	(38,268,936)
10) Depreciation, amortisation and doubtful credits provisio	ns		
a) amortisation of intangible fixed assets	(26,542,270)	(24,892,438)	(1,649,832)
b) depreciation of tangible fixed assets	(58,629,949)	(57,277,411)	(1,352,538)
c) other devaluation of fixed assets	(23,444)	(3,780,970)	3,757,526
d) provision for doubtful credits, cash & bank and other current assets devaluations	(8,182,106)	(8,606,938)	424,832
Total Depreciation, amortisation and doubtful credits provision	ns (93,377,769)	(94,557,757)	1,179,988
<ol> <li>Decrease/(increase) in stock of raw materials, pack., sup and merch.</li> </ol>	ppl. 7,305,963	(1,996,337)	9,302,300
12) Sundry risk provisions	(8,710,105)	(16,907,499)	8,197,394
14) Other operating costs	(41,064,320)	(33,186,718)	(7,877,602)
Total B) Production Costs	(2,166,277,545)	(2,108,288,177)	(57,989,368)
		440 004 405	4- 64- 44-
Earning before interest and tax	163,302,948	119,691,506	43,611,442



# **STATEMENT OF INCOME**

	12.31.16	12.31.15	difference
C) Financial Income and Expenses			
16) Other financial income			
b) term securities	1,658	7,970	(6,312)
c) marketable securities	27,862	5,572	22,290
d) other proceeds	798,030	714,228	83,802
17) Interest paid and other financial charges	(10,005,122)	(10,246,612)	241,490
17 bis) Gains and losses on exchange rates	(11,177,060)	4,147,059	(15,324,119)
Totale C) Financial Income and Expenses	(20,354,632)	(5,371,783)	(14,982,849)
D) Adjustments in the value of Financial Assets			
18) Revaluations			
c) revalutation of current financial assets	1.915	0	1.915
19) Devaluations	,,,,,,		.,
b) devaluation of other financial assets	(798)	(7,670)	6,872
Total D) Adjustments in the value of Financial Assets	1,117	(7,670)	8,787
Profit/(loss) before tax	142,949,433	114,312,053	28,637,380
20 a) Income tax	(55,266,717)	(45,030,835)	(10,235,882)
20 b) Taxation related to previous periods	(1,362,559)	(25,258,898)	23,896,339
20 c) Anticipated (Deferred) Tax	1,937,890	1,189,415	748,475
Total Taxes	(54,691,386)	(69,100,318)	14,408,932
21) Profit (loss) for the year	88,258,047	45,211,735	43,046,312
Minority Interests	40,661	(353,208)	393,869
Net Profit	88,217,386	45,564,943	42,652,443

# **CASH FLOW STATEMENT**

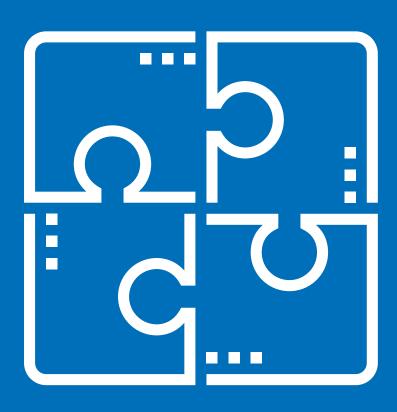
	12.31.16	12.31.15	difference
A) Financial adjustments related to income management (indirect method)			
Profit / (Loss) for the year	88,258,047	45,211,735	43,046,312
I	F 4 CO1 70C	47 401 400	11 000 000
Income Taxes	54,691,386	43,481,420	11,209,966
Interests expense/(interest income)	9,176,667	10,246,612	(1,069,945)
<ol> <li>Profit/ (Loss) for the year before income tax, interests, capital gain/loss</li> </ol>	152,126,100	98,939,767	53,186,333
Adjustments of non-monetary elements having counterbalance in Net Working Capital:	88,422,489	72,694,639	15,727,850
Depreciation of tangible assets	58,629,949	57,277,411	1,352,538
Amortisation of intangible assets	26,542,270	24,892,438	1,649,832
Staff severance provision	(50,243)	(464,768)	414,525
Change in reserves	4,737,713	(11,469,282)	16,206,995
Devaluation/(Revaluation)	22,326	3,788,640	(3,766,314)
Other movements in reserves due to consolidation operations	(1,459,526)	(1,329,800)	(129,726)
2) Net Cash before Working Capital	240,548,589	171,634,406	68,914,183
Ly ites easil pereis from any eaphai	2 10,0 10,000	17 1,00 1,100	00,011,100
Working Capital Surplus/(Requirement):	(7,443,286)	(28,962,449)	21,519,163
(Increase)/Decrease in Net trade receivables	(9,522,547)	(24,949,237)	15,426,690
(Increase)/Decrease in Inventories	(18,060,587)	(3,658,960)	(14,401,627)
(Increase)/Decrease in Other receivables	(5,590,633)	(7,560,847)	1,970,214
Increase/(Decrease) in Trade payables	32,162,529	6,130,860	26,031,669
Increase/(Decrease) in Other payables	(6,432,048)	1,075,735	(7,507,783)
3) Net cash after Working Capital	233,105,303	142,671,957	90,433,346

# **CASH FLOW STATEMENT**

	12.31.16	12.31.15	difference
Other adjustments			
Interests cashed/(paid)	(8,990,981)	(9,762,948)	771,967
(income tax paid)	(54,062,035)	(38,215,289)	(15,846,746)
Total Other Adjustments	(63,053,016)	(47,978,237)	(15,074,779)
Net cash provided by / (used In) the operating activity (A)	170,052,287	94,693,720	75,358,567
B) Cash flow from investing activities:	(106,049,763)	(99,660,334)	(6,389,429)
Intangible assets	(26,659,432)	(37,788,055)	11,128,623
Tangible assets (inclusive of the change in the consolidation area)	(79,259,940)	(66,003,432)	(13,256,508)
Investments	(130,391)	4,131,153	(4,261,544)
(Increase)/Decrease in other ml/t receivables (net of other ml/t payables)	(456,049)	(281,878)	(174,171)
() « payance,			
Net cash (used in) / provided by the investing activity (B)	(106,505,812)	(99,942,212)	(6,563,600)
	(106,505,812)	(99,942,212)	(6,563,600)
Net cash (used in) / provided by the investing activity (B)	(106,505,812)	(99,942,212)	(6,563,600)
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities			
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity	27,200,574	(2,226,562)	29,427,136
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid	<b>27,200,574</b> (100,000)	<b>(2,226,562)</b> (1,500,000)	<b>29,427,136</b> 1,400,000
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid Increase of Net Equity Reserves  Increase/(Decrease) in Loans and ml/t borrowings	27,200,574 (100,000) 27,300,574 (4,583,823)	(2,226,562) (1,500,000) (726,562) 40,979,450	29,427,136 1,400,000 28,027,136 -45,563,273
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid Increase of Net Equity Reserves	27,200,574 (100,000) 27,300,574 (4,583,823) 79,976,275	(2,226,562) (1,500,000) (726,562)	29,427,136 1,400,000 28,027,136 -45,563,273 27,394,666
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid  Increase of Net Equity Reserves  Increase/(Decrease) in Loans and ml/t borrowings  Loans and other ml/t borrowings	27,200,574 (100,000) 27,300,574 (4,583,823)	(2,226,562) (1,500,000) (726,562) 40,979,450 52,581,609	29,427,136 1,400,000 28,027,136 -45,563,273
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid Increase of Net Equity Reserves  Increase/(Decrease) in Loans and ml/t borrowings  Loans and other ml/t borrowings  Bond Repayment	27,200,574 (100,000) 27,300,574 (4,583,823) 79,976,275 (46,000,000)	(2,226,562) (1,500,000) (726,562) 40,979,450 52,581,609	29,427,136 1,400,000 28,027,136 -45,563,273 27,394,666 (46,000,000)
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid  Increase of Net Equity Reserves  Increase/(Decrease) in Loans and ml/t borrowings  Loans and other ml/t borrowings  Bond Repayment  S/t bank and other financial institution	27,200,574 (100,000) 27,300,574 (4,583,823) 79,976,275 (46,000,000) (38,560,098)	(2,226,562) (1,500,000) (726,562) 40,979,450 52,581,609 0 (11,602,159)	29,427,136 1,400,000 28,027,136 -45,563,273 27,394,666 (46,000,000) (26,957,939)
Net cash (used in) / provided by the investing activity (B)  C) Cash flow from financing activities  Increase/(Decrease) in Shareholders' Equity  Dividends paid Increase of Net Equity Reserves  Increase/(Decrease) in Loans and ml/t borrowings  Loans and other ml/t borrowings  Bond Repayment  S/t bank and other financial institution  Net cash provided by / (used in) the financing activity (C)	27,200,574 (100,000) 27,300,574 (4,583,823) 79,976,275 (46,000,000) (38,560,098) 22,616,751	(2,226,562) (1,500,000) (726,562) 40,979,450 52,581,609 0 (11,602,159) 38,752,888	29,427,136 1,400,000 28,027,136 -45,563,273 27,394,666 (46,000,000) (26,957,939) -16,136,137



# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS







# Year ended December 31st, 2016

# Structure and contents of Balance Sheet and **Profit and Loss Statement**

These Consolidated Financial Statements as per December 31st, 2016, are composed of the Balance Sheet, the Profit and Loss Statement and the Notes to the Financial Statements and are prepared according to the general principles set forth in the Italian Legislative Decree no. 127 dated April 9th, 1991, as amended. These principles have been integrated with the accounting principles elaborated by the Consiglio Nazionale dei Dottori Commercialisti e Ragionieri (C.N.D.C.R.) (the Italian Accounting Profession) and the Organismo Italiano di Contabilità (O.I.C.) (the Italian Accounting Organisation).

In this regard, it should be noted that, in 2016, a number of accounting standards were amended and updated as part of the review process launched by the OIC (Italian Accounting Organisation) as a result of the acknowledgement into national law, through Legislative Decree 139/2015, of Directive 2013/34/EU (so-called "Accounting Directive"). The standards in force which were reviewed or the new standards introduced by the OIC are listed below.

#	TITLE	#	TITLE
OIC 9	Write-offs due to impairment of intangible and tangible assets	OIC 19	Payables
OIC 10	Cash flow statement	OIC 21	Equity investments
OIC 12	Financial statements composition and layouts	OIC 24	Intangible assets
OIC 13	Inventory	OIC 25	Income taxes
OIC 14	Cash on hand and banks		
OIC 15	Account receivables	OIC 29	Changes of standards, of estimates, correction of errors
OIC 16	Tangible assets	OIC 31	Provisions for risks and charges and Staff Severance Fund
OIC 18	Accruals and deferrals	OIC 32	Derivative financial instruments

OIC 22, "Memorandum accounts", is no longer applicable, given repealed.

These Notes to the consolidated financial statements, drafted in accordance with the provisions of articles 2427 and 2427 bis of the Italian Civil Code, analyse and integrate financial data with complementary information considered necessary for a true and fair view of the data illustrated.

The items not disclosed in the Balance Sheet and in the Profit and Loss Statement, set forth in articles 2424 and 2425 of the Italian Civil Code and in the Cash flow statement presented in compliance with accounting standard OIC 10, are intended as a zero balance. The option to not include these items relates solely to the case in which they have an amount equal to zero in both the current and previous year.

The accounting policies pursuant to article 2426 of the Italian Civil Code conform to those used in the preparation of the previous year's financial statements, with the exception of the items for which Legislative Decree 139/2015 introduced new accounting standards. No exceptional events were verified that required the use of the exemptions set forth in article 2423 bis, subsection 2, and article 2423, subsection 5 of the Italian Civil Code.

Where applicable, the principles and recommendations published by the Organismo Italiano di Contabilità (OIC) - Italian Accounting Organisation - were observed, supplemented, where lacking, by the IAS/IFRS issued by the IASB, in order to give a true and fair view of the equity, financial and economic position.

There are no elements of assets or liabilities which fall under several balance sheet items. For the purposes of comparing financial statements items, pursuant to article 2423 ter, subsection 5 of the Italian Civil Code, the balances of the previous year were reclassified. In case balances are not comparable or cannot be adjusted, they are reported and commented in these Notes.

It should be noted that, as a result of the amendments introduced by the accounting standards in acknowledgement of the Accounting Directive mentioned above, financial statements layout was amended and applied retroactively for 2015 classification purposes. The most important modifications are summarised below:

# Financial statements composition and layouts

The positive and negative extraordinary income components booked to item E20 of the Profit and Loss Statement were reclassified to item A5 "Other revenue and income", "B14 "Other operating costs" and E20b) "Taxes of previous years".

Own shares have been used to reduce shareholders' equity, as set forth in OIC 28 in the item "Negative reserve for own shares in the portfolio".

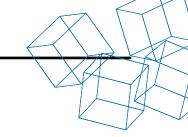
# **Derivative financial instruments**

The company applied OIC 32 retrospectively for all pre-existing hedging transactions as at January 1st, 2016 which the company designated as accounting hedges at the start date of the financial statements. This involved:

- a) the verification of the eligibility criteria at the date;
- b) for cash flow coverage, the calculation of the ineffectiveness of the hedge at the start date of the financial statements and recognition of the ineffective component, if applicable, to income or loss of previous years, while the effective component is booked to the item A) VII "Reserve for expected cash flow hedges".

At the time of the first application of the standard and just for the hedging transations in place at the start date of the first application financial statements, it is assumed that the hedge is fully effective when the key elements of the hedging instrument and the hedged elements are corresponding or are closely aligned. For these transactions, the "simple relations" accounting model has been adopted.

It should be noted that the Company availed itself of the right granted by article 12, subsection 2 of Legislative Decree 139/2015 to not apply the amortised cost method and, jointly, to discount items connected with transactions performed prior to January 1st, 2016.



# Consolidation criteria and changes occurred during the financial year

In accordance with articles 38 and 39 of the Italian Law Decree 127/1991, listed below are the companies directly or indirectly controlled by Mapei Spa and included in the consolidated results on a line-by-line basis:

COMPANY	LOCATION	CUR-	SHARE	DIRECT	INDIRECT
COTH AIRT	200/11011	RENCY	CAPITAL	OWNER-	OWNER-
		KEI101	GAI TIAL	SHIP	SHIP
Adesital Spa	Fiorano	EUR	1,600,000	100%	0%
Cercol Spa	Sassuolo	EUR	520,000	100%	0%
General Resource Technology Corporation	Eagan	USD	19,816,672	0%	100%
Gorka Cement Spzoo	Trzebinia	PLN	10,000,000	100%	0%
Lusomapei Sa	Anadia	EUR	6,803,993	100%	0%
Mapefin Austria Gmbh	Nußdorf	EUR	8,500,000	100%	0%
Mapefin Deutschland Gmbh	Wiesbaden	EUR	25,000	100%	0%
Mapei Ab	Stockholm	SEK	10,272,000	0%	100%
Mapei Argentina Sa	Buenos Aires	ARS	141,550,243	95%	5%
Mapei As	Sagstua	NOK	24,148,950	100%	0%
Mapei Australia Pty Ltd	Brisbane	AUD	8,400,000	100%	0%
Mapei Benelux Sa	Liege	EUR	1,215,990	100%	0%
Mapei Brasil Construction Materials Ltda	San Paolo	BRL	13,340,650	96%	4%
Mapei Bulgaria Eood	Ruse	BGN	12,869,230	100%	0%
Mapei Caribe Inc	Puerto Rico	USD	2,001,000	0%	100%
Mapei China Ltd	Hong Kong	HKD	169,800,000	100%	0%
Mapei Construction Chemicals Panama Sa	Panama City	PAB	4,200,000	100%	0%
Mapei Construction Chemicals Llc	Dubai	AED	300,000	49%	0%
Mapei Construction Materials Co Ltd	Canton	RMB	56,350,000	0%	100%
Mapei Construction Products India Ltd	Bangalore	INR	430,000,000	100%	0%
Mapei Corp	Ft. Lauderdale	USD	80,697,440	100%	0%
Mapei Costa Rica Sa	San Josè	CRC	5,381,300	0%	100%
Mapei Croatia Doo	Zagreb	HRK	1,250,000	100%	0%
Mapei Denmark As	Fredriksberg	DKK	500,800	100%	0%
Mapei Doha Llc	Doha	QAR	200,000	49%	0%
Mapei Doo	Ljubljana	EUR	208,646	100%	0%
Mapei East Corp	Ft. Lauderdale	USD	1,000	100%	0%
Mapei Far East Pte Ltd	Singapore	SGD	21,200,000	100%	0%
Mapei France Sa	Saint Alban	EUR	5,000,000	100%	0%
Mapei Gmbh (A)	Nußdorf	EUR	210,000	0%	100%
Mapei Gmbh (D)	Erlenbach	EUR	3,500,000	100%	0%
Mapei Hellas Sa	Athens	EUR	2,600,000	100%	0%
Mapei Inc	Montreal	CAD	3,794,499	100%	0%
Mapei Indonesia Construction Products Pt	Bekasi	IDR	3,255,500,000	1%	99%
		HUF	400,000,000	73%	27%
Mapei Kft Mapei Korea Ltd	Budaors Chungbuk	KRW	8,736,860,000	100%	0%
Mapei Korea Ltd Mapei Malaysia Sdn Bhd	Selangor	MYR	32,500,000	0%	100%
Mapei Mexico Sa de Cv	Queretaro	MXN	126,110,940	67%	33%
Mapei Nederland Bv	Almelo	EUR	2,900,000	100%	0%
Mapei New Zealand Ltd	Auckland	NZD	1,800,000	100%	0%
Mapei New Zealand Ltd Mapei Oy	Helsinki		7,568	0%	100%
· · ·	+	EUR PEN	-		0%
Mapei Perù Sac	Lima		4,477,200 35,000,000	100%	0%
Mapei Polska Spzoo	Gliwice	PLN		100%	0%
Mapei Romania Srl	Bucharest	RON	4,014,140	100%	
Mapei Sk Sro	Bratislava	EUR	497,910	60%	40%

