

INSIGHT

Prysmian Quarterly magazine
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Prysmian paving the path towards a digital Europe

**Growth gained steam
Record order book**

**Ever-more countries
committ to renewables**

**Record setting subsea
project secured**





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GROWTH GAINS STEAM AS HALF YEAR MARK PASSED

Editorial Team
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Prysmian passed the first half of the year mark on an upbeat note, as solid results were posted for the second quarter, growth gained steam and important new projects were secured. CEO Valerio Battista noted that the results for the first half of 2015 showed that the strategic businesses of submarine cables and systems and optical fibre cables “have performed extremely well”, while the situation in the more standardized businesses of power distribution and building wires was “slowly but steadily improving”.

The global champion of the cable business also affirmed its leadership as the setter of new goals for the entire industry as well as for policy and decision makers. Prysmian in fact paved the path towards a full digitalization of Europe by organizing a round table in the EU Parliament on the need of quality infrastructure to ensure long lasting digital network across Europe.

The event, to which Insight devotes its FOCUS ON section, was co-hosted by Member of European Parliament Dominique Riquet, Chair of the Long-term Investment and Reindustrialization Intergroup, and saw the interventions of high-level speakers from the European Investment Bank, the European Commission and Parliament, as well as telecom operators and ICT industries representatives.

In the GLOBAL SCENARIO section we report that Europacable launched the “Industry Charter”, a statute expressing the commitment to shared principles and objectives of ethical, sustainable and high-quality cable development and manufacturing, promptly signed by Prysmian Group and several other industry groups. Green Energy is actually STAGING THE FUTURE in contemporary world as Insight reports that renewable targets has become a global standard in recent years across the world, with as much as 164 countries have now adopted at least one type of target, up from just 43 in 2005.

Looking to the future while continuing DOING BUSINESS. Among the contracts recently secured was worth reporting the project to link through a submarine cable Norway and the UK along a 740 km total route in a €550 million worth project awarded by Prysmian. At the same time, Prysmian became a main partner in Italian High-Speed Rail expansion by supplying cables and accessories for a total of more than 1,100 km of lines. Valuable achievements are not just those reported quarterly in the sale and order books: Prysmian has been included in the prestigious FTSE4Good Global Index, which is composed of the companies that stand out for their ethical, transparent management and implementation of proper sustainability policies in company processes.

DRIVING THE DEBATE ON BROADBAND IN EUROPE

The path towards further digitalisation has been the subject of an in-depth discussion at a [roundtable organised by Prysmian in the EU Parliament](#).



Moving towards FTTH at different speeds

There is large variation across the EU in terms of current and expected roll-out of FTTH (fibre to the home). **France** has 6.3% FTTH market penetration that is expected to reach 19.5% by the end of 2019. The Government aims to provide coverage to 70% of the population by 2020 and universal coverage by 2025. **Germany** has 1% FTTH penetration, that should rise to 4.2% by the end of 2019. The country has

made slow progress in rolling out FTTH with the incumbent, Deutsche Telekom, choosing instead to focus on xDSL. The **United Kingdom** has just 0.2% penetration, but is expected to reach 1.7% by the end of 2019. The country has a large number of small, generally rural FTTH projects but not much else. In 2012, BT announced that its FTTx programme would reach 16 million by 2015. **Italy** scored 1.4% FTTH penetration,

expected to grow to 3.1% by the end of 2019. Initially a FTTH pioneer, Italian progress stalled afterwards. **Spain** has done much better among large European countries with a FTTH market penetration of 7.9%, which is expected to grow to 27.9% by the end of 2019. The rapid expansion has been driven by Telefonica, with other competitors now joining, and passed 10 million homes by the end of 2014.

The need for quality infrastructure to ensure long-lasting digital networks across Europe was the main topic at the event, co-hosted by Member of the European Parliament, Dominique Riquet, Chair of the Long-Term Investment and Reindustrialization Intergroup. The roundtable, a Prysmian Group initiative, featured contributions from high-level speakers representing the European Investment Bank, and European Commission and Parliament, as well as telecom operators and ICT industry representatives, who shared views on the challenges and opportunities for the development of a European high-speed broadband infrastructure and the resulting increased growth and competitiveness.



ATTRACTING PRIVATE INVESTMENTS

The contributions from experts and policymakers were focused on new ways to attract private finance to strong added-value ICT projects. Reliable high-speed broadband, like energy and transport infrastructures, are key to increasing the growth potential of the Union and thus boost Europe's real economic competitiveness in a globalised market. Panellists engaged in a lively exchange on the challenges related to building a high-speed, secure and trustworthy ICT infrastructure as the backbone for the European digital economy. "Economic operators who design and implement fibre-based, ultra-high-speed access network technologies, have a unique

role in helping meet the 2020 targets of the Digital Agenda for Europe," said Philippe Vanhille, Senior Vice President of Telecom Business for the Prysmian Group.