COMPANY	LOCATION	CUR- RENCY	SHARE CAPITAL	DIRECT OWNER- SHIP	INDIRECT OWNER- SHIP
Mapei Spain Sa	Barcelona	EUR	7,662,904	100%	0%
Mapei Srb Doo	Belgrade	RSD	55,375,000	100%	0%
Mapei Sro	Olomouc	CZK	75,100,000	67%	33%
Mapei South Africa Pty Ltd	Johannesburg	ZAR	185,275,520	100%	0%
Mapei Stadium Srl	Reggio Emilia	EUR	20,000	100%	0%
Mapei Suisse Sa	Sorens	CHF	4,000,000	99%	1%
Mapei UK Ltd	West Midlands	GBP	7,300,000	100%	0%
Mapei Ukraina Llc	Kiev	UAH	55,897,722	100%	0%
Mapei Venezuela Ca	Caracas	USD	2,287,743	0%	79%
Mapei Vietnam Ltd	Danang	VND	68,869,400,000	100%	0%
Mapei Yapi Kimyasallari Ins, San, Ve Tic, As	Ankara	TRY	19,714,000	100%	0%
Mosaico+ Srl	Modena	EUR	1,600,000	100%	0%
Mosaico Plus Ukraine Llc	Kiev	UAH	105,580	0%	100%
Polyglass GB Ltd	Willenhall	GBP	50,100	0%	100%
Polyglass Spa	Ponte di Piave	EUR	30,000,000	100%	0%
Polyglass Usa Inc	Ft. Lauderdale	USD	7,500,934	0%	100%
Progetto Mosaico+ Srl	Spilimbergo	EUR	100,000	0%	50%
Rasco Bitumentechnik Gmbh	Augustdorf	EUR	25,000	0%	100%
Resconsult As	Nord Odal	NOK	120,000	0%	100%
Sopro Bauchemie Gmbh (D)	Wiesbaden	EUR	18,000,000	0%	100%
Sopro Bauchemie Gmbh (A)	Asten	EUR	2,617,167	0%	100%
Sopro Hungaria Kft	Budakeszi	HUF	37,000,000	0%	100%
Sopro Nederland Bv	Nieuwegein	EUR	18,000	0%	100%
Sopro Polska Spzoo	Warsaw	PLN	26,714,500	0%	100%
U,S, Sassuolo Calcio Srl	Sassuolo	EUR	5,000,000	100%	0%
Vaga Srl	Costa de' Nobili	EUR	3,944,960	100%	0%
Vinavil Americas Inc	Montreal	CAD	100	0%	100%
Vinavil Egypt for Chemicals Sae	Suez I.Z.	EGP	30,000,000	50%	0%
Vinavil Spa	Milan	EUR	6,000,000	100%	0%
Zao Mapei	Moscow	RUB	934,100,000	100%	0%
4307721 Canada Inc	Laval	CAD	100	0%	100%

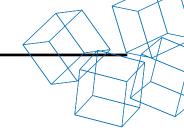
The Mapei Group Consolidated Financial Statements at December 31st, 2016 are based on the Financial Statements of the Parent Company and the Italian and foreign companies under its control.

The company Mapei Perù S.A.C., held by Mapei Spa, which became operative in 2016, was consolidated on a line-by-line basis.

Note that, it has been performed the merger of Mapei Betontechnik Gmbh in Mapei Gmbh (A) with the subsequent transfer of company assets and the deconsolidation of the company Polyglass Romania Srl.

The company Mapei Middle East Fzco, owned by Mapei Spa with 50% of ownership, Mapei Philippines Inc and Mapei Saudia Llc., are not included in the consolidation area and valued at cost, since they were not operative during 2016.

The company Vaga Società Agricola S.s, 90% owned through Vaga Srl, which is valued at cost, has also been excluded from the consolidation area due to the low financial relevance.



# **Principles of consolidation**

Financial Statements of the subsidiaries included in the consolidation area are consolidated on a line-by-line basis, irrespective of the percentage of ownership. In addition, costs and revenues of Subsidiaries included in the consolidation area were considered from the date of inclusion in the Consolidated Financial Statements.

In particular, with reference to the companies included in the consolidation area, they were consolidated on a line-by-line basis, as follows:

- 1) the book value of investments included in the consolidation area is eliminated against the related net worth, following the full consolidation method, and, where the direct or indirect investment is lower than 100%, minority interests are recognised.
- 2) in case of a positive difference between the book value and the related net worth of the investment at the moment of its acquisition, the exceeding value is attributed directly to the company assets included in the consolidation area and, where not possible, the difference is posted as "Difference from consolidation" and amortised on a straight-line basis in accordance with the residual value;
- 3) in case of a negative difference, it is posted as a net worth reserve named "Consolidation reserve" or, in case it is related to forecasted negative results, provisioned in a risk fund.

Eliminations from the Consolidated Financial Statements are the followings:

- all intercompany receivables and payables as well as costs and revenues between consolidated companies;
- all significant intercompany gains and losses deriving from the sale of fixed assets between consolidated companies;
- any profit, if material, deriving from trade between consolidated companies;
- dividends received, with reference to the part realised with consolidated companies.

# Financial Statements used for the consolidation

The Consolidated Financial Statements have been prepared using the Financial Statements for the year-ended December 31st, 2016 of the companies included in the consolidation, approved by correspondent Boards of Directors. The individual Statements have been reclassified and adjusted, where required, to conform to Group accounting principles.

In compliance with article 2426, subsection 1, no. 8-bis of the Italian Civil Code, monetary assets and liabilities in a currency other than the functional currency in which the financial statements are presented (so-called "accounting currency"), subsequent to initial recognition, are booked at the spot exchange rate at year-end. Any related exchange gain or loss is recorded in item C17-bis) of the Profit and Loss Statement "exchange gains and losses" and any net profit, which contributes to the result for the year, is allocated to the appropriate reserve which cannot be distributed until realised. The conversion of Profit and Loss Statement items has been carried out on the basis of average exchange rates for the financial year.

The exchange rate differences arising from the conversion of Financial Statements expressed in foreign currencies have been posted directly to the "Translation reserve" included in net worth, according to the provisions of OIC 17 "Consolidated financial statements and equity method".

The following exchange rates were used for the current year:

CURRENCY	AVERAGE RATE	FINAL RATE
Argentinian Peso	0,06122	0,05971
Australian Dollar	0,67177	0,68512
Brazilian Real	0,25896	0,29150
British Pound	1,22070	1,16795
Bulgarian Lev	0,51130	0,51130
Canadian Dollar	0,68194	0,70482
Chinese Renminbi	0,13606	0,13661
Costa Rica Colon	0,00166	0,00172
Czech Crown	0,03699	0,03701
Danish Crown	0,13431	0,13451
Egyptian Pound	0,09043	0,05205
Hong Kong Dollar	0,11641	0,12232
Hungarian Fiorin	0,00321	0,00323
Indian Rupee	0,01345	0,01397
Indonesian Rupia	0,00007	0,00007
Malaysian Ringgit	0,21814	0,21147
Mexican Peso	0,04841	0,04593
New Zealand Dollar	0,62913	0,65972
Norwegian Crown	0,10761	0,11006
Panama Balboa	0,90367	0,94860
Peruvian Sol	0,29095	0,28247
Polish Zloty	0,22917	0,22674
Qatari Riyal	0,24826	0,26063
Romanian Leu	0,22268	0,22031
Russian Ruble	0,01347	0,01555
Serbian Dinar	0,00812	0,00810
Singapore Dollar	0,65454	0,65643
South African Rand	0,06144	0,06917
South Korean Won	0,00079	0,00078
Swedish Crown	0,10563	0,10468
Swiss Franc	0,91726	0,93119
Turkish Lira	0,29916	0,26975
Ukranian Hryvnia	0,03537	0,03480
United Arab Emirates Dirham	0,24617	0,25842
US Dollar	0,90367	0,94860
Vietnamese Dong	0,0004	0,00004



In compliance with the provisions of article 2423 of the Italian Civil Code, the company has adhered to the general assumptions of clarity and the presentation of a true and fair view of the company's equity and financial position and of an economic result for the year. The recognition, measurement, presentation and disclosure of items may defer from what has been regulated by accounting standards, only in case the non-observance has irrelevant effects on the true and fair view of the company's equity and financial position and economic result for the year. To this extent, information is considered relevant, based on qualitative and/or quantitative aspects, when its omission or incorrect indication could reasonably influence the decisions taken by financial statements users. Additional specific criteria adopted to apply the concept of relevance are indicated next to the individual items of the financial statements when affected by its application. The relevance of the individual items is considered within the context of other similar items.

The principles established in article 2423-bis of the Italian Civil Code were also observed, as indicated hereunder.

Financial statements items were measured according to the prudence principle and based on the going concern assumption, also taking into account the substance of the transaction or of the contract. For each transaction or fact and, nonetheless, for every company event, their substance has been identified, no matter what the origin.

Profits indicated in the financial statements are exclusively those realised at the balance sheet date. The income and expenses indicated are those accrued in the year, regardless of the date of payment or collection.

Provisions on risks and losses have been booked according to the accrual basis principle, even when known after the closing date. Any dissimilar element included in individual items were evaluated and booked separately.

The financial statements and all comments and tables of these Notes were stated in Euro. All information related to the items in the Balance Sheet and the Profit and Loss Statement are presented according to the order in which the relevant items are indicated in the Balance Sheet and the Profit and Loss Statement, pursuant to article 2427, subsection 2 of the Italian Civil Code.

# **Accounting policies**

The accounting policies art. 2426 of the Italian Civil Code are compliant with those adopted in the preparation of the previous year's financial statements, with the exception for the items impacted by the new accounting standards. There have been no exceptional events disregarding the article 2423 bis, subsection 2, and article 2423, subsection 4 of the Italian Civil Code.

This assumption no longer applies with reference to those items that were impacted by the amendments illustrated previously, such as the introduction of the amortised cost method for the valuation of receivables and payables that arose after January 1<sup>st</sup>, 2016. For the purposes of comparing the balances of the financial statements, pursuant to article 2423 ter, subsection 5 of the Italian Civil Code, where necessary, the balances of the previous year were reclassified.

#### Intangible assets

Intangible assets are stated at purchase price, inclusive of all directly attributable costs, and amortised systematically over the period of their estimated useful life. The following rates have been applied:

	Rate
Trademarks	20%
Goodwill	10%
Other intangible assets	20%
Know How	5-50%

Taking account of the sector where the Group operates in, amortisation of goodwill is determined in ten years, a period considered representative of the estimated useful life.

Depreciation of leasehold improvements and assets subject to long-term financing are determined on the basis of the residual length of each underlying contract, or on the basis of the residual life of the improvements, if lower.

"Long-term football players' registration rights" are also classified under "Other intangible assets". These are booked at their historical acquisition cost, including any directly attributable accessory expenses, if acquired prior to January 1st, 2016, otherwise they have been measured according to the amortised cost method. The amounts are stated net of the amortisation charges which were calculated on a straight-line basis in relation to the duration of the contracts stipulated with the individual professional football players.

Intangible assets are reduced in case of permanent losses of value. For more details please refer to the section "Write-offs due to impairment of tangible and intangible assets".

#### **Tangible assets**

Tangible assets are stated at purchase price, inclusive of all directly attributable costs, re-valued, where specified, and when permitted by law. Plants and buildings under construction are recorded at cost and are not subject to depreciation until the assets are placed into service.

Assets are depreciated systematically on the basis of rates determined in accordance with their residual value and estimated useful lives. The rates have been used are as follows:

	Rate
Industrial buildings	3-4 %
Plant and machinery	10-11.5 %
Industrial equipment	40%
Forklifts	20%
Small buildings	10%
Office equipment	20%
Office furniture	12%
Trucks	20%
Cars	25%

Ordinary maintenance costs are charged directly to Profit and Loss as incurred, while extraordinary maintenance costs are capitalised and depreciated at rates applicable to the underlying assets.

Financial leasing contracts are recorded in accordance with International Accounting Standard no. 17. The value of the tangible asset is booked to the relevant Balance Sheet caption; the residual debt is recorded in liabilities with interest and depreciation charged to Profit and Loss.

Government grants have been deducted from the related tangible asset and are credited to Profit and Loss through a reduction of the related depreciation expense.

Tangible assets are reduced in case of permanent losses of value.

For more details please refer to the section "Write-offs due to impairment of tangible and intangible assets".

#### Write-offs due to impairment of tangible and intangible assets

Write-offs due to impairment of intangible and tangible assets are posted in accordance with the provisions of Accounting Standard OIC 9.

At each reporting date, company verify whether indicators suggest that a fixed asset has suffered a reduction in value and, in that case, it estimate the realizable value of the fixed asset.

In particular, if the recoverable value of a fixed asset (i.e. the higher between its value in use and its fair value) is lower than its book value, the fixed asset is recognised at lower value. The difference is booked as impairment to item B10c) of the Profit and Loss Statement.

In order to evaluate whether an asset has suffered impairment, the company verifies the existence of certain indicators, for example:

- whether the market value of an asset has fallen significantly during the year, more than would have occurred with the time and the normal use;
- whether, during the year, significant changes occurred, or which could occur in the
  near future, with a negative effect for the company in the technological, market,
  economic or regulatory domains in which the company operates or in the market to
  which an activity is directed;
- whether, during the year, market interest rates or other rates of return on investments have increased, and whether it is likely that these increases will shape the discount rate used in calculating the value in use of an asset and reduce the recoverable value;
- whether obsolescence or physical deterioration of an asset is greater than expected;
- whether, during the year, significant changes happened with a negative impact on the company (such as the non-use of an asset, disposal or restructuring plans, redefinition of the useful life of the fixed asset), or it is presumed that they may occur in the near future, to the extent or in the way in which an asset is used or is expected to be used.

If it is not possible to estimate the recoverable value of the individual fixed asset, the recoverable value of the cash-generating unit (CGU) to which the fixed asset belongs is determined. This happens when individual fixed assets do not generate cash flows autonomously with respect to other fixed assets. Under this assumption, if the recoverable value of the CGU is lower than its book value, the reduction in the book value of the assets which is part of the CGU is firstly allocated to the value of goodwill booked in the CGU and, subsequently, proportionally to the other assets, based on the book value of each asset part of the CGU.

In the absence of indicators for potential impairment, the recoverable value is not determined.

The value is reversed if the reasons for the write-off for impairment no longer apply, up to the limit of the value that the asset would have had if the adjustment had not taken place. The write-off booked to goodwill and capitalized expenses cannot be reversed as this is not allowed under the applicable law.

#### **Derivative financial instruments**

Derivative financial instruments are booked at the date of the signature of the contract, starting from when the company is subject to related rights and obligations.

Pursuant to the provision of article 2426, subsection 1, number 11-bis of the Italian Civil Code and of OIC 32, derivative financial instruments, even if embedded in other financial instruments, are measured at fair value both at the date of initial recognition and at each subsequent reporting date. The recognition and the variation in fair value with respect to the previous year are booked to the financial statements using methods that differ depending on whether the transaction involving derivative financial instruments qualifies (and is effectively designated) as a cash flow hedge or not.

Transactions that do not qualify (or are not designated) as hedges

If the transaction does not qualify (or is not designated) as a hedge, the fair value changes are booked to section D) in Profit and Loss "Value adjustments to financial assets and liabilities". As set out in article 2426, subsection 1, number 11-bis of the Italian Civil Code, profits deriving from the valuation of derivative financial instruments not designated as hedges are allocated to undistributable shareholders' equity reserves.

Transactions that qualify (and are designated) as hedges

The company can enter into transactions involving derivative financial instruments to hedge against interest rate or exchange rate risk.