CHOOSING THE RIGHT PRODUCTS

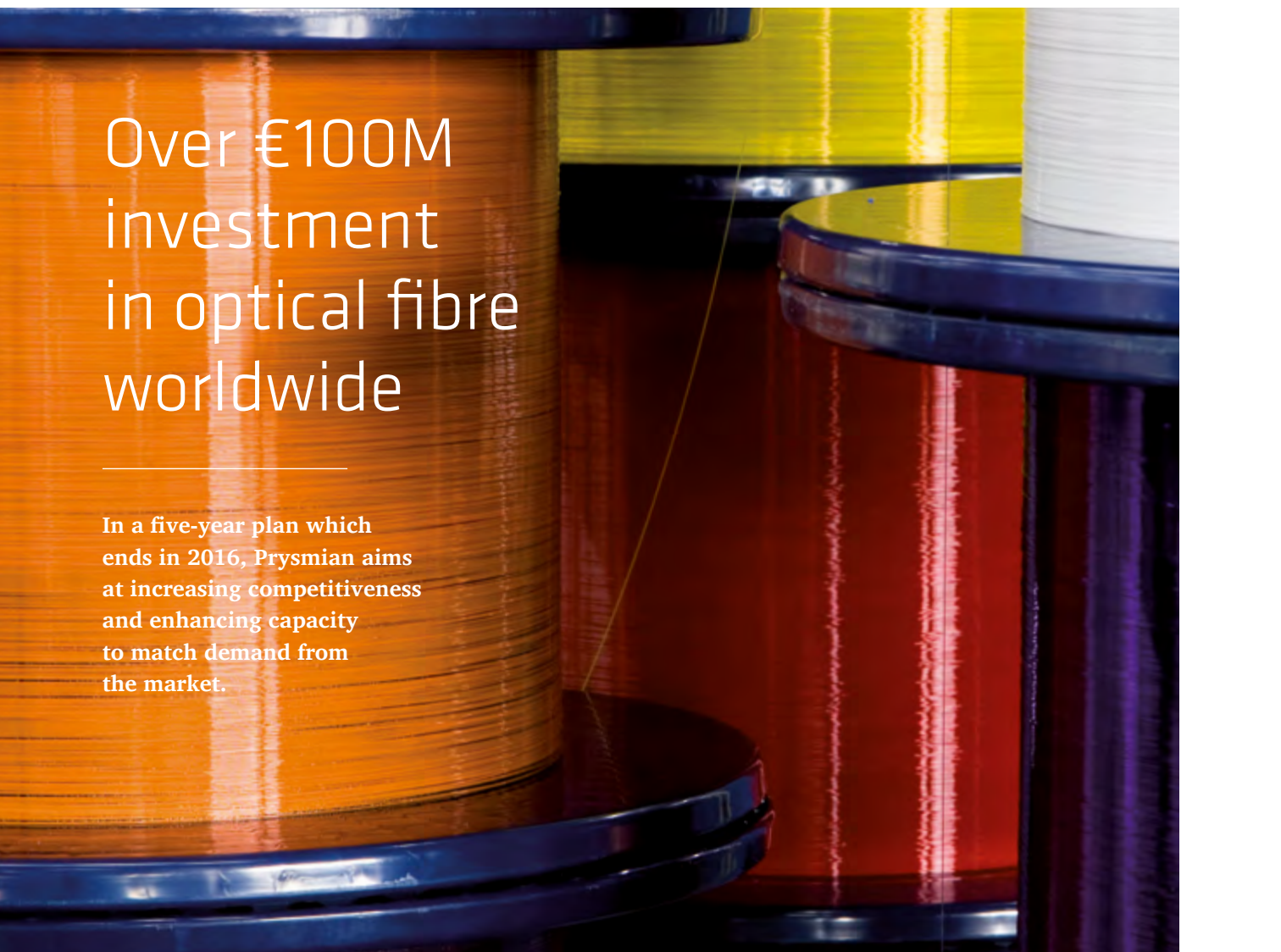
Throughout the discussion, panellists questioned what type and quality of technology is most effective. They agreed that choosing the right products to optimise overall capital expenditure and minimise future maintenance is essential. Optical fibre cables emerged as the future-proof solution for broadband networks – precisely the type of investment that instils confidence in private investors and encourages them to accept the associated long term risks – and benefits.

The challenge of a digital single market

The discussion paper that provided the framework for the discussion at the European Parliament roundtable pointed out that high-performance ICT, underpinned by high-speed infrastructures, will stimulate both job creation and growth. The political importance granted to these goals is mirrored in their nomination by President Jean-Claude Juncker as the first two of

the political guidelines for the new Commission. Prysmian agrees with this assessment and believes that fibre optic technologies provide the best and most forward-looking solution: long-term, future-proof solutions are required to ensure that the Digital Agenda targets for 2020 are not only reached, but that it is possible to build on them to truly connect the European digital single market.

Progress on the Digital Agenda has so far been slow, particularly in terms of the target that half of Europe's citizens have 100Mb/s connections by 2020. Rapid action is therefore required. The upcoming reform of the EU telecoms rules in 2016, including 'tackling regulatory fragmentation to allow economies of scale', should also be considered to better address this slow progress.



Over €100M investment in optical fibre worldwide

In a five-year plan which ends in 2016, Prysmian aims at increasing competitiveness and enhancing capacity to match demand from the market.

Prysmian Group continues to sustain the development of broadband networks, while maintaining its commitment to innovation and competing in the optical fibre sector worldwide. As part of a five-year plan which ends in 2016, Prysmian is investing more than €100m in its telecom R&D activities and optical fibre plants worldwide, with the aim of increasing competitiveness of fibre products and enhancing production capacity in order to match demand from the market. “The quality of the passive elements of an optical infrastructure is absolutely

key to guarantee the sustainability of the telecom service and also to optimise the total cost of ownership of the network,” said Philippe Vanhille, Executive Vice President, Telecom at Prysmian Group. In fact, the closer the fibre gets to the premises, the more the passive components’ quality becomes critical to avoid service disruptions and high cost of ownership. Prysmian is consistently investing in optical innovation, in order to improve the performance of its products and processes permanently.

Our mission is to provide the market with the best solutions, creating concrete value for our customers, both in Brazil and globally.

New expanded production facility in Brazil

One of the five worldwide excellence centres covered by the investment plan is the [newly expanded optical fibre production facility in Sorocaba, São Paulo](#). The Brazilian project is part of the ongoing global scheme which will improve the performance of the Group's optical products and manufacturing processes,

along with other excellence centres in the USA, France, Italy and the Netherlands. The first phase of the investment plan for the Sorocaba plant – now completed and fully operational – increased the local production capacity to meet local market needs of 4.5 million km of fibre preforms per year. The ongoing second phase of

the plan aims to upgrade manufacturing processes in order to provide the South American market with the most advanced fibre solutions and also further increase capacity if market demand requires it.



Constantly working on new technologies

Prysmian provides the market with the benefit of 40 years of optical fibre R&D, fully owned optical technology and ever-growing experience across six continents.

The Group is constantly working to develop new technologies in wiring and connectivity to provide the best, most up-to-date customer experience.

Recent developments have included the RetractableNet and VertiCasa retractable solutions for indoor and outdoor installation, and FlexTube™ 1728fo cable, the largest FlexTube™ cable available with the highest fibre density of any high fibre count cable deployed in the world, (4.16f/mm²), recently installed in Australia.

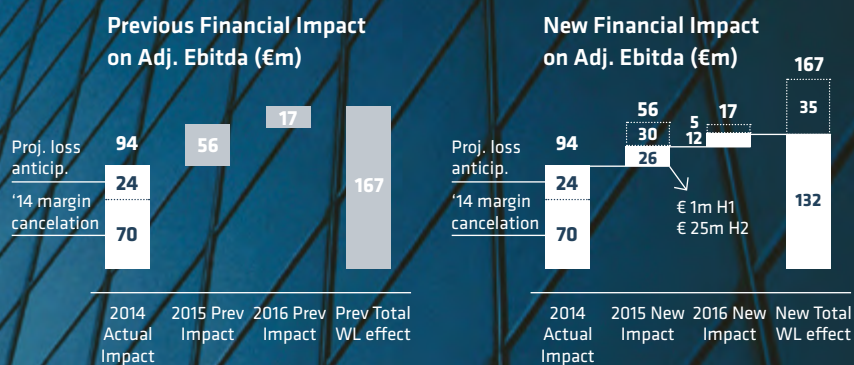
GROWTH GAINED STEAM IN Q2. RECORD ORDER BOOK

The results of Prysmian Group for the first half of 2015 approved by the Board of Directors confirmed the growth seen since the start of the year, which has shown further acceleration.

The results posted for the first-half of the year confirmed the growth path shown since the start of 2015, which has further accelerated. CEO Valerio Battista noted that the strategic businesses of submarine cables and systems and optical fibre cables “have performed extremely well”, while the situation in the more standardized businesses of power distribution and building wires is “slowly but steadily improving”. In this context of consolidating market recovery, the Group has been able to intercept some of the most attractive business opportunities, boosting its transmission order book to

a new record figure of almost €3.5 billion. Prysmian was also awarded the NSN project, the longest HVDC link ever built and worth more than €550 million. Mr Battista also wished to confirm that the plan in response to the problems emerged in the Western Link project execution was proceeding apace and “producing better-than-expected results”, allowing to make a positive revision of €35 million to the project’s initially estimated impact. Given this scenario, the Group aims to position itself at the top end of the Adjusted EBITDA range of €590-€640 million for full year 2015.

Western Link effect: new financial impact 2015-2016 Euro 35 Millions project's result improvement



Highlights and Actions

- Improved efficiency of the manufacturing process
- Project execution accelerated thanks to recovery of full capacity
- Enhanced warranty and extended project timing agreed between the parties

Sales climbed to €3,737 million up 7.0% excluding WL impact Energy & Infrastructure consolidated recovery excellent performance by Energy Projects and Telecom.

Adj. EBITDA at €315 million excluding WL and €314 million including WL, posting a major increase of 54,1% on €204 million one year earlier

Net financial position down to €979 million, better than expected (consensus at 1,100 mln €), it was €1,209 million at 30 June 2014.

FY 2015 guidance confirmed with goal of reaching top end of Adj. EBITDA range €590M – €640M.

ENERGY PROJECTS SALES IMPROVED MARKEDLY

This operating segment also improved profitability significantly. Submarine, Umbilical and DHT cables up, High Voltage Underground in line with 2014. Record Transmission orders.

Sales by the Energy Projects operating segment reached €739 million in the first half of 2015, posting organic growth of 21.7%. Profitability improved significantly with Adjusted EBITDA of €115 million, up from €36 million in the first half of 2014, and a margin on sales of 15.6% versus 6.2% one year earlier. Excluding the adverse impact of the Western Link project, sales would have been €797 million, with organic growth of 17.4%, and Adj. EBITDA would have been €116 million (€110 million in the first half of 2014).

Sales by the Submarine Cables and Systems business grew fast, particularly thanks to the capability to execute the numerous projects currently in the Group's order book. The deepwater cable for the Western Link project is at an advanced stage of production, with installation scheduled to start in the second half of the year. The implementation of the plan is delivering positive results, with an acceleration in the execution schedule. The market continues to be strong, driven by projects for the interconnection of transmission networks in Europe. Sales by the High Voltage Underground



business were essentially in line with plan. In Europe, strong performance in the UK was offset by weak demand in France, Italy and the Nordic countries. The award of the new interconnection project between France and Italy is nonetheless an encouraging sign of the real desire to create a single European electricity market. Sales in China and the Middle East also performed well.

The order book for Underground and Submarine power transmission grew significantly, reaching a new peak of around €3.5 billion. The latest project awarded was

the North Sea Network, an interconnector between Britain and Norway worth more than €550 million. As the longest HVDC link ever planned, the award confirms the Group's market leadership.

The strong sales performance by the SURF business continued to benefit from the execution of long term project and by robust growth of the Down Hole Technology market in North America.

ENERGY PRODUCTS PROFITABILITY STEADILY IMPROVING

Continued recovery for Trade & Installers and better than expected improvement for Distribution. Industrial posted good results in Elevators, improvement in Specialties & OEM.

The Energy Products operating segment sales amounted to €2,420 million, posting organic growth of 2.7% on the first half of 2015, mainly due to the recovery in volumes in North America and Northern Europe and growth in Asia, partially offset by the downward trend in Brazil. There was slight but steady improvement in profitability with Adj. EBITDA at €128 million, up 2.9% on the first half of 2014, with margins largely stable at 5.3% of sales.



Energy & Infrastructure sales posted organic growth of 5.3% to €1,468 million, with an acceleration in the second quarter at 7.1%. The result was due to the effective commercial strategy of differentiating and improving the sales mix but also to market growth in the US and recovery of infrastructure investment in Germany and the Nordics. Adj. EBITDA reached €63 million, up from €54 million one year earlier, with margin essentially stable at 4.3% of sales.