A transaction involving derivative financial instruments is designated as a hedge when:

- a) the hedging relationship consists solely of eligible hedging instruments and eligible hedged items pursuant to OIC 32;
- b) there is strict and documented correlation between the characteristics of the hedged instrument or transaction and those of the hedging instrument, pursuant to article 2426, subsection 1, number 11-bis of the Italian Civil Code; the documentation concerns the formalisation of the hedging relationship, the company's risk management objectives and hedging strategy;
- c) the hedging relationship meets all the following requirements as regards the effectiveness of the hedge:
  - i. there is an economic relationship between the hedged item and the hedging instrument;
  - ii. the effect of the credit risk of the counterpart of the derivative financial instrument and the hedged item, if the credit risk is not the risk being hedged, does not prevail over changes in value resulting from the economic relationship;
  - iii. the hedge ratio is determined as the relationship between the quantity of the derivative financial instruments used and the quantities of the hedged item (to the extent not to affect ex-ante the ineffectiveness of the hedge).

The economic relationship is verified from a qualitative point of view, by verifying that the key elements of the hedging instrument and the hedged item correspond or are closely aligned, and from a quantitative viewpoint. When the hedging transactions



concern derivative financial instruments with characteristics altogether similar to those of the hedged item (defined as "simple hedging relationships") and the derivative financial instrument is stipulated under market conditions, the hedging relationship is considered effective by simply checking that the key elements (such as the nominal amount, the date of settlement of cash flows, the maturity and underlying variable) of the hedging instrument and the hedged item correspond or are closely aligned and that the credit risk of the counterpart is not as such to significantly impact the fair value of both the hedging instrument and of the hedged item.

The existence of eligibility criteria is verified on an ongoing basis and, at each reporting date, the company evaluates whether the hedging relationship still meets the effectiveness requirements.

The company prospectively ceases to account for the hedge when:

- a) the hedging instrument expires, is sold or is terminated (with the replacement already provided for in the original hedging strategy);
- b) the hedge no longer satisfies the conditions for booking the hedge.

If a change in the economic relationship between the hedged item and the hedging instrument is as such to lead to a termination of the hedging relationship and the risk management objective for the designated hedging relationship remains the same, the company assesses the possibility of revising the hedging relationship.

The Group has cash flow hedging contracts in place.

This type of hedge is employed when the hedging objective is to limit the exposure to the risk of changes in cash flows attributable to an asset or liability booked to the financial statements, to irrevocable commitments, or to planned transactions. The company recognises the cash flow hedge, connected to an asset or liability booked to the financial statements, an irrevocable commitments or a planned transaction, in the balance sheet at fair value, with the component of the hedge deemed effective recorded in A) VII "Reserve for expected cash flow hedges", while the ineffective component, calculated for hedging relationships that do not qualify as simple, is recognised in section D) of Profit and Loss.

## Determination of the fair value

In order to determine the fair value of the derivative financial instruments in the financial statements, the company has defined their main market (or the most advantageous) and the most appropriate valuation techniques, taking into account the levels of the fair value hierarchy in which the parameters are classified and the assumptions that market operators will use to determine the price of the derivative financial instrument, including the assumptions regarding risks, presuming that the market operators act in their own economic interest in the best possible manner.

In particular, in determining the fair value, the company maximised the use of relevant observable parameters and minimised the use of non-observable parameters, as required by the fair value hierarchy by identifying the fair value based on the available market information at the reporting date for the derivative instruments subscribed by the company.

Other equity investments, investments in subsidiaries that are not in operations yet and securities not representing equity investments, are recorded at cost adjusted for any permanent impairment of their value. If the reasons for the write-off are no longer valid, the original value is restated.

#### **Financial assets**

Other equity investments are recorded at cost adjusted for any permanent impairment of their value.

Securities not representing equity investments are stated at the lower of cost or market value at the close of the financial year.

In case the reasons for devalutation are no longer valid, Financial assets are restated at their original value.

#### **Inventories**

Raw materials, supplies and finished goods inventories are stated at the lower between cost or market using the "first in first out" (FIFO) method.

When market conditions indicate a permanently reduced realisable value if compared with the FIFO, the value of the inventory is reduced to the net realisable value.

Inventories of maintenance and marketing material are recorded at a weighted average cost method.

The inventory value is restated to its realisable value through a provision in case of obsolete or slow moving goods.

#### **Accounts receivable**

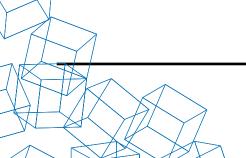
Accounts receivable are classified under fixed assets or under current assets, based on their use and/or origin with respect to ordinary activities, and are booked at their presumed realisable value.

Accounts receivable, pursuant to article 2426, subsection 8 of the Italian Civil Code, are recognised according to the amortised cost method, taking into account the time factor. If the interest rate of the transaction is not significantly different from the market rate, the receivable is initially booked at the nominal value net of all discounts and rebates and inclusive of any cost directly attributable to the transaction that generated the receivable. As indicated previously, the company availed itself of the optional exemption from applying the amortised cost method for positions that arose prior to January 1st, 2016. Account receivable are presented in the financial statements net of a provision for doubtful accounts to cover receivables considered non-collectable, as well as generic risk related to the remaining receivables, based on estimates prepared according to past experience, the trend in the ageing ratios of past due receivables, the general economic situation, the industry situation and country risk, as well as on the events that occurred after the close of the year that impacted the values at the reporting date.

#### Cash on hand and banks

Receivables from bank and postal accounts deriving from deposits and ordinary accounts are recorded at their nominal value.

Cash on hand is recorded at its nominal value.



#### Accruals and pre-payments assets and liabilities

These items represent the current portion of costs and proceeds related to two or more financial years as required by accrual basis accounting. Based on this criteria, an accrual or deferral is recognised when the following conditions are satisfied:

- the contract starts in one year and ends in the next one;
- the service price is contractually due in advance or deferred in two or more consecutive years;
- the amount of the accruals changes during financial periods.

Income and expenses fully related to the current year financials are not included in accruals and deferrals.

At the end of each year, the company verifies whether the conditions that determined the initial recognition of the accrual or the deferral are still valid; if necessary, adjustments are made. This evaluation takes into account not only time but also the amount recoverability.

#### Sundry risks and other funds

These are provisions allocated to cover certain or probable losses or payables, in respect of which, however, the amount or the date of occurrence could not be determined at year-end. The amounts provided reflect management's best estimate based on the available information.

#### Staff severance reserve

The staff severance reserve is maintained at a value sufficient to cover the entire accumulated provision for every employee in conformity with current legislation and collective labour and benefit contracts.

## **Accounts payable**

Pursuant to article 2426, subsection 8 of the Italian Civil Code, payables are recognised using the amortised cost method; if the interest rate of the transaction is not significantly different from the market rate, the payable is initially recognised at the nominal value net of all transaction costs and all discounts and rebates deriving directly from the transaction.

Amounts due within and after 12 months are split with reference to contractual or legal maturity, also taking into account events that may determine a change to the original maturity.

As indicated previously, the company availed itself of the optional exemption from applying the amortised cost method for positions that arose prior to January 1st, 2016. Some payables related to financial institutions are directly connected with the respect of some covenants. Where covenants are not fullfilled, if necessary, the medium/long-term payables have to be reclassified as short-term.

#### Recognition of revenues and costs

Revenues are recognised in the Income Statement on an accrual basis net of returns, discounts and rebates. In detail:

- revenues from the sale of goods are recognised when the ownership of the goods is transferred, normally the date of shipment, unless otherwise specified in the contract;
- revenues from the sale of services are recognised when the service is fully performed in accordance with the terms of the contract;
- · costs are recognised on an accrual basis;
- financial income and proceeds are recognised on an accrual basis.



#### **Current and deferred income tax**

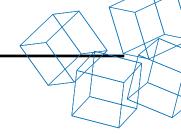
Taxes for the period are determined on the basis of a realistic estimate of the amounts to be paid according to existing legislation.

In accordance with accounting standard no. 25, drawn up by the Italian Accounting Organisation ("Organismo Italiano di Contabilità"), deferred tax liabilities are recorded in the account. "Taxation funds", while deferred tax assets are booked in the account "Deferred tax assets"; they reflect the temporary differences between the tax basis of assets and liabilities and the corresponding book value. In particular, deferred tax assets are only recognised if it is reasonably certain that, in the years in which the associated temporary differences will reverse, taxable income will be generated which is no less than the amount of the differences that will be cancelled.

# Derogations to subsection 4 of article 2423

Deferred tax assets and deferred tax liabilities are not discounted.

It should be noted that no derogations were applied in the financial statements, as provided by the article 2423, subsection 4, of the Italian Civil Code.



# Notes to the Balance Sheet

All amounts in Euros

# **Assets**

# **Intangible assets**

The breakdown of intangible assets at the end of the financial year is as follows:

	12.31.2016	12.31.2015	Difference
Establishment and broadering costs	0	335,948	- 335,948
Industrial patent	12,555,413	825,543	11,729,870
Governament Concessions, know how, licences, trade-marks and similar rights	3,945,290	3,896,611	48,679
Goodwill	27,841,810	32,584,211	-4,742,401
Assets in progress and payments in advance	3,093,574	8,903,562	-5,809,988
Other intangible assets	60,080,072	60,221,212	-141,140
TOTAL	107,516,159	106,767,087	749,072

The increase in item "Industrial patents" is attributable to Mapei Spa's software licences of the new group ERP System.

The decrease in the item "Goodwill" results from amortisation made during the year plus the exchange rate changes recorded.

The table here below summarises the Goodwill composition:

	Goodwill
Opening balance	152,279,652
Exchange difference opening balance	767,654
Increase	276,300
Exchange difference variation	-161,250
Acquisition cost	153,162,356
Opening balance - Cumulated amortisation	119,695,441
Exchange difference opening balance	232,275
Increase - Amortisation/Devaluation	5,446,871
Exchange difference variation	-54,041
Cumulated amortisation	125,320,546
TOTAL	27,841,810

The breakdown of goodwill by legal Entity as at December 31st, 2016 is as follows:

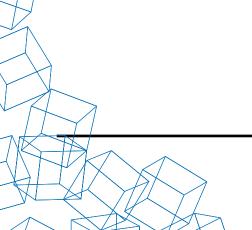
	Acquisition cost	Accumulated amortisation	Total
Adesital Spa	1,869,925	1,869,925	-
Vaga Srl	3,762,175	3,762,175	-
Lusomapei Sa	421,065	421,065	-
Mapei Spain Sa	431,735	431,735	-
Gorka Cement Spzoo	656,179	656,179	-
Mapei Construction Chemicals Llc	6,646,527	4,757,214	1,889,313
Mosaico+ Srl	2,933,938	2,933,938	-
Mapei Korea Ltd	4,373,562	2,906,522	1,467,040
Vinavil Egypt for Chemicals Sae	8,593,446	3,007,705	5,585,741
Mapei Yapi Kimyasallari Ins. San. Ve Tic As	7,961,867	4,513,594	3,448,273
Mapei Construction Materials Co Ltd (Guangzhou)	2,527,748	2,527,748	-
Sopro Group	48,807,022	48,482,263	324,759
Mapei As	9,289,035	9,289,035	-
Mapei Inc	297,570	297,570	-
Mapei Corp Group	32,345,639	23,492,689	8,852,950
Polyglass Group	4,531,509	2,358,251	2,173,258
Cercol Spa	2,002,720	2,002,720	-
Mapei Construction Chemicals Panama Sa	712,379	361,775	350,604
Mapei Austria Gmbh	14,736,189	11,235,337	3,500,852
Mapei Mexico Sa de Cv	262,126	13,106	249,020
TOTAL	153,162,356	125,320,546	27,841,810

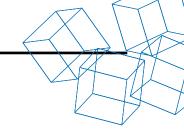
Goodwill included in Intangible assets is justified by the profit generated and by the market and technological potentiality provided by the purchased companies. An increase in goodwill was recorded, due to Mapei Mexico Sa de Cv, as a result of the acquisition of the company Texzim.

The decrease in "assets in progress and payments in advance" is due primarily to the reclassification carried out by Mapei Spa in 2016 to the item "Industrial Patents" for the licences of the new group ERP Software became operative in 2016.

The item "other intangible assets" is composed predominantly by the item "Football players' registration rights" of the company U.S. Sassuolo Calcio Srl.

Amortisation for the year amounts to  $\leqslant$  26,542,270 ( $\leqslant$  24,892,438 in 2015).





# **Tangible assets**

The breakdown of tangible assets at the end of the financial year is as follows:

	12.31.2016	12.31.2015	Difference
Land and buildings	362,145,772	343,974,034	18,171,738
Plants and machinery	119,893,681	128,352,848	-8,459,167
Industrial and commercial equipment	13,014,009	9,546,476	3,467,533
Other tangible assets	19,789,209	17,109,000	2,680,209
Assets in progress and payments in advance	35,117,508	26,268,638	8,848,870
TOTAL	549,960,179	525,250,996	24,709,183

The variation of € 24,709,184, net of depreciation of € 58,629,949 (€ 57,277,411 in 2015) is detailed as follows:

	Land and buildings	Plant and machinery	Industrial and commercial equipment	Other tangible assets	Assets in progress and payments in advance	TOTAL
Book value at 12.31.2015	545,977,190	610,068,842	60,243,664	66,574,700	26,268,638	1,309,133,034
Increase	21,121,562	11,992,378	6,370,049	7,532,793	33,083,680	80,100,462
Thereof due to change in the consolidation area			10,032	53,125		63,157
(Decrease)	- 970,592	- 1,747,820	- 1,165,823	- 4,789,031		- 8,673,266
Reclassification	13,954,365	8,813,954	- 621,266	2,214,658	- 24,481,798	- 120,087
Revaluation/(devaluation)	4,166,365	3,306,112	493,469	243,039	246,988	8,455,973
Cost at 12.31.2016	584,248,890	632,433,466	65,320,093	71,776,159	35,117,508	1,388,896,116
Provision at 12.31.2015	202,003,156	481,715,994	50,697,188	49,465,700		783,882,038
Depreciation	18,209,492	30,351,136	3,970,649	6,098,672		58,629,949
Reclassification	944,317	- 201,233	- 1,527,235	664,064		- 120,087
(Decrease)	- 558,972	- 1,648,481	- 1,140,908	- 4,470,451		-7,818,812
Exchange rate difference	1,505,125	2,322,369	306,390	228,965		4,362,849
Accumulated Depreciation at 12.31.2016	222,103,118	512,539,785	52,306,084	51,986,950		838,935,937
NET BOOK VALUE 12.31.2016	362,145,772	119,893,681	13,014,009	19,789,209	35,117,508	549,960,179

The main variations which occurred during the year are as follows:

Mapei Corp made investments for approximately € 16,000,000 for the construction of the powder plant in Dalton (Georgia), for the purchase of a land in Virginia, for the construction of a production site in New Jersey, as well as for the upgrade and maintenance of the production site in Chicago (Illinois) and the extension of the warehouse in Garland (Texas).

Polyglass USA Inc made investments of approximately  $\leq$  9,700,000, mainly due to the construction of the new production site in Waco (Texas), to the maintenance of the Winter Haven (Florida) plant and to the purchase of equipment for the production site in Hazleton (Pennsylvania).

Mapei South Africa Pty Ltd made investments amounting to € 7,000,000 for the purchase of a building and renovation of offices in Johannesburg.

Mapei Spa incurred investments in the year of about € 5,700,000, of which € 1,700,000 for the purchase of two buildings in Latina and for the expansion of the Mediglia and Sassuolo production sites, € 1,100,000 for furniture and electronic machines for the new offices in Sassuolo and € 1,200,000 for improvements to plants in Mediglia.

Vinavil Spa made investments of approximately € 4,000,000 relating primarily to rationalisation initiatives and improvements at the Ravenna production site, particularly to the "Raviflex bagging machine" facility, and restoration of the sewage pipe; initiatives to enhance the new "Acrylics" production line at the Villadossola production site, as well as to adjustments into line with safety legislation.

Mapei Malaysia Sdn Bhd invested approximately € 3,100,000, relating to the purchase of a piece of land in the Johor area.

Zao Mapei made investments totalling around € 3,000,000, mainly for the purchase of assets from the company Baumit in the Saint Petersburg area.

Mapei Contruction Products India Ltd invested approximately € 2,300,000 relating to the new production site in Vadodara (Gujarat).

Polyglass Spa invested approximately € 2,200,000, primarily for the purchase of an industrial building close to the Ponte di Piave production site and the creation of a new line of bituminous products.

Mapei Mexico Sa de Cv invested roughly € 2,100,000 for the purchase of assets from the company Texzim in the Zimapan and Cancun production sites.

Mapei Polska Spzoo made investments of approximately € 2,000,000, mostly relating to the purchase of equipment and for maintenance of the production site in Barcin, as well as for the extension of the liquids plant and the purchase of equipment for the Gliwice production site.

Mapei Stadium Srl invested € 1,800,000 in the redevelopment of the grandstand area and in the maintenance of the Reggio Emilia stadium.

Mapei Construction Chemicals Llc carried out investments of approximately € 1,800,000 in upgrading the production site and extending the warehouse and offices in Dubai.

Mapei As invested roughly  $\leq$  1,600,000 in the revamping and extraordinary maintenance of plants and buildings.

Mapei Argentina Sa invested € 1,300,000 in modernising the Buenos Aires production site.

Mapei Yapi Kimyasallari Ins San Ve Tic AS carried out investments totalling approximately € 1,200,000 for the extension and renovation of the Polatli production site.



Vinavil Egypt for Chemicals Sae invested around  $\$  1,100,000, essentially in the construction of the new acrylics plant.

General Resource Technology Corp invested around € 1,000,000 in the new production sites in Garland (Texas) and Logan (New Jersey).

The remaining investments of around  $\le$  13,200,000 were carried out by all our other companies, involving an amount of less than  $\le$  1,000,000, and refer predominantly to extraordinary maintenance and upgrading of production sites.

The decreases in the year, totalling approximately  $\leq$  1,000,000, net of accumulated depreciation, refer in particular to disposals of "Land and buildings, Equipment and Other assets (cars, computers and office equipment)" of the various companies.

A part of the increases in the period, amounting to around € 60,000, is attributable to the variation of the consolidation area and, in particular, to Mapei Perù Sac.

The exchange rate had a positive effect on the transactions of the year. The 2016 amount of approximately € 8,500,000, is mainly attributable to a revaluation of US Dollar, Canadian Dollar, Norwegian Krone and Russian Ruble, while British Pound and Egyptian Lira recorded a devaluation.

Tangible assets were subjected to monetary revaluations in previous years by Mapei Spa and by Vinavil Spa in accordance to specific regulations (Italian laws no. 576/75-72/83 - 413/91 - 342/00 - 350/03 - 266/05 - 185/08). Details of the monetary revaluations performed during the years are as follows:

Assets revaluated	Total
Land	234,108
Building	30,299,995
Plants and machinery	76,468,018
Industrial and commercial equipment	11,592,187
Other assets	268,266

# Financial assets - Investments in subsidiaries

The item consists of equity investments in non-operational companies during 2016, Mapei Middle East Fzco and Mapei Saudia Llc, as well as Vaga Società Agricola S.s, not included in the consolidation area.

The table below shows the breakdown of balances of the investments as at December 31st, 2016, compared with the balances as at December 31st, 2015.

COMPANY	12.31.2016	12.31.2015	Difference	% of ownership
Mapei Middle East Fzco	81,458	81,458	0	50%
Mapei Saudia Llc	130,595	0	130,595	100%
Mapei Perù Sac	0	321	-321	100%
Vaga Società Agricola Ss	9,000	9,000	-	90%
TOTAL	221,053	90,779	130,274	

# Financial assets - Investments in other companies

As at December 31st, 2016, the item totals € 256,945 (€ 256,828 in 2015) and refers to minority interests held primarily by Mapei Spa for € 56,332 and Vinavil Spa for € 195,909. The list of investments held is reported below:

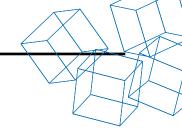
COMPANY	12.31.2016	12.31.2015	Difference	% of ownership
Ravenna Servizi Industriali	195,909	195,909	-	3,50%
Golf Club Modena Spa	18,000	18,000	-	0,05%
Internazionale Marmi e Macchine	10,331	10,331	-	0,10%
STRESS Scarl	24,000	24,000	-	6,00%
Consorzio Cis-e	4,000	4,000	-	5%
Other minority investments	4,705	4,588	117	
TOTAL	256,945	256,828	117	

# Financial assets - Other receivables

Other receivables of € 2,204,668 as at December 31st, 2016 (€ 1,781,991 in 2015), mainly consist of loans related to the core business of Mapei Corp (€ 873,139), Mapei Spa (€ 655,965), Mapei Construction Chemicals Llc (€ 154,867), the Sopro Group (€ 81,066), Mapei As (€ 72,829), Mapei Romania Srl (€ 68,953) and the Polyglass Group (€ 67,417).

The interest rate applied to these loans is aligned with market conditions.





# Financial assets - Term securities

At year-end, the item amounts to  $\in$  1,348,971 ( $\in$  1,295,044 as at December 31st, 2015) and mainly includes securities held by Mapei Corp ( $\in$  360,497), Polyglass Group ( $\in$  324,758), Sopro Group ( $\in$  259,272), Mapei Gmbh (A) ( $\in$  159,318), Mapei Construction Chemicals Panama Sa ( $\in$  65,140) and Mapei Yapi Kimyasallari Ins San Ve Tic AS ( $\in$  54,159).

# **Current assets - Inventories**

Inventories breakdown, as at December 31st, 2016, compared with the situation as at December 31st, 2015, is composed as follows:

	12.31.2016	12.31.2015	Difference
Raw materials, packaging and supplies	133,653,413	127,466,193	6,187,220
Work in progress and semi-finished goods	11,123,199	12,188,371	-1,065,172
Work in progress on a contract basis	889,178	102,444	786,734
Finished products and merchandise	149,346,197	139,404,118	9,942,079
Advances to suppliers	10,222	405,092	- 394,870
TOTAL	295,022,209	279,566,218	15,455,991

The major part of raw material stock is held by Mapei Spa (€ 22,469,941), Mapei Corp (€ 21,849,305), Polyglass Group (€ 19,373,364), Vinavil Spa (€ 12,501,521), Sopro Group (€ 4,926,241), Mapei Inc (€ 4,213,122), Gorka Cement Spzoo (€ 3,559,831), Mapei France Sa (€ 3,546,418), Mapei Polska Spzoo (€ 3,430,854), Mapei As (€ 3,381,336), Mapei Far East Pte Ltd (€ 3,301,710), Vinavil Egypt for Chemicals Sae (€ 2,891,360), Mapei Construction Chemicals Llc (€ 2,659,796) and Mapei Gmbh (D) (€ 2,348,228).

Regarding finished products, the major part of the stock is held by Mapei Corp (€ 26,366,808), Mapei Spa (€ 16,331,666), Polyglass Group (€ 14,985,685), Mapei Inc (€ 9,273,852), Vinavil Spa (€ 7,431,541), Sopro Group (€ 6,992,177), Mapei Polska Spzoo (€ 5,093,541), Mapei France Sa (€ 4,920,272), Mapei As (€ 4,712,385), Mapei Gmbh (D) (€ 4,132,325), Mapei Construction Chemicals Llc (€ 3,776,674), Mapei Uk Ltd (€ 3,452,921), Mapei Australia Pty Ltd (€ 3,343,801), Gorka Cement Spzoo (€ 3,248,834), Mapei Suisse Sa (€ 2,522,673) and Mapei Kft (€ 2,599,330).

Inventories of raw materials increased, because of some companies purchased more raw materials, anticipating the increase of some raw material costs.

The increase in inventories of finished goods, compared to the previous year, is due to the increase in turnover. This increase was also impacted by the exchange rate effect.

# **Current assets - Receivables**

The breakdown is as follows:

	12.31.2016	12.31.2015	Difference
Trade receivables	497,838,996	487,252,188	10,586,808
Allowance for doubtful credits as at January 1 <sup>st</sup> , 2016	- 28,668,744	- 31,009,902	2,341,158
Exchange rate difference at opening balance	945,793	16,991	928,802
Provision to the allowance for credits	- 7,348,307	- 8,046,083	69 <i>7,77</i> 6
Release of the allowance for credits	6,170,281	10,311,133	- 4,140,852
Exchange rate difference variation	66,318	59,117	7,201
Allowance for doubtful credits as at December 31st, 2016	- 28,834,659	- 28,668,744	- 165,915
Trade receivables (net of allowance for doubtful credits)	469,004,337	458,583,444	10,420,893
Towards tax offices	34,225,968	28,687,268	5,538,700
Deferred tax assets	25,505,237	24,503,955	1,001,282
Other receivables	57,496,377	59,798,278	- 2,301,901
TOTAL	586,231,918	571,572,945	14,658,973

# **Current assets - Trade Receivables**

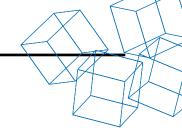
The Companies with the most significant amounts of trade receivables are Mapei Corp ( $\le 5,820,747$ ), Mapei Inc ( $\le 4,737,744$ ), Mapei As ( $\le 3,496,452$ ), Mapei Argentina Sa ( $\le 2,003,093$ ), Mapei Australia Pty Ltd ( $\le 1,153,052$ ), Mapei France Sa ( $\le 1,059,308$ ) and Mapei Perù Sac ( $\le 773,264$ ), mostly due to the increase in turnover.

The provision for doubtful accounts is mainly composed of amounts related to Polyglass Group (€ 6,788,701), Mapei Spa (€ 3,300,145), Mapei Yapi Kimyasallari Ins. San. Ve Tic. As (€ 1,982,304), Vinavil Spa (€ 1,284,257), Mapei Hellas Sa (€ 1,196,327), Sopro Group (€ 1,179,114), Mapei Corp (€ 912,197), Mapei Polska Spzoo (€ 838,598), Mapei Australia Pty Ltd (€ 640,875), Benelux Sa (€ 617,699), Mapei Sro (€ 598,277), Mapei Contruction Chemicals Llc (€ 591,246), Adesital Spa (€ 550,000) and Cercol Spa (€ 500,000).

# **Current assets - Receivables from tax offices**

Receivables towards Tax authorities, equal to € 34,225,968 as at December 31st, 2016 (€ 28,687,268 as at December 31st, 2015) refer to receivables from tax authorities related to income taxes and VAT. The companies with the most significant amounts are Mapei Spa (€ 16,665,606), Mapei France Sa (€ 2,504,535), Polyglass Group (€ 2,144,266), Vinavil Spa (€ 1,431,230), Mapei Hellas Sa (€ 1,425,000), Mapei Construction Chemicals Panama Sa (€ 1,185,821), Vaga Srl (€ 980,636) and Mapei Suisse Sa (€ 942,739).





# **Current assets - Deferred tax assets**

Deferred tax assets, equal to € 25,505,237 as at December 31st, 2016 (€ 24,503,955 as at December 31st, 2015) and are mainly attributable to Mapei Spa (€ 12,372,234), Polyglass Group (€ 3,290,385), Mapei Corp (€ 2,824,576), Sopro Group (€ 908,471), Mapei Australia Pty Ltd (€ 654,644), Mapei Polska Spzoo (€ 652,185) and Vinavil Spa (€ 606,080). The total amount of Deferred Tax assets was generated by Group Companies booking of fiscal losses, costs, provisions, depreciations and accruals whose tax deduction is deferred to one or more following years. The amount has been refundable according to the profitability prospective of the Group companies tax deductible in two or more exercises. Whenever necessary, the tax rate has been adjusted based on the rate set out by the Stability Law. For further details, please refer to the enclosed attachment 3.

# **Current assets - Other Receivables**

Other receivables at year-end, totalling  $\leq$  57,496,377 ( $\leq$  59,798,278 in 2015) are detailed as follows:

	12.31.2016	12.31.2015	Difference
Receivables from insurance companies	488,397	635,578	- 147,181
Receivables from social security institutions	245,522	232,123	13,399
Receivables from employees	1,447,564	1,740,292	- 292,728
Advances to suppliers	7,605,943	7,915,880	- 309,937
Other receivables	47,708,951	49,274,405	- 1,565,454
TOTAL	57,496,377	59,798,278	- 2,301,901

# **Current assets - Marketable securities**

At the end of the year, marketable securities amount to  $\le$  6,755 ( $\le$  6,424 as at December 31st, 2015) and consist mainly of securities held by Mapei As.

# **Current assets - Cash and banks**

The breakdown is as follows:

	12.31.2016	12.31.2015	Difference
Bank and postal current accounts	171,299,572	83,367,186	87,932,386
Cash	2,373,156	4,142,316	- 1,769,160
TOTAL	173,672,728	87,509,502	86,163,226

Bank and postal deposits represent temporary positions on bank current accounts at year-end. The most significant balances refer to Mapei Spa (€ 120,559,616), Ma-

pei Suisse Sa (€ 6,777,128), Vinavil Egypt for Chemical Sae (€ 5,751,109), Mapei As (€ 3,519,013), Mapei Malaysia Sdn Bhd (€ 2,702,098), Mapei Construction Chemicals Llc (€ 2,646,804), Mapei South Africa Pty Ltd (€ 2,225,243), Mapei Corp (€ 2,217,151), Sopro Group (€ 2,129,010), Mapei Hellas Sa (€ 2,089,979), Mapei Contruction Materials Co Ltd (Guangzhou) (€ 2,078,977), Zao Mapei (€ 1,595,756), Mapei Romania Srl (€ 1,275,003), Mapei Inc (€ 1,175,744), Mapei Australia Pty Ltd (€ 1,157,534) and Mapei Uk Ltd (€ 1,058,171).

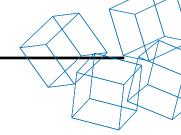
# **Current assets - Accruals and pre-payments**

This item amounts to € 9,984,630 as at December 31st, 2016 (€ 8,962,682 as at December 31st, 2015) and is mainly composed of costs pertaining to future years and held by U.S. Sassuolo Calcio SrI (€ 2,606,829), Mapei Spa (€ 1,699,533), Mapei Corp (€ 1,511,157), Mapei France Sa (€ 824,670), Mapei Korea Ltd (€ 412,577), Mapei Stadium SrI (€ 367,699), Mapei Far East Pte Ltd (€ 361,538), Mapei Indonesia Construction Product Pt (€ 312,912), Mapei Construction Chemicals LIc (€ 252,539) and Mapei Suisse Sa (€ 219,616).

The breakdown is as follows:

	12.31.2016	12.31.2015	Difference
Rents	3,194,916	2,901,142	293,774
Interests	309,088	335,012	- 25,924
Insurances	2,462,054	1,468,957	993,097
Non-capitalised grants	-	203,062	- 203,062
Others	4,018,572	4,054,509	- 35,937
TOTAL	9,984,630	8,962,682	1,021,948

# Liabilities



# **Shareholders' Equity**

The breakdown is as follows (movements are disclosed in the enclosed Annex no.2):

#### **Share capital**

As at December 31st, 2016, the share capital of the Holding Company is € 100,000,000, entirely paid, equal to 100,000,000 shares of € 1 each, increased compared to the previous year due to an increase in share capital of € 27,500,000 and a free of charges increase totalling € 25,000,000 from a riclassification of the item "Revaluation Reserve". The Holding Company also cancelled 3,060,000 own shares with a value of € 1 for a total nominal value of € 3,060,000.

#### **Revaluation reserve**

The Holding Company, Mapei Spa, and Vinavil Spa, during the previous fiscal years made monetary revalutations of some tangible assets by introducing in the Shareholders' Equity a dedicated monetary revaluation reserve of  $\leqslant$  53,687,539. This reserve was partially used, for an amount of  $\leqslant$  25,000,000, for the free share capital increase of Mapei Spa.

#### Legal reserve

The legal reserve is recorded on the Holding Company books; it amounts to  $\leq$  10,112,000, unchanged in comparison with the previous year.

# Other reserves

These amount to  $\le$  26,536,289 as at December 31<sup>st</sup>, 2016 ( $\le$  21,707,900 as at December 31<sup>st</sup>, 2015) and are mainly attributable to Mapei Spa and Vinavil Spa, in compliance with specific tax law. The difference, compared to the previous year, is attributable to the allocation of a portion of accumulated profit brought forward made by the Holding Company.

#### **Translation reserve**

This reserve, deriving from the translation of Financial Statements expressed in foreign currencies using the current exchange rate method, shows a positive balance of € 9,192,455 as at December 31<sup>st</sup>, 2016 (€ 8,900,183 as at December 31<sup>st</sup>, 2015). The substantial stability of the reserve is generated by the different trend in some currencies, including a revaluation of US Dollar, Canadian Dollar, Russian Ruble and Norwegian Krone, while Egyptian Lira and British Pound recorded a devaluation.

#### **Consolidation reserve**

As at December 31st, 2016 this reserve totals € 1,198,890 (€ 1,493,976 as at December 31st, 2015) and represents the difference between the purchase cost of consolidated subsidiaries and the corresponding share of shareholders' equity at the date of the first consolidation. The decrease is attributable to Mapei Mexico Sa de CV as a result of the increase in the value of the equity investment and the deconsolidation of Polyglass Romania Srl.

#### Reserve for expected cash flow hedges

This negative reserve, introduced by accounting standard no. 32 of the Italian Accounting Organisation, amounts to  $\leqslant$  716,355, and relates to the negative value deriving from the market information at the reporting date of the derivative instruments subscribed by Mapei Spa ( $\leqslant$  425,498) and Polyglass Spa ( $\leqslant$  290,857).

These instruments, as already outlined in the section "Derivative instruments", are classified as "simple hedging relationships" and, as such, are aligned to the underlying for whose hedging they were subscribed.