Trade & Installers reflected a consolidation of the signs of recovery emerging in

the last few months of 2014, allowing moderate organic growth. The trend was positive in Spain, Britain and Eastern Europe, as well as in North America.

Power Distribution enjoyed a higher-than-expected growth in sales thanks to strong performance in Germany, the Nordics and Argentina, where the Group benefited from new investments to upgrade electricity networks. Prices remained in line with previous quarters.

Industrial & Network Components sales amounted to €897 million, reflecting

persistent weakness of investments in infrastructure. Oil & Gas was affected by weak demand for Maintenance, Repair & Operations, along with the oil price slide. Specialties & OEM recorded positive organic growth, with good performance in Asia Pacific and Europe. Elevators posted a solid performance across all regions.

In Network Components, positive performance by high voltage products in China counterbalanced weakness in Europe.

TELECOM: MARKED JUMP IN ORGANIC GROWTH

The operating segment also saw a major improvement in profitability and solid growth for Media Solutions. Continued strength for Optical Cables.

Sales by the Telecom Operating segment posted a 13.1% jump in organic growth to €578 million, thanks to strong demand for optical fibre cables. Profitability benefited from stabilisation of prices, the result of investments aimed at regaining cost competitiveness and the contribution of Yangtze Joint Stock Limited Company (YOFC). Adjusted EBITDA came in at €71 million, compared with €43 million in the first half of 2014, while margin on sales improved to 12.2% from 8.8%.

In Europe, growth was driven by the backhaul projects and FTTH/FTTA connections awarded by leading operators such as Telefonica in Spain, Orange and Free in France and Telecom Italia in Italy. In North America, development of the new ultra-broadband and FTTx networks led to a good increase in demand. In the Asia Pacific region, the National Broadband Network project in Australia contributed to growth, even if a slowdown is expected in the second half of the year. Less positive performances were recorded in South America, particularly in Brazil, where the market is failing to show significant signs of improvement.

The growth in Multimedia Solutions is proving solid, particularly in Asia Pacific and Brazil. Volumes and prices stabilised in Europe. The Group maintained its strategic focus on higher value-added products and businesses, such as data centres in Europe.



Upbeat guidance for FY 2015 confirmed, WL negative impact on Adj. EBITDA slashed

The macro environment continued to show signs of stabilisation and slight improvement in Europe, while remaining solid in the US. However, persisting geopolitical tensions in the Middle East and Russia, together with the slowdown in some economies, such as China and Brazil, continue to raise doubts over the short and medium-term. In this economic context, the Group's expectation is that demand in the cyclical businesses of medium voltage cables will record a slight recovery, while in the Energy Projects the improving trend and potential growth in the Submarine and SURF businesses are confirmed.

The response to the problems which emerged during the Western Link project is proceeding better than expected, enabling a faster execution schedule. Thanks to the actions taken, along

with the strengthening of contractual guarantees and longer project timing agreed with the customer, the overall result in terms of Adjusted EBITDA is expected to improve by €35 million, reducing the negative impact from €167 million originally estimated to €132 million. Western Link is thus forecast to have a negative impact on 2015 Adj. EBITDA of €26 million compared with the original estimate of €56 million.

Exchange rates, which had an adverse impact of about €14 million on Adj. EBITDA in FY 2014, are forecast to have a positive impact on the FY 2015. Based on the existing order book and considering the factors mentioned above, the Group is forecasting Adjusted EBITDA for FY 2015 in the range of €590–640 million (€616–666 million excluding WL), marking a significant improvement on the €509 million reported in 2014.

Ratings positive targets raised

The H1 results released by Prysmian Group were ahead of market expectations both in terms of organic growth and business trends, as well as in terms of cash generation.

The areas of particular attention by major brokers were the sustainability of the growth in the Submarine and Telecom business, considering the strong performance the two businesses are recording. Some analysts were expecting an upgrade of the guidance, even excluding WL, on the back of the strong results, considering that the consensus was already positioned in the upper side of the guidance range: 600 mln € before the revision of the WL estimates.

In detail, among brokers that assigned a rating, Credit Suisse confirmed its Outperform and raised the target to 23€/share from 21, Bofa Merrill Lynch reiterated its Buy with a 23 €/share target, Barclays and Morgan Stanley both confirmed their Overweight, Citi and Banca Akros confirmed their Buy, with a target at 22.6 €/share and 23.5 €/share respectively, JP Morgan reiterated its Neutral but increased the target to 20.5 €/share, Equita maintained its Hold while increasing the target to 23 €/share, while Kepler-Cheuvreux confirmed the Hold rating with target increased to 22.5 €/share.

Mediobanca changed its rating to Neutral from Outperform with a target at 21,8 €/share while Exane rating was Sell with a target raised to 18.5 €/share.

A CAMPAIGN TO DEFEND QUALITY

Europacable, the voice of European wire and cable industry in Brussels, launched the “Industry Charter”, a statute expressing the commitment to high-quality products development and manufacturing.

With the Industry Charter, promptly [signed by Prysmian Group](#) and other Europacable member companies, the Association representing the leading wire and cable manufacturers in Europe launched a campaign aimed at contrasting the penetration into the European market of low-quality, sub-standard cable products. The purpose of Industry Charter is to show that manufacturers belonging to Europacable already achieved the highest standards, as a guarantee of the top quality

of their products. Among Europacable objectives there is the promotion of high performing, state of the art technology. The Industry Charter is a formal expression of Europacable members’ acknowledgement of the need to meet the demands of business stakeholders, while at the same time defending the interests of their employees, their customers, the wider community and the environment, with a strong commitment not only to meeting the basic requirements of the law, but also about expecting to take a proactive role in monitoring and evaluating emerging issues

and finding innovative solutions that seek to exceed the minimum requirements. The Charter is part of its policy aimed at monitoring and reacting to the emerging and changing EU legislation that affects the industry, by raising awareness to the risk of sub-standard products entering the European markets. The answer to industry’s question as to how to remain competitive in the face of non-European countries which, for instance, offer less stringent regulations, is first of all to convert risk into opportunity.