Their main characteristics are summarised below:

COMPANY	BANK	INSTRUMENT	MATURITY	NOTIONAL VALUE
Mapei Spa	Unicredit	Interest Rate Swap	30.09.2019	27,500,000 €
Mapei Spa	Unicredit	Interest Rate Swap	15.07.2019	36,666,667 €
Polyglass Spa	Intesa San Paolo	Interest Rate Swap	20.12.2021	3,115,940 €

#### Accumulated profit brought forward

As at December 31st, 2016 this reserve amounts to  $\le$  502,861,270 ( $\le$  510,679,829 as at December 31st, 2015) and includes the non-distributed accumulated profit brought forward, net of the dividend distributed by Mapei Spa of  $\le$  100,000. In 2016, they were increased by the nominal value of own shares of  $\le$  3,060,000, cancelled during the year, from which at the moment of subscription they were withdrawn and decreased by a value of  $\le$  51,515,113 following the cancellation of own shares booked to the Financial Statements.

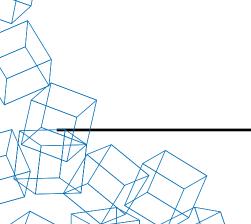
This item showed the following trend:

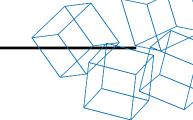
	12.31.2016
Profit /(loss) brought forward - Dec. 31st 2015	510,679,829
Consolidated accumulated profit brought forward - 2015	40,736,554
Dividends	- 100,000
Other changes	- 48,455,113
PROFIT /(LOSS) BROUGHT FORWARD DECEMBER 31st, 2016	502,861,270

# **Minority equity**

This item includes portions of shareholders' equity and profits, relating to consolidated subsidiaries, pertaining to minority interests.

As at December  $31^{st}$ , 2016, this item amounts to  $\leq$  307,209 (compared to  $\leq$  330,570 as at December  $31^{st}$ , 2015).





# Sundry risk and other funds

This item totalled € 61,868,910 (€ 58,893,921 as at December 31st, 2015) and breaks down as follows:

	12.31.2016	12.31.2015	Difference
Pension fund	22,775,787	21,618,908	1,156,879
Taxation	17,822,574	17,257,960	564,614
Derivative financial instruments (liabilities)	928,096	936,369	-8,273
Others	20,342,453	19,080,484	1,261,969
TOTAL	61,868,910	58,893,721	2,975,189

Pension funds mainly consist of the pension fund of Sopro Group (€ 5,964,519), Mapei Gmbh (D) (€ 2,076,670) and Mapei Corp (€ 594,874), the agents termination indemnity of Mapei Spa (€ 3,378,944) and the pension fund dedicated to managers and directors of Mapei Spa (€ 7,110,630), Vinavil Spa (€ 1,131,863) and Cercol Spa (€ 809,176).

The tax fund is composed of the deferred tax provision and the tax risks fund. The former, amounting to € 17,471,111, mainly relates to the companies Mapei Corp (€ 9,731,414), Mapei Spa (€ 2,575,967), Mapei Inc (€ 1,703,198), Mapei France Sa (€ 1,019,783), Adesital Spa (€ 604,024), Cercol Spa (€ 375,579), Mapei As (€ 240,438), Gorka Cement Spzoo (€ 238,068) and Sopro Group (€ 179,540); the latter, amounting to € 351,463 (€ 500,507 as at December 31st, 2015), is primarily attributable to Polyglass Group.

Deferred Tax Liabilities are originated by timing differences between the book value of assets and liabilities included in Financial Statements and their correspondent tax basis. Movements in this fund during the year 2016 are as follows:

Opening balance - Jan 1st 2016	17,257,960
Exchange rate difference opening balance	242,497
Increase	4,325,937
Decrease	- 4,108,392
Exchange rate difference variations	104,572
CLOSING BALANCE DEC 31 <sup>ST</sup> 2016	17,822,574

For further details, please refer to annex 3.

The provision for financial instruments (payable), introduced under article 2424 of the Italian Civil Code, represents the market value of derivative financial instruments subscribed by Mapei Spa and Polyglass Spa. As at December 31st, 2016, this item amounts to € 928,096 (€ 936,369 as at December 31st, 2015).

Other funds amounting to € 20,342,453, compared to € 19,080,484 in 2015, are composed essentially of provisions made by Mapei Spa for € 10,500,000 for potential future risks deriving from civil liability, by Sopro Group (€ 858,637), relating to potential future losses connected with the alignment of the value of a building lease agreement and a risk deriving from product guarantees offered, by Mapei Gmbh (A) for € 1,301,405, in relation to possible third parties future liability risks by Vaga Srl for

€ 592,000 related to the quarry restoration costs, by Polyglass Group amounting to € 4,978,435 for the product guarantee, by Mapei Polska Spzoo (€ 1,365,718) for prize contest.

The main increase is attributable to Mapei Spa (€ 1,500,000) in relation to possible future third parties liability risks.

# Staff severance reserve

The amount as at December 31st, 2016 is  $\leq$  11,349,178 ( $\leq$  11,355,715 as at December 31st, 2015) and covers the entire liability to employees, in compliance with current legislation in each single country. During the year, the fund showed the following trend:

	12.31.2015	Provision	(Utilized)	Exchange rate	12.31.2016
Mapei Spa	5,147,095	4,743,246	5,373,175	-	4,517,166
Vinavil Spa	1,049,227	1,147,553	1,201,401	-	995,379
Adesital Spa	278,501	126,136	141,854	-	262,783
Vaga Srl	442,530	96,977	37,934	-	501,573
Mapei Spain Sa	36,384	-	36,384	-	-
Mapei Gmbh (A)	664,362	59,903	-	-	724,265
Mapei Polska Spzoo	38,919	6,738	-	- 1,363	44,294
Gorka Cement Spzoo	119,412	7,282	7,282	- 3,964	115,448
Mapei Hellas Sa	172,952	288,859	364,731	-	97,080
Mapei Construction Chemicals Llc	1,001,421	335,918	66,711	46,274	1,316,902
U.S. Sassuolo Calcio Srl	455,330	559,612	348,389	-	666,553
Mosaico + Srl	137,482	34,004	36,955	-	134,531
Progetto Mosaico + Srl	128,476	37,030	-	-	165,506
Mapei Construction Chemicals Panama Sa	21,976	178,937	124,862	3,415	79,466
Mapei Doha Llc	12,230	5,326	4,214	457	13,799
Mapei Costa Rica Sa	415	1,246	- 415	52	2,128
Mapei Perù Sac	-	9,534	-	- 278	9,256
Sopro Group	573,382	116,160	63,431	- 885	625,226
Polyglass Group	860,659	464,414	452,950	-	872,123
Mapei Argentina SA	-	160,838	160,838	-	-
Cercol Spa	214,962	130,287	139,549	-	205,700
TOTAL	11,355,715	8,510,000	8,560,245	43,708	11,349,178

# Liabilities

The composition of liabilities is reported and commented below.

# **Bonds**

The bond, issued by Mapei Spa, maturing on June 14<sup>th</sup>, 2016, was fully repaid on July 18<sup>th</sup>, 2016. This item was therefore eliminated.

# Bank repayable within 12 months

As at December 31st, 2016 bank loans amount to € 96,481,181 (€ 144,498,186 as at December 31st, 2015) and refer to the following companies:

	12.31.2016	12.31.2015	Difference
Mapei Spa	37,486,496	73,572,860	- 36,086,364
Vinavil Spa	993	1,644	- 651
Adesital Spa	701	574	127
Vaga Srl	606	608	- 2
Mapei France Sa	14	1,750,114	- 1,750,100
Mapei Benelux Sa	740,000	2,500,000	- 1,760,000
Mapei Gmbh (D)	5,000	-	5,000
Mapei UK Ltd	-	423	- 423
Mapei Construction Chemicals Llc	27,273,236	33,301,321	- 6,028,085
Mapei Polska Spzoo	1,114	2,649	- 1,535
Mapei Korea Ltd	866,578	1,093,084	- 226,506
Vinavil Egypt for Chemicals Sae	3,830,455	1,709,491	2,120,964
Mapei Australia Pty Ltd	-	137	- 137
Mapei Panama Sa	-	461	- 461
Mosaico+ Srl	790	2,396	- 1,606
Progetto Mosaico+ Srl	158,951	174,285	- 15,334
Mapei Yapi Kimyasallari Ins. San. Ve Tic As	4,905,928	5,033,133	- 127,205
Mapei Gmbh (A)	18,233	-	18,233
Mapei Construction Materials Co Ltd (Guangzhou)	1,215,464	2,131,961	- 916,497
Mapei Malaysia Sdn Bhd	-	5,813,361	- 5,813,361
Mapei As	216,707	1,133,489	- 916,782
Mapei Corp	9,499,306	9,197,405	301,901
Polyglass Group	205,605	397,720	- 192,115
Cercol Spa	4,384	3,015	1,369
U.S. Sassuolo Calcio Srl	10,000,249	6,666,922	3,333,327
Mapei Argentina Sa	7,106	-	7,106
Mapei Srb Doo	43,265	11,133	32,132
TOTAL	96,481,181	144,498,186	- 48,017,005

These amounts also include the current portion of the long-term loans expiring in 2016, which amount to  $\leqslant$  59,644,959 ( $\leqslant$  65,933,172 in the previous financial year). The decrease in short-term indebtedness is mainly attributable to the Holding Company, due to the lower usage of these lines.

#### Banks repayable after 12 months

As at December 31<sup>st</sup>, 2016, these amounted to € 350,449,138 (€ 266,321,845 as at December 31<sup>st</sup>, 2015) and refer to the following companies:

	12.31.2016	12.31.2015	Difference
Mapei Spa	278,785,066	194,666,667	84,118,399
Mapei France Sa	-	5,821	- 5,821
Mapei Benelux Sa	2,960,000	3,700,000	- 740,000
Mapei Construction Chemicals Llc	27,829,171	27,566,416	262,755
Mapei As	1,554,538	1,627,096	- 72,558
Mapei Inc	-	2,755,580	- 2,755,580
Mapei Corp	18,973,532	27,555,801	- 8,582,269
Progetto Mosaico + Srl	31,250	156,250	- 125,000
Mapei Yapi Kimyasallari Ins. San. Ve Tic As	2,015,356	2,500,865	- 485,509
Mapei Srb Doo	-	1,232	- 1,232
Polyglass Group	800,225	786,117	14,108
U.S. Sassuolo Calcio Srl	17,500,000	5,000,000	12,500,000
TOTAL	350,449,138	266,321,845	84,127,293

The increase occurred during the year, equal to € 84,127,293, is mainly due to the new loans issued by Mapei Spa and U.S. Sassuolo Calcio Srl from Intesa San Paolo, EIB, Unicredit and BNL.

The above loans will expire according to the following schedule:

	2018	2019	2020	2021 and following	Bank maturity
Loans from banks	101,755,472	81,425,669	80,140,058	87,127,939	350,449,138

# Debts to other financial institutions repayable within 12 months

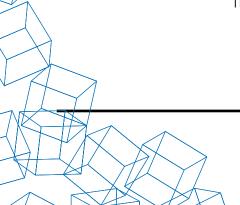
As at December 31st, 2016 these debts amount to € 13,736,520 (€ 2,025,472 as at December 31st, 2015) and are mainly composed by the portions of the long-term finance lease agreements outstanding with other financial institutions.

The increase is predominantly attributable to the factoring of trade receivables, carried out by U.S. Sassuolo Calcio ( $\le 11,500,000$ ).

The most significant amounts mainly relate to Mapei Polska Spzoo ( $\leqslant$  834,841), Mapei Group ( $\leqslant$  651,361), Polyglass Group ( $\leqslant$  379,518) and Mapei As ( $\leqslant$  123,813).

#### Debts to other financial institutions repayable after 12 months

As at December 31<sup>st</sup>, 2016 these debts amount to € 6,446,105 (€ 5,737,715 as at December 31<sup>st</sup>, 2015). The amounts are mainly attributable to the accounting for properties under finance lease contracts according to International Accounting Standard no. 17. These properties relate to the following companies:



	12.31.2016	12.31.2015	Difference
Mapei Spain Sa	435,072	444,172	- 9,100
Mapei Polska Spzoo	1,104,619	546,619	558,000
Mapei Bulgaria Eood	57,816	117,427	- 59,611
Mapei Betontechnik Gmbh	-	10,877	- 10,877
Progetto Mosaico+ Srl	62,500	-	62,500
Mapei Malaysia Sdn Bhd	77,193	42,590	34,603
Mapei As	619,064	702,905	- 83,841
Mapei Inc	1,144	10,459	- 9,315
Mapei Corp	1,455,506	676,936	778,570
Mapei Argentina Sa	114,799	128,862	- 14,063
Polyglass Group	2,518,392	3,056,868	- 538,476
TOTAL	6,446,105	5,737,715	708,390

The above loans expire according to the following schedule:

	2018	2019	2020	2021 and following	Bank maturity
Loans from other financial institutions	2,211,476	1,667,994	1,230,775	1,335,860	6,446,105

#### **Advances from customers**

As at December 31st, 2016, advances from customers totalled € 2,187,464 (€ 3,260,806 as at December 31st, 2015), mostly due to advances from customers of Mapei Construction Materials Co Ltd (Guangzhou) (€ 675,832), Mapei Spa (€ 455,000), Mapei Nederland Bv (€ 353,514), Sopro Group (€ 292,501), Zao Mapei (€ 102,811) and Mosaico+ Srl (€ 56,096).

## **Trade payables**

As at December 31st, 2016, trade payables totalled € 248,301,675 (€ 219,095,357 as at December 31st, 2015) and mainly include trade payables of Mapei Spa (€ 91,264,002), Polyglass Group (€ 23,604,032), Vinavil Spa (€ 18,327,745), Sopro Group (€ 15,213,328), Mapei Corp (€ 13,917,509), Mapei Uk Ltd (€ 8,621,796), Mapei As (€ 6,706,715), Mapei Construction Chemicals Llc (€ 5,826,618), Mapei Inc (€ 5,825,990) and Mapei Malaysia Sdn Bhd (€ 5,445,884). Mapei France Sa (€ 5,196,322), Mapei Polska Spzoo (€ 3,901,209), Mapei Suisse Sa (€ 3,475,707), Mapei Far East Pte Ltd (€ 3,389,118) and Vaga Srl (€ 2,879,910).

# **Draft and promissory notes**

As at December 31st, 2016, these totalled € 1,529,359 (€ 1,114,182 in 2015) and include draft and promissory notes to suppliers, mainly by Mapei Korea Ltd.

# **Due to Tax offices**

As at December 31st, 2016, these payables totalled € 32,623,289 (€ 32,959,777 as at December 31st, 2015), fully reflecting the current tax obligations of the Group.

#### Social security contributions

As at December 31st, 2016, these totalled € 12,362,234 (€ 11,369,028 as at December 31st, 2015) and are all payable within one year.

#### Other payables

As at December 31st, 2016, these payables totalled € 83,740,467 (€ 93,615,130 as at December 31st, 2015). This amount mainly includes payables to Football clubs of U.S. Sassuolo Calcio SrI (€ 39,341,700) for the residual instalments on the purchase of players' registration rights, payables to employees of Mapei Spa (€ 12,099,537), Mapei Corp (€ 3,708,990), Sopro Group (€ 3,388,001), Polyglass Group (€ 3,280,150), Vinavil Spa (€ 2,854,500), Mapei France Sa (€ 2,001,944), Mapei Inc (€ 1,916,844), Mapei As (€ 1,782,579), Mapei Suisse Sa (€ 1,268,646) and Mapei Australia Pty Ltd (€ 1,071,548). The breakdown by category is detailed below:

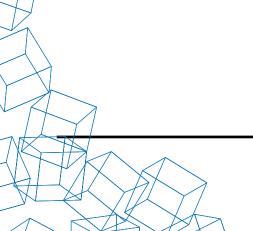
	12.31.2016	12.31.2015	Difference
Payables to insurance companies	233,675	1,567,117	- 1,333,442
Payables to employees	42,686,585	36,690,294	5,996,291
Other payables	40,820,207	55,357,719	- 14,537,512
TOTAL	83,740,467	93,615,130	- 9,874,663

The decrease is mainly attributable to the company U.S. Sassuolo Calcio Srl owing to the drop in payables due to companies in the sector.

# **Accruals and pre-payments**

As at December 31st, 2016 the balance was € 13,954,013 (€ 11,103,826 as at December 31st, 2015) and is mainly composed of deferred income of the company U.S. Sassuolo Calcio Srl related to television and media revenues pertaining to the next year, deferred income accounted for by Mapei Hellas Sa for the grants received from the Greek Government for the investment in the plant in Athens and insurance costs mainly related to Mapei Corp. The breakdown by category is detailed below:

	12.31.2016	12.31.2015	Difference
Rents	1,183,380	875,954	307,426
Interests	589,247	564,930	24,317
Insurance	2,396,393	1,592,397	803,996
Leasing	208,051	288,556	- 80,505
Not capitalized Grants	701,846	874,783	- 172,937
Other	8,875,096	6,907,206	1,967,890
TOTAL	13,954,013	11,103,826	2,850,187





No significant amounts for financial payments are booked to assets in the Balance Sheet.

# Other obligations not recordered in the Balance Sheet

There are no obligations not recordered in the Statement of Assets and Liabilities.