Celebrating World Environment Day

Prysmian joined the celebration of World Environment Day (WED), a global event aimed at raising public awareness and mobilising public opinion on environmental issues. It was first established by the United Nations General Assembly in 1972 and is annually celebrated around the globe. WED also serves as the 'people's day' for doing something positive for the environment, galvanising individual actions into a collective power that generates an exponentially positive impact on the planet. Over the years it has grown to be a global platform for public outreach that is widely celebrated by stakeholders in over 100 countries.

Prysmian locations around the world took part with several initiatives, such as giving a small green plant to the first employees to arrive at each office, using eco-friendly forms of transport, or switching off lights and electronic equipment for 15 minutes at lunchtime.

Signatories commitments

The cable-makers that adopted the Charter will voluntarily put their efforts in four main fields: product compliance and innovation, business ethics and social responsibility, health and safety, environment and climate change. They will therefore be committed to: supply safe and reliable cables and systems, accordingly with the relevant EU regulations while developing and applying advanced technological solutions; implement CSR as the vehicle for sustainable development and establish Codes of Ethics and Business Conduct; ensure working conditions in accordance with EU standards; fulfill a key role as a knowledge partner in implementing sustainable electricity and future-proof telecommunication infrastructures.

Facing the green challenges

Up to 50% of the laws currently being issued or reviewed by the European Commission have to do with environmental issues. Many laws and directives have been introduced, and many more are being issued with this objective in mind. REACH, Rohs, and the New Standards on land reclamation and water treatment are just some of the latest acronyms with which the industry is now familiar. Antonio Traversi, Chairman of Europa Cable Environmental Committee and HSE & General Service manager at Prysmian, pointed out that the industry can take that as opportunities they can seize. This is why European cable makers are increasingly deploying strategies to minimise energy consumption and boost the eco-efficiency of their products.

VIABLE COMMERCIAL PROPOSITION

That's also why the combination of the green approach with cost-cutting and environmental best practices are being increasingly promoted. Life Cycle Assessment methods for EcoDesign are also being introduced with the aim of making high-tech "green" cables a viable commercial proposition. These methods, which have always been known in the environmental field, are proving to be a great value-added asset when it comes to maintaining global competitiveness. They add that something extra that in some cases can make the difference with increasingly demanding customers.

EVER-MORE COUNTRIES WORLDWIDE COMMIT TO RENEWABLES

Setting renewable energy targets has become a global standard in the energy landscape in recent years. It's a fact demonstrated in a report by the International Renewable Energy Agency, showing that as many as 164 countries around the world have now adopted at least one type of target, up from just 43 countries in 2005.

Renewable energy targets have emerged as a popular mechanism to put national and regional economies on the path towards a more sustainable energy future. They provide an important signal to the industry and can help to align stakeholders by creating a clearer, common vision for the development of the energy sector, the report points out. Developing and emerging economies are leading the new wave of the adoption of targets, accounting for 131 out of the 164 countries with energy targets. Most of them focus on electricity, with 150 countries having set targets, but also commitments in other sectors are on the rise, with renewable powered transport targets more than doubled from 27 countries in 2005 to 59 today.

MORE EFFORTS NEEDED IN TERMS OF SPECIFIC ACTIONS

Renewable targets are established to meet multiple objectives, such as energy security, environmental sustainability and socio-economic benefits. The rapid growth of target setting is seen by experts as just one more signal of the world's ongoing shift towards renewable energy while moving away from fossil fuels. While underscoring the importance of renewable energy targets, the report recognises that they are still not enough in and of themselves. In order to be seen as credible by investors and the wider public, and to provide a reliable trajectory for the future evolution of the energy mix, they need to be accompanied by a clear and effective strategy and backed by specific policies and measures.

HV cable market led by offshore wind farms

A new report has found that the high voltage cables and accessories market is predominantly led by the growth of offshore wind farm, high voltage direct current transmission links, and grid interconnections. All these means of HV transmission are carried out by overhead lines or underground/submarine cable systems that comprise commonly used cables, including XLPE and MI, or bare conductors, and accessories such as cable joints and terminations. XLPE and

mass impregnated cables are usually used for underground and subsea cable systems, whereas overhead lines use bare conductors of copper or aluminium. According to the StatPlan Cable Report, the Asia-Pacific market held the largest share in 2014, at around 45% of the total, with China standing as the largest market and expected to continue its dominance. Across other regions, the US is a leading market in North America due to several HVDC projects enhancing the electricity transmission infrastructure of the country.

The global energy and communications wire and cable market was worth \$186 billion in 2014.

Mozambique: \$200mn for power transmission line

Up to \$200 million will be provided by the Islamic Development Bank to fund a power transmission line in Mozambique. On top of the financing, two deals were signed by the bank and Government to support training activities, in particular are the training of entrepreneurs on the Islamic finance model and private sector development. The transmission line, which actually costs an estimated \$600 million, will be built between Nacala in the Nampula province and Chimwara in the Zambezia province. It aims to replace the current line to meet the rise in demand for energy in the country's centre and north.



Czech Republic to unify the electric railway



The Czech Government is planning one of the largest projects in the country's infrastructure history.

The Czech Republic is planning one of the largest projects in the history of the country's railways infrastructure. Under the project, announced by Czech Transport Ministry, the electric grids on which the railway is currently running will be unified. The Czech railways are currently powered by two different electric grids, roughly split in two parts between the north and south of the country. The northern electric grid is powered by a one-way 3kV direct current system, while the southern grid is driven by the more modern 25kV alternating current system. The Czech Government is planning to unify the entire railway into the alternating current system. For that purpose, the ministry plans a tender for a feasibility study into the project of unification. The entire project of unification of the electric grid should take decades, costing tens of billions of Czech korunas and including the renewal of the entire train fleet.



Mexico 1/energy permits multiplied

The concession of permits for energy projects has increased from 40 awarded in January-May 2014 up to a total of 241 in the same period of 2015. These projects consist of small production, co-generation, self-efficiency, independent energy producers, exports and imports. Mexico said that that it had also received 20 requests for new generation projects. On the other hand, the electricity company Comision Federal de Electricidad has announced that Colombian energy firm Electricas de Medellin and Mexican Edemtec have been awarded a \$38.50 million contract to implement two transmission lines between the cities of Campeche and Quintana Roo.

Mexico 2/Iberdrola to build solar and wind plants

The Mexican energy regulation Commission has announced that the Spanish energy firm, Iberdrola, will build five electricity generation plants in Mexico using renewable energy. The projects will be developed between 2016 and 2017 and they will provide electricity to companies such as Cuauhtemoc Moctezuma, Gamesa, Apasco, Metalsa, Magna Internacional and PepsiCo, among others.

The Commission approved the permits for the development of the initiatives, which will receive the clean energy certificates from 2018. It is estimated that Iberdrola will invest between \$745 million and \$896 million in the projects. The initiatives encompass two solar energy plants in San Luis Potosi and Sonora, with an installed capacity of 200 megawatts (MW) and 100MW respectively. The construction works will start in April 2016. In addition, Iberdrola will build two wind farms, with a capacity of 50MW and 105MW, and an efficient natural gas-fired cogeneration plant with a capacity of 51MW.

Thailand to benefit greatly from smart grid



consulting firm has joined forces with Chulalongkorn University to advise a Thai power utility to develop its roadmap toward the smart grid system. 85 utilities executives from 20 countries took part in the study, which also found a growing threat in the areas of greater competition and rising risk of grid faults.

The country's consumers and electricity utilities to become inter-connected and to gain intelligence information on their real-time supply and demand behaviour.

The impact of new technologies on utilities' revenues is estimated at up to \$48 billion in the United States, and up to €61 billion in Europe, based on the potential power load reduction. In the case of Thailand, more opportunities than threats are seen for the country as it leverages new technologies, including distributed energy resources such as solar power and energy storage technologies to lower its electricity costs. Solar power has already reached the tipping point to gain the grid parity in Thailand, but due to its intermittent nature, the country needs to strengthen the reliability of its power grid through digitising it with analytics technology and automated systems, and on the consumer side, smart meters.

An Accenture survey found that energy utilities in Thailand could potentially see their revenues shredded by 15% from an evolution of new energy technologies that include energy conservation and demand response, energy efficiencies, energy substitution, and distributed generation resources. The leading global



China: UHV DC transmission project in Xiangtan

A project to set up an ultra-high-voltage direct current power transmission line, which has the world's largest UHV DC power conversion volume, has been launched in Xiangtan, Hunan Province, China. The 800kV line will supply electricity catering to 25% of the total power demand in Hunan, according to the State Grid Corp of China. The €3.75 billion project will be completed in 2017 and will set up a power transmission line with a total length of 2,383km and two converter stations with a capacity of 16 million kilowatts. Annual power transmission capacity of the new line to be set up between Jiuquan and Hunan will reach 40bn kilowatt-hour.



Study kicked off for Xinjiang-Pakistan connection

State Grid Corporation of China kicked-off the pre-feasibility study for the 660kV Xinjiang-Pakistan direct current power transmission project and the 1,100-kV Kazakhstan-Henan DC transmission project. The Kazakhstan-Henan DC project has a rated power transmission capacity of 12 million kilowatts and will transfer power to Nanyang of China's Henan. The 2,18km Xinjiang-Pakistan DC project has a rated power transmission capacity of 4 million kW and will transfer power from either Ili Kazakh or Kuqa of Xinjiang to Pakistan's Lahore. About €2.29 billion investment are expected to be spent to install six to eight 660,000kW thermal power sets.



THE NORTHERN CONNECTIONS

Prysmian to link Norway and the UK via a submarine cable along a 740km total route in a €550 million project, while also providing electricity to the Channel Islands with the Normandie 1 cable interconnection from mainland France.

The longest HVDC subsea cable ever installed

The project, also known as North Sea Network, will be the first power cable system to connect Norway and the UK. It is of high strategic value as it enables the trading of power between Norway and the UK, while providing a means to share the use of renewable energy and secure electricity supply. It is an essential part of the European grid reinforcement strategy, aimed at reducing prices, providing cleaner energy and compensating for the supply from ageing plants in the UK that will be taken out of service. Prysmian Group has been awarded the contract worth around €550 million, for a High Voltage Direct Current (HVDC) submarine interconnector by Statnett SF and National Grid NSN Link Ltd, a project-specific subsidiary of National Grid plc. The project represents a true milestone as it will set a new record as the longest HVDC subsea cable link ever

470 km route
€550 million

installed, following a route of about 740km in length between the converter stations in Kvilldal in Norway and Blyth in the UK.

The contract involves the **turn-key supply and installation of a total of around 950km** of submarine and land cables in two sections to cover 470km route length.

The interconnection features an HVDC bipole that will operate at the voltage level of $\pm 525\text{kV}$ with a rating of 1,400MW. All cables will be produced in the Arco Felice factory of Naples, Italy, one of the Group's centres of technological and manufacturing excellence for submarine cables. The main marine cable laying will be performed by the Group's owned 'Giulio Verne' cable-laying vessel, using its proven capability to handle extremely long cable lengths and install these at depth. The delivery and commissioning of the system is scheduled to be completed by September 2021.

A key role in the most strategic projects

Prysmian has been taking a key role in the development of some of the most strategic submarine power interconnections worldwide, supporting the global upgrade of power grids to optimise the use of available resources with its state-of-the-art cable technology and its undisputed expertise in the field of MI cables.

The Group boasts an impressive track record of successfully completed milestone projects using MI cable insulation technology, in particular with the SA.PE.I project between Sardinia and the Italian mainland, the Neptune project between New Jersey and Long Island, NY in the USA and the Basslink project between Tasmania and the State of Victoria in Australia.