## Notes to the Profit and Loss Statement

## Value of production

#### **Net sales**

In 2016, our Group generated an aggregate turnover of  $\leqslant$  2,705,548,373, compared to  $\leqslant$  2,600,082,797 in 2015. Intercompany transactions totalled  $\leqslant$  423,449,635, compared to  $\leqslant$  420,406,253 in the previous year. The result is a consolidated Group turnover of  $\leqslant$  2,282,098,738 in 2016, compared to  $\leqslant$  2,179,676,544 in 2015, with an increase of  $\leqslant$  102,422,194, equal to 4.7%.

The following companies mainly contributed to the increase in consolidated turnover: Mapei Corp, Mapei As, Sopro Group, Polyglass Group, Mapei Australia Pty Ltd, Mapei Korea Ltd, Mapei Spain Sa, Mapei Inc, Mapei Malaysia Sdn Bhd, Mapei France Sa, Mapei Gmbh (D), Mapei Construction Products India Ltd, Mapei Mexico Sa de Cv, Mapei Romania Srl, Mapei Nederland Bv, Mapei Hellas Sa, Mapei Construction Chemicals Llc and U.S. Sassuolo Calcio Srl.

The Group consolidated turnover by geographic area is the following (amounts in millions of Euros):

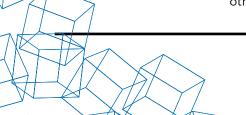
GEOGRAPHIC AREA	12.31.2016	12.31.2015	% Difference	% Incidence 2016	% Incidence 2015
Italy	541,0	545,6	-0,8%	23,7%	25,1%
Western Europe	625,7	595,1	5,1%	27,4%	27,3%
Eastern Europe	209,1	214,1	-2,3%	9,2%	9,8%
Americas	679,7	604,6	12,4%	29,8%	27,7%
Asia	150,1	148,7	0,9%	6,6%	6,8%
Oceania	41,3	34,0	21,5%	1,8%	1,6%
Africa	35,2	37,6	-6,4%	1,5%	1,7%
TOTAL	2,282,1	2,179,7	4,7%	100,0%	100,0%

### **Capitalised costs**

This item amounts to  $\leqslant$  957,395 ( $\leqslant$  803,916 in 2015), attributable mostly to the Holding Company in relation to the capitalisation of personnel costs for the development of the new ERP System.

### Other revenues

This item amounted to € 38,552,301, down by € 2,714,345 compared to 2015, and mainly includes gains on disposal of players' registration rights of U.S. Sassuolo Calcio SrI (€ 22,883,674), cost recovery and release of funds of Sopro Group (€ 1,793,100), other operating revenue of Mapei As (€ 1,476,068), the employee costs recharged and contingent assets from the operations of Mapei Spa (€ 6,461,188), release of funds and other operating revenues of Mapei Polska Spzoo (€ 1,086,583).





Production costs amount to  $\leq$  2,166,277,545, marking an increase of  $\leq$  57,989,368 compared to 2015, and are broken down as follows:

	12.31.2016	12.31.2015	Difference
Purchase of raw materials, packaging and supplies	1,040,466,695	1,024,682,373	15,784,322
Purchase of services	422,655,834	409,504,709	13,151,125
Rentals and leasing	33,829,581	32,242,516	1,587,065
Labour costs	533,479,204	495,210,268	38,268,936
Amortisation, depreciation and doubtful credits provision	93,377,769	94,557,757	- 1,179,988
Decrease/(increase) of raw materials, pack, suppl. and merch.	- 7,305,963	1,996,337	- 9,302,300
Sundry risk provisions	8,710,105	16,907,499	- 8,197,394
Other operating costs	41,064,320	33,186,718	7,877,602
TOTAL	2,166,277,545	2,108,288,177	57,989,368

## Purchase of raw materials, packaging and suppliers

The increase in the purchase of raw materials, packaging and suppliers is essentially due to the increase in turnover; the relative incidence on revenues decreased compared to last year, due to the lower prices of some raw materials.

#### **Services**

Purchase of services refers to industrial services (maintenance, consumption and third-party services), commercial services (transport, fees, advertising and marketing) and general services (consultancy, travel, courses, insurance, postal and telephone charges). The breakdown by nature is detailed below:

	12.31.2016	12.31.2015	Difference
Variable costs	70,715,140	70,013,349	701,791
Marketing and Advertising	56,643,582	54,563,384	2,080,198
Travel and Entertainment	37,521,259	35,594,638	1,926,621
Freight costs	124,483,085	117,300,925	7,182,160
Insurances	8,772,155	8,484,618	287,537
Other industrial and general services	124,520,613	123,547,795	972,818
TOTAL	422,655,834	409,504,709	13,151,125

The increase in Freight costs is mainly due to the increase in turnover.

### **Labour costs**

Personnel costs in 2016 amount to € 533,479,204, marking an increase of € 38,268,936 compared to 2015, due primarily to the increases in personnel. The highest increases relate to Mapei Spa (€ 10,845,857), Mapei Corp (€ 9,261,747), Polyglass Group (€ 3,406,733), Sopro Group (€ 1,207,270), Mapei Gmbh (D) (€ 1,114,868), Mapei Inc (€ 1,508,209), Mapei Australia Pty Ltd (€ 963,864) and U.S. Sassuolo Calcio Srl (€ 904,103).



The headcount by geographic area is the following:

GEOGRAPHICAL AREA		12.31.2016			12.31.2015	
	Blue- collars	White- collars	Total	Blue- collars	White- collars	Total
Italy	874	1,328	2,202	876	1,257	2,133
Western Europe	612	1,396	2,008	564	1,372	1,936
Eastern Europe	400	1,022	1,422	391	981	1,372
Americas	1,038	1,023	2,061	892	924	1,816
Asia	191	499	690	163	439	602
Oceania	16	82	98	12	78	90
Africa	102	53	155	99	50	149
TOTAL	3,233	5,403	8,636	2,997	5,101	8,098

### **Amortisation and depreciation**

The amortisation of intangible assets increased compared to the previous year, mainly due to the amortisation of players' registration rights of the company U.S. Sassuolo Calcio Srl., and due to higher amortisation of Mapei Spa's software licences.

The depreciation of tangible assets increases compared to previous years, as a result of the investments made.

#### **Provision for doubtful credits**

This item includes the allocations to the provision for doubtful accounts and is composed primarily of the balances of Polyglass Group ( $\leqslant$  1,298,173), Mapei Spa ( $\leqslant$  1,098,435), Mapei Polska Spzoo ( $\leqslant$  772,337), Mapei Yapi Kimysallari Ins. San. Ve Tic. As ( $\leqslant$  530,730), Mapei Construction Chemicals Llc ( $\leqslant$  331,820) and Mapei Mexico Sa de Cv ( $\leqslant$  314,336).

## **Sundry risks provisions**

This item amounts to  $\in$  8,710,105 ( $\in$  16,907,499 in 2015) and is partly attributable to the Holding Company for provisions in relation to possible future third parties liability risks.

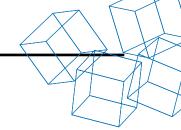
## Other operating costs

Other operating costs break down as follows:

	12.31.2016	12.31.2015	Difference
Associations	3,177,379	1,975,449	1,201,930
Property taxes and rates	4,912,023	4,736,507	175,516
Other taxes and duties	4,736,771	4,073,501	663,270
Losses on disposal of assets	114,719	800,735	- 686,016
Consultancy on products	5,171,932	4,131,160	1,040,772
Gratuity and donations	3,847,646	1,287,011	2,560,635
Other operating costs	19,103,850	16,182,355	2,921,495
TOTAL	41,064,320	33,186,718	7,877,602

The increase in the item "Other operating costs" is attributable to Mapei Spa and Mapei As. The increases in the items "Associations and Donations" are attributable to the Holding Company.





## Financial income and expenses

#### Other financial income

Other financial income pursuant to C16) of the Profit and Loss Statement amount to € 827,550 (€ 727,770 in 2015) and is mainly attributable to Mapei South Africa Pty Ltd (€ 255,035), Zao Mapei (€ 131,600), Sopro Group (€ 117,202), U.S. Sassuolo Calcio Srl (€ 70,433), Mapei Construction Products India Ltd (€ 61,528), Vinavil Egypt for Chemicals Sae (€ 30,068) and Mapei As (€ 28,909). This financial income refers to interest income on financial activities of companies in Mapei Group.

## Interest paid and other financial charges

Interest paid and other financial charges detailed in line C17) of the Profit and Loss Statement amount to  $\[ \le 10,005,122 \]$  ( $\[ \le 10,246,612 \]$  in 2015) and are mainly attributable to Mapei Spa ( $\[ \le 3,127,048 \]$ ), Mapei Construction Chemicals Llc ( $\[ \le 1,532,287 \]$ ), Mapei Corp ( $\[ \le 1,186,793 \]$ ), Mapei Yapi Kimyasallari Ins. San. Ve Tic. As ( $\[ \le 958,747 \]$ ), Polyglass Group ( $\[ \le 343,976 \]$ ), Mapei Argentina Sa ( $\[ \le 324,553 \]$ ), U.S. Sassuolo Calcio Srl ( $\[ \le 269,295 \]$ ), Vinavil Egypt for Chemicals Sae ( $\[ \le 262,724 \]$ ) and Sopro Group ( $\[ \le 223,484 \]$ ) and refer to interest paid on loans and bank current accounts.

### Gains and loss on exchange rates

The negative balance of exchange rate management ( $\leqslant$  11,177,060), showing a clear deterioration compared to 2015 (positive balance of  $\leqslant$  4,147,059), is attributable mainly to the devaluation of Egyptian Lira compared to the previous year.

## Income and anticipated (deferred) tax

In 2016, these amount to  $\leqslant$  54,691,386 ( $\leqslant$  69,100,318 in 2015) of which  $\leqslant$  55,266,717 for income tax provision,  $\leqslant$  1,362,559 for taxes of previous years and  $\leqslant$  1,937,890 for prepaid taxes. It should be noted that, the other extraordinary expenses relating to the taxes of previous years were reclassified in this item, as a result of the acknowledgement of the new legislation.

The item is mainly attributable to the taxes relating to Mapei Corp (€ 19,085,491), Polyglass Group (€ 6,459,754), Sopro Group (€ 5,566,924), U.S. Sassuolo Calcio Srl (€ 4,575,855), Mapei Suisse Sa (€ 3,919,608), Vinavil Spa (€ 3,856,773), Mapei Uk Ltd (€ 2,154,938) and Mapei Polska Spzoo (€ 2,075,280). For further details, please refer to annex 3.

# Significant events subsequent to the close of the financial year

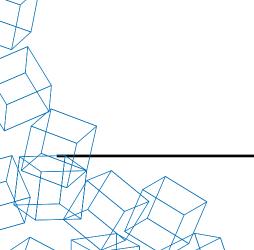
In February, we acquired 100% of the shares of the Colombian company Productos Bronco Sa with registered office in Medellin. The company specialises in the production of waterproof products, sealants and finishes and occupies a prestigious spot in the market owing to the quality of its products. The company name was subsequently changed to Mapei Colombia Sas. This acquisition will enable us to strengthen our presence in the South American market.

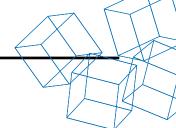
No other significant events occurred after the close of the year, whose effects could require changes or additional comments with respect to our company's economic, equity and financial position as at December 31st 2016.

# **Emoluments to the Directors and to the Statutory Auditors of the Parent Company**

Managing Director: Euro 1,000,000 Statutory Auditors: Euro 109,200

Managing Director Mr. Giorgio Squinzi





## Annex 1

## **Development of net equity of Mapei Group**

	Net Profit	Net Equity
As per Mapei Spa's Financial Statements	35,066,421	394,981,451
Increase in net profit and net worth arising from consolidation	104,858,453	460,432,791
Consolidation Adjustments:		
Dividends from consolidated investments	-70,081,492	0
Amortisation of Goodwill	-5,581,229	-99,795,299
Devaluation of consolidated investments	24,729,432	26,613,518
Adjustments due to the Group accounting principles	-1,566,813	4,267,548
Elimination of intercompany extraordinary gain	-40,030	-1,309,887
Deferred taxation	832,644	-3,961,049
Translation Reserve	0	9,860,401
Group	88,217,386	791,089,474
Minority Interest	40,661	307,209
As per Mapei Group Financial Statements (TOTAL)	88,258,047	791,396,683

## Annex 2

# Statement of changes in Consolidated Shareholders' equity - 2014-2015-2016

2014 CHANGES	As at December 31, 2013	2013 Net Profit: Brought Forward	2013 Net Profit: Dividends	Translation of the Financial Statements	Other changes	2014 Net Profit	As at December 31, 2014
I Share Capital	50,560,000						50,560,000
III Revaluation Reserve	79,692,811				(1,005,272)		78,687,539
IV Legal Reserve	10,112,000						10,112,000
VI Own Shares Reserves	51,515,113						51,515,113
VII Other Reserves	8,913,095				1,005,272		9,918,367
Translation Reserve	(8,962,346)			8,507,281			(455,065)
Consolidation Reserve	1,989,022				(81,159)		1,907,863
VIII Profit Brought Forward	406,141,086	41,997,576	(100,000)		1,359,323		449,397,985
IX Group Net Profit	41,997,576	(41,997,576)				23,368,934	23,368,934
Group Net Equity	641,958,357	0	(100,000)	8,507,281	1,278,164	23,368,934	675,012,736
Minority Interest Capital and Reserve	440,339	115,168		(29,774)	0		525,733
Minority Interest Net Profit	115,168	(115,168)				128,710	128,710
Total Net Equity	642,513,864	0	(100,000)	8,477,507	1,278,164	23,497,644	675,667,179

2015 CHANGES	As at December 31, 2014	2014 Net Profit: Brought Forward	2014 Net Profit: Dividends	Translation of the Financial Statements	Other changes	2015 Net Profit	As at December 31, 2015
I Share Capital	50,560,000						50,560,000
III Revaluation Reserve	78,687,539						78,687,539
IV Legal Reserve	10,112,000						10,112,000
VI Own Shares Reserves	51,515,113						51,515,113
VII Other Reserves	9,918,367	11,789,533					21,707,900
Translation Reserve	(455,065)			9,355,248			8,900,183
Consolidation Reserve	1,907,863				(413,887)		1,493,976
VIII Profit Brought Forward	449,397,985	11,579,401	(1,500,000)		(312,670)		459,164,716
IX Group Net Profit	23,368,934	(23,368,934)				45,564,943	45,564,943
Group Net Equity	675,012,736	0	(1,500,000)	9,355,248	(726,557)	45,564,943	727,706,370
Minority Interest Capital and Reserve	525,733	128,710		29,335	0		683,778
Minority Interest Net Profit	128,710	(128,710)				(353,208)	(353,208)
Total Net Equity	675,667,179	0	(1,500,000)	9,384,583	(726,557)	45,211,735	728,036,940

2016 CHANGES	As at December 31, 2015	2015 Net Profit: Brought Forward	2015 Net Profit: Dividends	Translation of the Financial Statements	Other changes	2016 Net Profit	As at December 31, 2016
I Share Capital	50,560,000				49,440,000		100,000,000
III Revaluation Reserve	78,687,539				(25,000,000)		53,687,539
IV Legal Reserve	10,112,000						10,112,000
V Own Shares Reserves	0				0		0
VI Other Reserves	21,707,900	4,828,389					26,536,289
VII Reserve for cash flow hedge	(812,091)				95,736		(716,355)
Translation Reserve	8,900,183			292,272			9,192,455
Consolidation Reserve	1,493,976				(295,086)		1,198,890
VIII Profit Brought Forward	510,679,829	40,736,554	(100,000)		(48,455,113)		502,861,270
IX Group Net Profit	45,564,943	(45,564,943)				88,217,386	88,217,386
X Own shares negative reserve	(51,515,113)				51,515,113		0
Group Net Equity	675,379,166	0	(100,000)	292,272	27,300,650	88,217,386	791,089,474
Minority Interest Capital and Reserve	683,778	(353,208)		(64,022)	0		266,548
Minority Interest Net Profit	(353,208)	353,208				40,661	40,661
Total Net Equity	675,709,736*	0	(100,000)	228,250	27,300,650	88,258,047	791,396,683

<sup>\* 2016</sup> opening balances differ from 2015 closing balance for the amendments introduced by the new accounting directives (OIC).