Power to Jersey along 28km in a single length

Recently awarded to Prysmian Group, [this project involves the turn-key supply and installation of a High Voltage Alternate Current cable connection](#) from Surville, France, to Archirondel, Jersey, including 28km of 90kV 3-core cable in a single length, related network components and specialist jointing works. Prysmian will design, supply and commission the submarine and land cable connections as part of a larger contract worth almost €28 million, awarded to a consortium between Prysmian and VBMS, that will perform the marine cable laying operations, including

protection and landfall activities.

The submarine cable will replace the existing obsolete Normandie 1 interconnector and its 100MW capacity will be shared by both Jersey and Guernsey islands under the Channel Islands Electricity Grid partnership agreement, which is the vehicle through which the local utilities procure power from EDF in France. The cables will be produced in the Arco Felice plant in Italy, while project completion is scheduled for October 2016.

The mission of connecting islands, worldwide

Prysmian Group boasts an unrivalled track record for the connection of islands to mainland grids, such as the Negros to Panay in the Philippines, the Cyclades project in Greece, the Capri-Torre Annunziata in Italy, the Ibiza-Mallorca and the Mallorca-Spanish mainland in the Balearic islands, the Phu Quoc in Vietnam and the Hudson Transmission Project interconnecting Manhattan to New Jersey in the US.

Doing business

A main partner in Italian high-speed railway expansion

Prysmian Group has supplied various types of cables and accessories for a total of more than 1,100km of railway lines.

As the Italian high-speed railway network expansion gains impetus, Prysmian has become one of the main partners of the major organisations involved, as the Alta Velocità Italiana project is currently in the execution phase and its future developments will involve laying new stretches of track, linking many large Italian and international cities. Under the agreements reached with the main consortia of Italian firms taking part in the project, Prysmian has supplied various types of cables and accessories for a total of more than 1,100km of high-speed rail lines. It has primarily supplied railway-signalling cables, special cables for rail-track circuits and fibre-optic cables manufactured at Italian plants.

This set of contracts represents the tangible result of a team effort begun long ago, and is an essential contribution to one of Italy's most important infrastructure projects. Most of the signalling cables installed along the Italian network have been supplied by Prysmian, and this is the evidence of the Group's deep expertise in the railway sector. Michele Mossio, T&I



and OEM Director Italy, stated that: "Once again, the Group is playing a leading role in the implementation of strategic infrastructure for Italy's development, bearing witness to the Company's continuing focus on researching and developing new solutions."

Oil & Gas: Aker and Kvaerner choose Prysmian

Prysmian Group has been awarded strategic frame agreements by Aker Solutions and Kvaerner that encompass the supply of offshore cables for Aker's oil platforms and of power cables for Aker subsea solutions, with the scope of activating close cooperation over two years and with local support coming from Norway and Brazil. The agreement with Kvaerner covers the supply of both offshore and onshore cables and focuses on a two-year collaboration, involving local Norwegian activity.

Record density fibre cable deployed in Sydney

Prysmian Group has supplied the highest fibre density in a high fibre count cable to Vocus for a 'one shot' installation for a data centre in Sydney. Vocus, the leading supplier of telecommunications, data centre and high bandwidth connectivity solutions in Australia and New Zealand, needed a very high fibre count cable for a special customer data centre install. The nature of the installation meant that they needed to install the largest number of fibres that they could fit into the available duct space – 1728f in 23mm – due to the 'one shot' nature of the installation.

Prysmian included in the FTSE4Good

The global index evaluates the performance of companies globally recognised for having the highest CSR standards.

Prysmian Group, the world leader in the energy and telecom cables and systems industry, [has been included in the FTSE Group's prestigious FTSE4Good Global Index](#), which is made up of the companies that stand out for their ethical, transparent management and implementation of proper sustainability policies in company processes.

FTSE4Good benchmark and tradable indices have been designed to measure the performance of companies that meet globally recognised social responsibility standards, helping to facilitate investment in those companies.

Prysmian has satisfied most of the stringent requirements, going well beyond the 'Good Practice' score set by FTSE Group. In particular, the Group received excellent evaluations by the Index's panel

of independent experts, thanks to the high standards we provide for our employees. This was due to our Diversity and Inclusion policy, which is based on the most effective international standards, a process aimed at fostering the development of individuals by creating a common identity, and various talent management programmes in a highly multicultural environment.

THE CODE OF BUSINESS CONDUCT

Another point of merit relates to the considerable attention devoted by Prysmian to the entire supply chain, thanks to the Code of Business Conduct aimed at spreading and ensuring responsible business practices throughout the supply chain. The FTSE Group introduced the FTSE4Good Index in 2001 in response to the increasing focus on corporate social responsibility amongst investors constantly searching for performance indicators of the proper implementation of environmental, social and governance criteria. In this way, the FTSE4Good Index also aims to provide concrete guidance to the foremost global investment players, who are increasingly interested in understanding the relationship between CSR policies and the creation of value for shareholders.

BendBrightXS fibre recognised by Frost & Sullivan

Prysmian Group was awarded the 2015 European New Product Innovation Award for its BendBrightXS optical fibre by Frost & Sullivan, the world leader in growth consulting and the integrated areas of technology research and market research. Every year in London, it presents this award to the company that has developed an innovative product by leveraging leading-edge technologies. The award recognises the value-added features and benefits of the product and the increased ROI it offers

to customers, which in turn enhances end-customer acquisition and overall market penetration potential. BendBrightXS fibre, initially designed for FTTH deployment, has now opened an innovative stairway for many new cable solutions applicable to a variety of network configurations. It combines an unprecedentedly low macro-bending sensitivity (G.657.A2 compliant) and industry reference micro-bending performance, while still preserving all the features of regular singlemode fibre (G.652.D compliant).

OFFSHORE GRID CONNECTIONS COMMISSIONED



The two contracts, both on the North Sea coast of Germany, were awarded to Prysmian Group by the Dutch-German operator TenneT.