Annex 3

## **Deferred tax assets and liabilities**

		2016		2015			
	Amount of timing differences	Tax Rate	Tax Effect	Amount of timing differences	Tax Rate	Tax Effect	
Deferred tax assets:	,			<u>'</u>			
Cost deductible in more fiscal years	933,183	26,2%	244,691	6,287,350	27,5%	1,727,071	
Differences in provisions	45,393,491	24,8%	11,280,176	33,465,602	26,5%	8,873,614	
Differences in depreciations	6,757,220	30,7%	2,077,308	4,456,039	30,8%	1,370,472	
Tax losses carried forward	31,115,360	23,9%	7,448,306	34,398,239	26,6%	9,167,004	
Unrealised losses on exchange rates	2,295,642	22,8%	523,838	1,452,300	27,2%	395,536	
Deferred tax assets based on tax credit	335,537	19,7%	65,976	367,474	19,9%	73,176	
Others	12,510,129	30,9%	3,864,942	9,807,252	29,5%	2,897,082	
Total	99,340,562		25,505,237	90,234,256		24,503,955*	
Deferred tax liabilities:							
Tax effect on anticipated depreciations	34,087,715	30,4%	10,378,526	28,246,133	27,7%	7,824,491	
Tax effect on leasing reclassification	13,605,951	28,4%	3,865,741	15,447,077	29,4%	4,545,369	
Unrealised gains on exchange rates	3,218,371	23,9%	768,421	7,171,033	25,9%	1,853,845	
Others	7,623,767	32,2%	2,458,421	7,829,562	32,4%	2,533,748	
Total	58,535,804		17,471,109	58,693,805		16,757,453	
Deferred tax liabilities (assets) net			8,034,128			7,746,502	

 $<sup>^{</sup>st}$  2015 amounts are affected by the new accounting standards.

Annex 4

Sales, receivables and payables analysis by geographic area as per 12.31.2016

	Consolidated Turnover	Consolidated Trade Receivables	Other Receivables	Trade Payables	Other Payables
Italy	540,982,461	215,307,113	91,364,435	136,464,789	72,138,606
Europe	834,791,737	116,259,356	13,897,430	57,907,428	37,678,665
Americas	679,708,046	78,141,342	9,435,471	29,675,791	14,269,554
Asia	150,169,413	44,442,015	1,402,992	19,864,413	5,993,514
Oceania	41,267,048	9,445,095	806,182	963,323	2,329,895
Africa	35,180,033	5,409,416	321,072	3,425,931	32,579
Total	2,282,098,738	469,004,337	117,227,582	248,301,675	132,442,813



EY S.p.A. Via Meravigli, 12 20123 Milano

Tel: +39 02 722121 Fax: +39 02 722122037

Independent auditor's report in accordance with article 14 of Legislative Decree n. 39, dated 27 January 2010 (Translation from the original Italian text)

To the Sole Shareholders of Mapei S.p.A.

## Report on the consolidated financial statements

We have audited the accompanying consolidated financial statements of Mapei Group, which comprise the balance sheet as at December 31, 2016, the income statement and the statement of cash flows for the year then ended, and the explanatory notes.

### Director's responsibility for the consolidated financial statements

The Sole Director of Mapei Group is responsible for the preparation of these consolidated financial statements that give a true and fair view in accordance with the Italian regulations governing financial statements.

## Auditor's responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing (ISA Italia) implemented in accordance with article 11 of Legislative Decree n. 39, dated 27 January 2010. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's professional judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by Directors, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

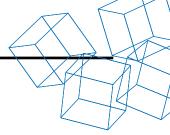
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A member firm of Ernst & Young Global Limited









## Opinion

In our opinion, the consolidated financial statements give a true and fair view of the financial position of Mapei Group as at December 31, 2016, of its financial performance and cash flows for the year then ended in accordance with the Italian law.

## Report on other legal and regulatory requirements

Opinion on the consistency of the Report on Operations with the consolidated financial statements

We have performed the procedures required under audit standard SA Italia n. 720B in order to express an opinion, as required by the law, on the consistency of the Report on Operations with the consolidated financial statements. The Sole Director of Mapei Group is responsible for the preparation of the Report on Operations in accordance with the applicable laws and regulations. In our opinion the Report on Operations is consistent with the consolidated financial statements of Mapei Group as at December 31, 2016.

Milano, July 5, 2017

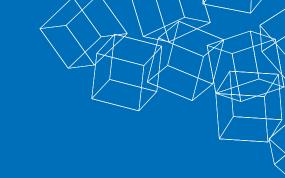
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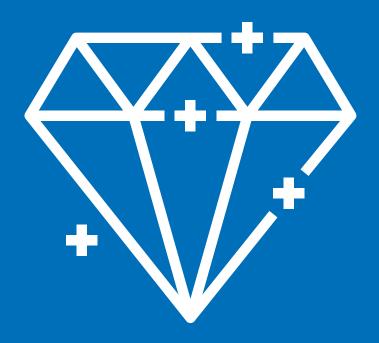
Signed by: Renato Macchi, partner

This report has been translated into the English language solely for the convenience of international readers.



# MAJOR PROJECTS 2016

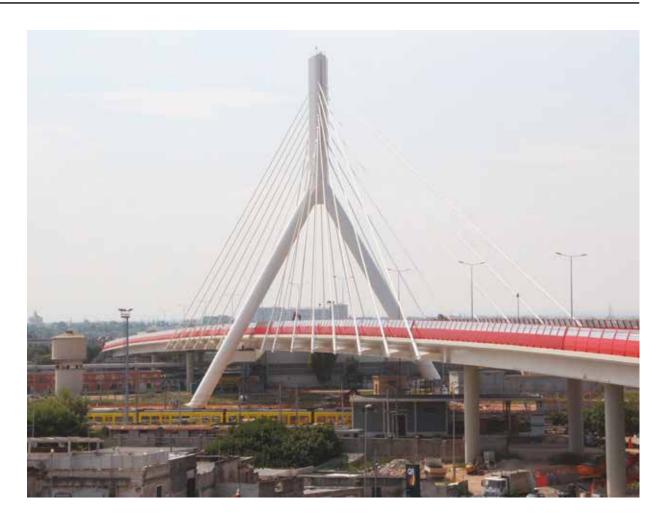




Used all around the world, not only in the residential building sector but also for strategic infrastructures and large sports complexes and projects, Mapei products contain a high level of advanced technology and have a competitive quality/price ratio. Durability, safety, ecosustainability and specialisation are the main characteristics of Mapei products. The result of investments that go on to supply and enhance a portfolio of more than 1,500 products, as well

as new developments in nanotechnology and sustainability, Mapei solutions are the winning choice for every site around the world, where Mapei Technical Services are always on hand to give advice and work alongside clients, designers and contractors.

The following pages illustrate the most important projects we worked on in 2016.



# Cable-stayed Bridge

Bari (Italy)

This cable-stayed bridge was designed by NET Engineering and owes its form to an idea by Carlos Fernandez. It was constructed to fill a large gap in the accessibility and urban roads network in the Bari area. Mapei intervened with a group of partners from the city to work on completion of the north-south axis of the bridge. In this particular case, one of the improvements was to apply protective, crack-resistant, elastomeric **Elastocolor Paint** on all the reinforced concrete piles of the bridge to guarantee their durability over the years. The paint was applied after treating the surfaces with the water-based, acrylic bonding promoter and primer **Malech** to even out the surfaces.

After this operation, white **Keraflex Maxi S1** high-performance, deformable cementitious adhesive with no vertical slip, extended open time and Low Dust technology was used, a product particularly recommended for installing large format porcelain and natural stone tiles (thickness of adhesive from 3 to 15 mm).







## Poliambulanza Foundation

Brescia (Italy)

Founded in 1903 as a hospital for the less fortunate, today the Poliambulanza general hospital is a specialised centre offering services with cutting-edge technology in modern, comfortable surroundings. Recently, to further improve the services available, a new multifunctional surgery unit was inaugurated. The contractor responsible for installing the PVC floor and wall coverings contacted Mapei Technical Services for assistance.

Work started by applying **Eco Prim T** acrylic primer in water dispersion, after which the substrates were skimmed with **Pianodur R** ultra-rapid, self-levelling smoothing compound. To level off the worst affected areas, the substrates were treated with **Nivorapid** ultra rapid-drying, thixotropic cementitious skimming compound mixed with **Latex Plus**. The last step was to bond sheets of PVC with **Ultrabond Eco V4 SP** multi-purpose adhesive in water dispersion with very low emission level of volatile organic compounds.







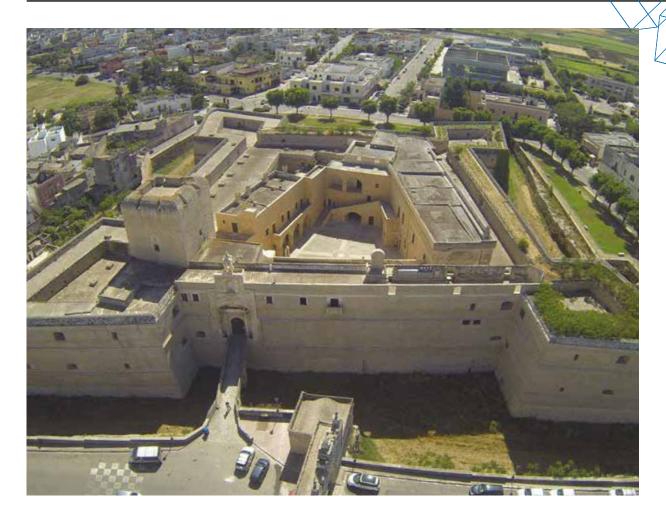
## The Innocenti Museum

Florence (Italy)

Founded by Brunelleschi in 1419 to provide refuge for abandoned children, today it is a Public Services Centre which offers assistance to children, with areas for foster children and mothers with personal problems, as well as several Unicef research offices. In 2016 a new floor was installed made from Ultratop ultra rapid-hardening, selflevelling cementitious mortar. The first step was to prime the installation bed with Primer SN and broadcast the surface of the primer with Quartz 1.2. At the end of this intervention the surface was treated with Mapecrete Stain Protection, while the plasterboard panels in the gallery were painted with Quarzolite Base Coat coloured primer with defect-covering properties and finished off with a coat of Quarzolite Paint. The next step was to apply the wall finish Silexcolor Marmorino, perfect for an antique-effect finish typical of Marmorino plaster.







# **Angevin Castle**

Copertino - Lecce (Italy)

Built in 1540 and then extended by the Angevins, the Castle is located in the ancient town centre of Copertino and is surrounded by its original moat. Mapei took part in the restoration and redevelopment work on the Castle. Silancolor Cleaner Plus was used to disinfect and clean the surface of the stone damaged by harmful microorganisms while Consolidante 8020 was used to consolidate the cortex of the weak and crumbling substrates, including those of historical and artistic interest.

**Mape-Antique Allettamento** masonry mortar was used to rebuild the damaged areas of the facing walls and then **Mape-Antique LC** hydraulic binder was used to make dehumidifying render.

After just a few days, the products from the **Mape-Antique** range had formed a structure comparable to that of mortar used in ancient times.

Lastly, **Antipluviol S** was used to protect the facing walls and guarantee the durability of the restoration work.







# Piazza Venezia

Rome (Italy)

Built on the ruins of other works at the foot of Government House, Piazza Venezia has always been a favourite tourist spot for visitors to Rome as well as one of the symbols of the Eternal City. Important restoration work was carried out on the paving in the Piazza to make it more functional and suitable for the high volume of traffic that passes through it on a daily basis.

With Mapei Technical Services on site to follow the work, the **Mapestone** System was the "turnkey" solution provided for the new paving in the Piazza, a system that ensures higher durability over the years and resistance to de-icing salts and freeze/thaw cycles. The stone blocks were installed and grouted with **Mapestone TFB 60** and **Mapestone PFS 2** XF4 exposure class ready-mixed cementitious mortar. On this occasion, the **Mapestone** System is literally the foundation for the renewal of this Piazza, an iconic symbol of the city of Rome.







# Carpe Vita Resort

St. Constantine and St. Helena (Bulgaria)

Located in the heart of the most important bathing area in Bulgaria, between St. Constantine and St. Helena, the Carpe Vita Resort is surrounded by beautiful parkland and spa water swimming pools overlooking the sea. Various Mapei products were used in the construction of this modern structure: Adesilex P7 cementitious adhesive for the glass mosaic, ceramics and marble floor and wall coverings in the rooms, Mapetherm EPS and Mapetherm AR 2 to install the external thermal insulation, Quarzolite Base Coat and Silexcolor Tonachino to paint the façades and, lastly, Mapelastic with Mapenet 150 to waterproof the balconies, terraces, bathrooms and swimming pools.







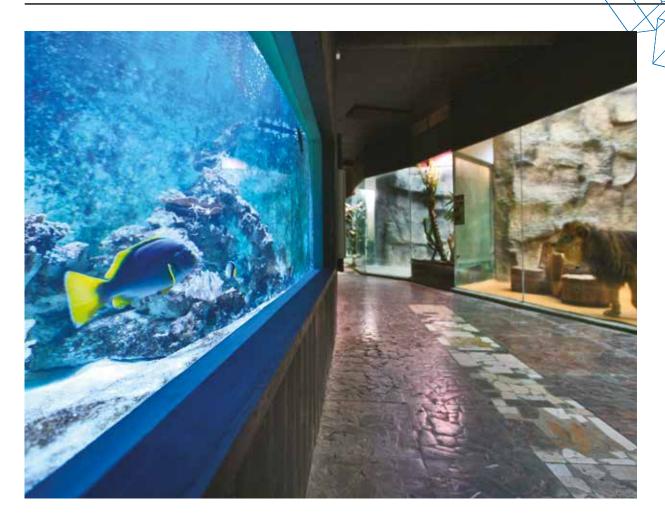
## Heritage Hotel Life Palace

Sebenico (Croatia)

Nestling in a small, lively square in Sebenico, a Croatian city on the Dalmatian coast, the Heritage Hotel Life Palace is an oasis of luxury that seems to have come straight out of a fairy tale. Between 2014 and 2015 the complex underwent a major overhaul, with a key role being played by Mapei products for the structural upgrading and restoration work. One of the products used was the high performance masonry mortar Mape-Antique LC, particularly recommended for upgrading masonry damaged by capillary rising damp and soluble salts. The original natural stone walls were restored and consolidated with Mape-Antique I-15, while the problem of rising damp from the foundations of the building was overcome by injecting Mapestop. Further consolidation and structural strengthening work was carried out with Carboplate and Adesilex PG1.







# Aquarium ZOO

Olomouc (Czech Republic)

Located in Olomouc in the Czech Republic, the zoo is home for numerous species of rare and fascinating mammals and marine creatures.

Mapei took part in the restoration work on the internal aquarium in 2016.

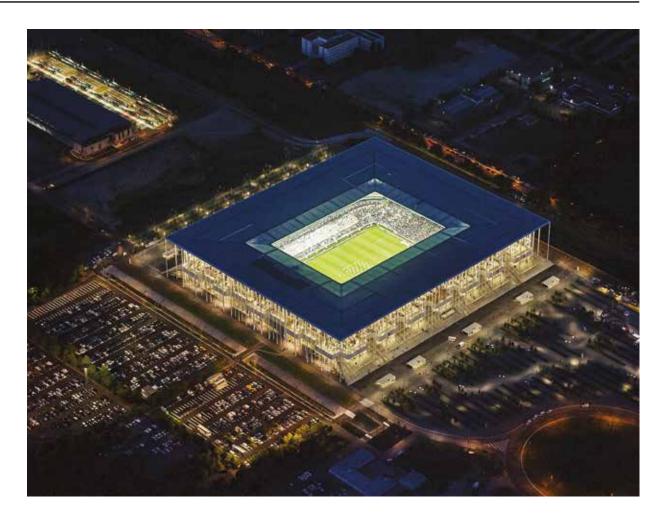
This project required the use of products suitable for permanent contact with the drinking water and salt water contained in the various tanks. **Mapeband TPE** and **Adesilex PG4** were used to seal and waterproof the joints between the bottoms and sides of the tanks and between the frames of the viewing windows and the concrete around them.

The hydro-expanding sealant **Mapeproof Swell** was also used. The bottom of the tanks, which are permanently covered with sand and water, was levelled off with **Triblock Finish**.

After it had been smoothed, parts of it were grouted with **Kerapoxy.** 







# Matmut-Atlantique Stadium

Bordeaux (France)

The new Matmut-Atlantic Stadium is a multi-purpose sports complex located in the French district of Bordeaux.

Mapei took part in the construction of this sports complex with the supply of innovative products and solutions, mainly concrete admixtures such as the super-plasticisers and set-accelerators **Chronos VF 210** and **Mapefast 1.** Other complementary products included **Mapeform Eco Oil** and **Mapeform Protec. Adesilex PG1** and **Mapefill F** were also used for bonding and sealing work.







# Gerber Shopping Centre

Stuttgart (Germany)

The Gerber is a grand, multi-purpose complex built with quality products according to eco-sustainability criteria. Inside the complex there are offices, apartments and 25,000 m² of shops and boutiques. Inaugurated in 2014, this three-storey structure is located in the centre of the city of Stuttgart and has around 90 shops and several restaurants arranged along its wide corridors, with parking spaces for 650 cars and 200 bicycles. Top quality Mapei products were also used in the building of this structure. The substrates were treated with **Primer G** and then levelled off with **Ultraplan Maxi**.

One-component, high performance **Ultralite S1** adhesive was used to install stone-effect hexagonal ceramic tiles while **Keracolor FL-S** rapid-drying cementitious mortar was used to grout the tiles.







# Nephroxenia Dialysis Center

Chania (Greece)

The Nephroxenia Dialysis Centre is a cutting-edge medical centre located in Chania on the beautiful island of Crete. The structure was built from scratch to maximise the comfort and satisfaction of patients while at the same time adopting the most advanced health and safety features. Most of the floors in the building were made using Mapei products.

In this particular case the choice was to use the **Ultratop System**, a cementitious-based flooring system applied directly on concrete substrates, prepared beforehand by priming them with **Primer SN** mixed with **Quartz 0.5**. The last step was to apply **Mapefloor Finish 50N** two-component, transparent polyurethane finish for absorbent surfaces to protect the floors.







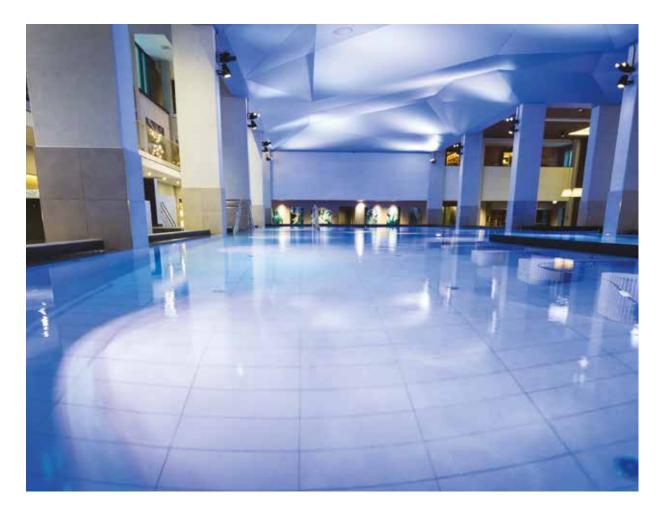
## **Avalon Park**

Miskolc (Hungary)

The city of Miskolctapolca is renowned for its Avalon Park, a favourite tourist spot for relaxation and fun in one of the largest forests in Hungary. Almost all the plasterboard surfaces in this multi-purpose complex were treated with synthetic resin-based Primer G, Prosfas was used to consolidate the concrete screeds in the chalets and Ultraplan Eco 20 and Ultraplan Renovation were used for the substrates before installing the textile wall coverings. The surfaces of the swimming pools and hotel balconies were treated with Planitop Fast 330 and Mapelastic Turbo, while the surfaces in the bathrooms were waterproofed with Mapelastic, Mapegum WPS and Mapelastic AquaDefense. The wall coverings were grouted with Keracolor FF Flex, Ultracolor Plus and Kerapoxy CQ and sealed with Mapesil LM and Mapesil AC. Lastly, external thermal insulation was applied using the Mapetherm System, which included the products Mapetherm AR1 and Mapetherm AR1 GG.







## The Well

Kolbotn (Norway)

The Well, the largest thermal and spa centre in Norway, offers a unique experience in wellbeing. Mapei products were used in various areas of the structure. Planicrete, VR Støp, Uniplan FR and Primer FR were used in all areas of the swimming pools to treat various surfaces and a combination of Redirep 45 RSF, Mapepoxy L and Planicrete were used to skim the walls of the swimming pools. Other surfaces were then repaired with Monofinish, while Mapepoxy L and Confix were used to make certain areas in the swimming pools stronger and more resistant. Redisit was applied on metal components to prevent rust and corrosion. Other products chosen for this project were Primer FR, Uniplan FR and Mapelast which, along with Mapeband, Mapenet 150 and Mapetex Sel, ensure the pools remain waterproofed. All the ceramic tiles were installed with Elastorapid, Adesilex P10, Isolastic and Ultralite S1 and Kerapoxy and Kerapoxy Design were used along with Mapesil AC to grout and seal the tiles and joints.







## Castelul de Lut Valea Zanelor

Sibiu (Romania)

A new and original hotel inspired by the world of fairies was built in the famous Romanian region of Transylvania.

The idea to build this very special structure came from a local singing couple who left Bucharest in 2014 and went back to live in the Carpathian Mountains with the idea to build a hotel out of materials typical of the area: clay, sand and straw. Construction of the hotel turned out to be a particularly ambitious project and a challenge that also involved Mapei Technical Services Romania.

Mape-Antique LC cement-free binder made from lime and Eco-Pozzolan was used to grout the gaps between the stone used to build the hotel restaurant. The product was mixed with locally-sourced aggregates and water to from mortar which remains highly permeable to water vapour, so that any moisture rising by capillary lift from the foundations is gradually released. The same product was also used to make dehumidifying render.







# Riviera Shopping Centre

Moscow (Russia)

The imposing Riviera Shopping Centre is the first one of its kind and opened in Moscow in 2016. Mapei supplied products and solutions to the contractors working on its construction between 2014 and 2016.

**Mapegrout** was used on the load-bearing structures, **Mapefill** was used to anchor the bases of the escalators, **Porocol** was used to build parts of the walls and columns, **Topcem Pronto** was used to level off differences in thickness and **Mapeflex PU30** was used to grout expansion joints.

**Primer G** was used to improve the bond of the finishing materials, while **Nivoplan Plus** was applied to level off walls and floors before the finishing operations and installation of the tiles and stone with **Keraflex Maxi**. **Granirapid** and **Mapeklej Extra** were chosen to install ceramics and natural stone, **Ultracolor Plus** was used to fill the grout lines and **Mapelastic** was used to waterproof the bathrooms and service rooms.







# Chelsea Creek Apartments

London (United Kingdom)

Chelsea Creek is a quiet London suburb that includes the newest and most prestigious luxury apartment complex, just a short walk from the River Thames.

The Mapei system **Ultraplan Renovation Screed 3240** was used to level off the differences in height in the substrates of all the apartments to bring them in line with the requirements of modern underfloor heating systems.

Before installing the floor and wall tiles in the bathrooms the **Mapeguard WP** waterproofing and anti-fracture system was applied, after which the fast set cementitious adhesives **Keraquick S1** and **Keraflex Maxi S1** were used to install the large format porcelain tiles and marble.

**Topcem Pronto** was used to prepare the screeds under the shower trays in the bathrooms and, lastly, **Keracolor FF** with **Fugolastic** were used to fill the grout lines in the tiles.







# Les Promenades Shopping Centre

Saint-Bruno (Québec - Canada)

Les Promenade in St-Bruno is an enormous shopping centre in Quebec, Canada, providing a modern and quality shopping experience for the residents from the South Shore area of Montreal, as well as from far beyond. The project manager of NC & G and his team worked with Mapei to complete the restoration, expansion and optimisation of the structure.

**Ultraplan 1 Plus** was used to level off the areas for the new floors, while the ceramic and quartz tiles on the main floor were installed with **Ultraflex RS Mortar** after treating the surfaces with **Eco Prim Grip**. The tiles were then grouted with **Ultracolor Plus**. All the old tiles on the second floor were removed and the entire surface was levelled off with **Novoplan 1** before installing the new flooring with **Mapei Ultralite Mortar** adhesive.







# Blue Lagoon apartment complex

Miami (Florida - USA)

With 29,729 m² of vertical façades, these four apartment blocks offer residents luxurious surroundings quite unlike any other: they are in a strategic position between the shores of "Blue Lagoon" lake and Miami International Airport. Mapei intervened to tackle the problems caused by damp and pollution. The buildings were coated with **Elastocolor Coat,** which is designed and tested to resist aggressive environmental conditions, particularly for masonry, and has a formulation based on one of the best resin systems available with excellent resistance to UV rays.







## Gran Teatro de La Habana

Havana (Cuba)

Located in the centre of Havana, the Gran Teatro de La Habana "Alicia Alonso" is one of the most important cultural institutions in the Cuban capital and home of the Cuba National Ballet Company. Numerous Mapei products were used in the restoration work on the building. Mape-Antique I was used to consolidate the walls, Lampocem was used to fasten the injection nozzles in place and Mapeflex PU 45 was used to seal surface cracks.

Mapefer 1K and Mapegrout Rapid were applied to repair reinforced concrete elements and to protect the reinforcement steel. Planitop 560 was used to finish off concrete elements and internal walls, while Planitop HDM Maxi was used to restore ornamental stone features. The masonry was coated with the Mape-Antique system and finished off with Silexcolor Tonachino after applying a special base coat of Silexcolor Primer. Lastly, the façade was treated by impregnating it with water-repellent Antipluviol S.







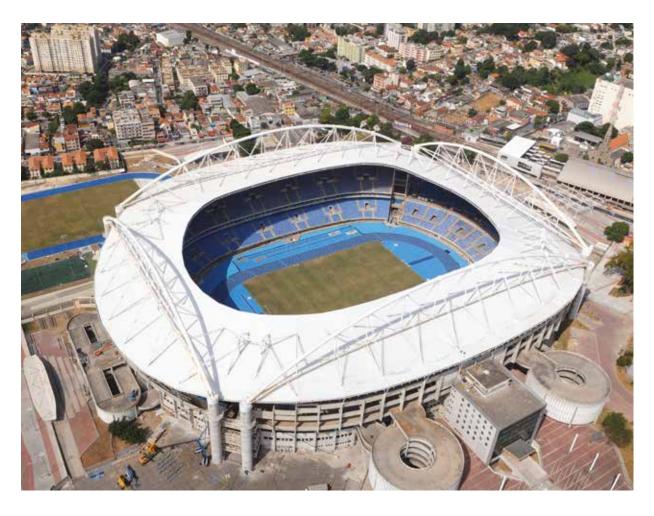
## New Panama Canal

Panama

After 7 years work involving 30,000 people and a cost of more than 5 billion dollars, the new Panama Canal was opened in June 2016. Thanks to the work carried out, ships with three times the capacity of those in the past are now able to pass through. Mapei supplied various admixtures of the latest generation, such as **Dynamon XP2** and **Dynamon** XP2 Evolution 1, specifically developed for the production of around 5,500,000 m<sup>3</sup> of mass and marine grade concrete. Planitop 15 repair mortar and the special liquid admixture Mapecure SRA were formulated to reduce the formation of hygrometric shrinkage cracks in normal and self-compacting concrete, while the synthetic membranes Sibelon PVC-P (a proprietary brand of CarpiTech produced in the Polyglass/ Mapei Group works) formed part of the waterproofing system for the run-off basins. Mapei also supplied numerous other products for this grandiose project, such as Planigrout 300, Mapegrout 05/06, Idrostop PVC Waterstop, Idrostop Multi 11, Mapegel UTT, Idrosilex Pronto, Mapeproof Swell, Idrostop 10 and Idrostop Mastic.







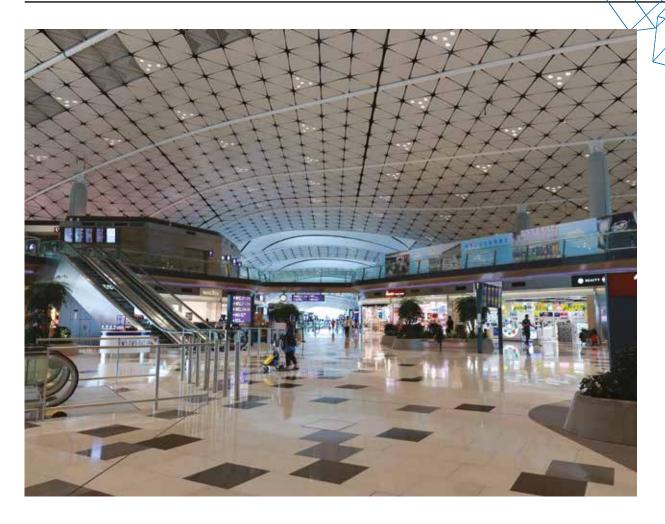
# Nilton Santos Stadium

Rio de Janeiro (Brazil)

Located in Rio de Janeiro, the Nílton Santos Stadium hosted athletic events for the 2016 Olympic Games. It is only the second time, after the Melbourne Games, that athletics events have been staged at a different venue to the Olympic Games opening and closing ceremonies, in this case the Estádio Jornalista Mário Filho. The athletics track where the events were held was installed with Adesilex G19, a twocomponent adhesive developed specifically for installing rubber athletics tracks. This product forms a tough, flexible layer resistant to moisture, water, heat and atmospheric agents and forms a very strong bond with almost all materials normally used in the building industry. Developed specifically as installation products, Adesilex G19 and Adesilex G20 guarantee that athletes adhere perfectly to the track, thereby improving the performance of the whole system and of the athletes themselves.







# International Airport

Hong Kong (China)

Renowned as being one of the busiest hubs in the world in terms of air traffic, Hong Kong Airport, also known as Chek Lap Kok, is implementing a long-term expansion project which, by 2030, will increase its capacity to 102 million passengers, 8.9 million tons of cargo and more that 600,000 aircraft. In the area which was completed in 2015, the atrium of the central terminal, Mapei products were used, such as Granirapid and Ultracolor Plus to install large format ceramic tiles (600x600x20 mm) over a total area of 30,000 m<sup>2</sup>. Planipatch and Latex Plus were used to level off the substrates in the areas between the gates and the ramps leading to the planes and Planicrete Latex was used as bonding slurry for the screeds. The use of eco-sustainable materials and other measures taken to respect the environment earned the terminal project prestigious awards such as BREEAM Plus Gold Rating, Green Building Awards and Be Inspired BIM Awards.







# Thrudesign Wood DIY Workshop

Beijing (China)

Founded by the winners of the Red Dot Design Award and the IF Product Design Award, two of the most important annual international product design awards, Thrudesign provides services and large spaces, as well as a highly experienced team to design contemporary objects and hold courses at the highest level. Based on the concept "less is more", Mapei contributed with its **Ultratop System**, a system of products used to create self-levelling cementitious floors in civil and industrial environments with a highly attractive finish and high resistance to abrasion.

The installation bed was treated with two-component, epoxy resin-based **Primer SN**, while the seamless flooring was created by spreading on **Ultratop Loft F** coarse-textured, trowellable cementitious paste. Lastly, the surface on the second floor was primed with the adhesion promoter **Mapefloor I 900.** 







# Dubai Opera House

Dubai (UAE, United Arab Emirates)

The Dubai Opera House is the first multi-format centre in the city dedicated to the performing arts and the staging of high quality shows. The 60,000 m² structure is a masterpiece of contemporary design and pays homage to the maritime history of Dubai. After a series of pull-off tests and other testing Mapei adhesives were chosen, such as **Adesilex P9** to install the flooring in the atrium and **Keralastic T** to install the natural stone on the ceilings.

**Ultracolor Plus** and **Kerapoxy** were used to fill the grout lines in the tiles.







### The Farah Hospital

Amman (Jordan)

The Farah Hospital is located in the Jordan city of Amman. A modern, twelve-storey building specialised in obstetrics, gynaecology and reproductive medicine, it is also one of the most important points of reference for many other specialities such as paediatrics and neonatology, plastic surgery and otorhinolaryngology. Between 2015 and 2016, Mapei was one of the key players working on the renovation of this large structure.

The products mostly used were **Mapelastic**, a two-component, elastic cementitious mortar for waterproofing balconies, terraces, bathrooms and swimming pools, and white **Ultralite S2**, a two-component, lightweight, high performance, highly deformable cementitious adhesive with extended open time for ceramic tiles and stone material, ideal for installing large format, thin porcelain tiles.









### Mapletree Business City

Republic of Singapore

The Mapletree Business City centre became a reality thanks to the Mapletree Group, a real-estate, investment and capital management company, which had the idea of transforming the Alexandra Distripark area of Singapore into a high-level business centre using building criteria compliant with the most severe standards of eco-sustainability.

Mapei technicians and engineers provided assistance for the contractors involved in the construction work using **Keraflex**Maxi S1 for the installation work and **Keracolor SF** to fill the grout lines.

Mapesil AC was used to seal the expansion joints, Keraflex was used in the corridors and atrium to install the granite flooring, while in other external areas Keraflex Maxi S1 was used to install granite flooring which was then grouted with Keracolor GG.







### **VCCC**

### Melbourne (Australia)

Located in the biomedical district of Parkville, the Victorian Comprehensive Cancer Centre (VCCC) is the most important oncology centre in Australia for the research and cure of tumours and training for medical personnel and paramedics. Rapid products needed to be used, but the products also had to safeguard the health of patients and hospital staff, the reason why Mapei technology was adopted. Work started off by applying Planiseal EMB on all the concrete substrates, which were then treated with Eco Prim T and, to make the surfaces perfectly flat, a layer of Ultraplan was applied. Mapegum WPS and Mapetex SEL were used in the bathrooms and in areas suffering with problems of damp. Around the drain areas, the substrates were levelled off with UC Leveller and the uneven surfaces were skimmed with Latexplan Trade and Planiprep SC. Then, vinyl flooring was installed with Ultrabond Eco V4 SP and Rollcoll adhesive. Lastly, self-laying textile carpet squares were fixed in place with Ultrabond Eco Tack.

















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