SYLWIN1,

A MILESTONE HVDC CONNECTION

Prysmian successfully commissioned the High Voltage Direct Current (HVDC) offshore grid connection project off the North Sea coast of Germany in a contract with the Dutch-German transmission system operator TenneT. The project was initially secured in January 2011 as part of overall contracts awarded to consortia between the Group and Siemens Energy for the grid connection of offshore wind farms to the mainland. SylWin1 links the offshore wind parks DanTysk and Butendiek, followed by Sandbank, located about 160 km offshore, to mainland Germany passing to the east of Helgoland and continuing along a 45km land route to the land converter station in Büttel, north-west of Hamburg. The project marks a series of significant milestones, being the highest-ever rated system for VSC technology, with a power rating of 864MW, operating at the highest commercially available voltage level of $\pm 320\text{kV}$ DC and employing an extruded cable connection along a total route of approximately 205km, of which 160km is offshore and 45km onshore.

HELWIN2,

A TOTAL ROUTE OF 130 KM

The Group has also announced the successful commissioning of another of these projects – HelWin2. This project now links the offshore wind park Amrumbank West with a 690MW cable connection operating at the highest commercially available voltage of $\pm 320\text{kV}$ DC, along a total route of 130km, of which 85km is submarine and 45km land, to the Büttel converter station.



Prysmian solutions showcased in London

At the Renewable Global Conference and Exhibition in London, the Group presented its state-of-the-art set of products and services for the offshore wind power industry, including AC and DC power transmission submarine cable systems used in all major offshore wind grid connections up to 320kV. Special focus was given to the Group's portfolio of ethylene-propylene rubber cable solutions for inter-array applications, 3-core HVAC cable solutions up to 220kV and the new Feltoflex HV cable system for moveable interconnection between platforms.

FIRST ASSET MANAGEMENT CONTRACT SIGNED

Prysmian secures an agreement with Italy's Enipower to manage all the HV links currently installed in seven power stations.

The contract will cover the Italian power stations of Brindisi, Ferrara, Mantova and Ravenna petrochemical plants, along with the Ferrera Erbognone and Livorno refineries, and the Bolgiano trigeneration site. The contract comprises diagnostic, maintenance and emergency repair services needed by Enipower to optimise the operation of its high voltage assets linked to the national power transmission grid. Also included are the ordinary and extraordinary maintenance activities for 132kV and 380kV cable links, using both extruded (EPR-XLPE) and self-contained fluid filled insulation technologies.

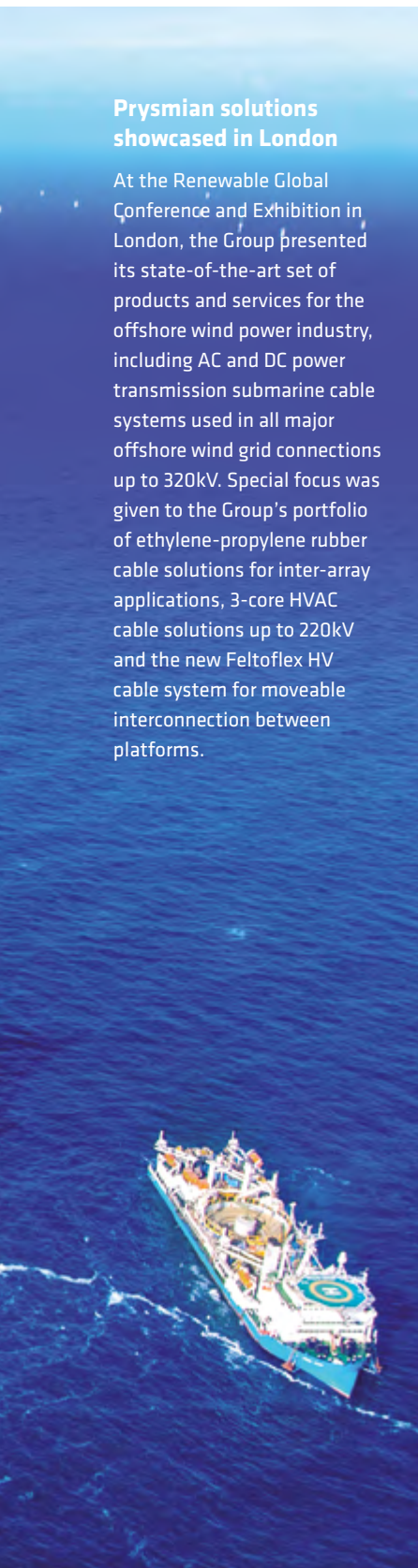
Additionally, the contract covers an emergency repair service, to preserve the strategic importance of the high voltage links. The service will be guaranteed by the highly widespread presence of the Prysmian Cavi e Sistemi Italia Srl Utilities and Network Components team over the Italian territory. With a total installed power capacity of some 5.2GW, Enipower – a subsidiary of Eni group, which is fully dedicated to power generation and steam production, as well as to the manufacturing and marketing of solar-cell systems – ranks among the major domestic companies in the electrical power production industry.

Upgrade completed at US facility

In a move aimed at anticipating the expected increase in market needs in North America for utility products, Prysmian has completed upgrade work at the Abbeville, South Carolina, production facility, by adding a second Vertical Continuous Vulcanization (VCV) line dedicated to underground high voltage cables up to 230kV. The upgrade comes six years after the opening of the extra high voltage production unit that already relies on a first VCV line, capable of producing extruded insulation cables up to 400kV. Both VCV lines are using state-of-the-art production technologies.

Fire cables testing lab certified in Spain

Prysmian has received accreditation for the Vilanova i la Geltrú laboratory by ENAC to become a third party lab to carry out fire testing on cables compliant to CPR standards. ENAC is an independent non-profit organisation declared to be of public interest with over 25 years' experience and is the body designated by the Spanish Government to assess technical competence in accordance with international standards. Prysmian Spain is the first cable manufacturer accredited as a fire cables testing lab. The accreditation represents official recognition of the technical competences of the Group and is a reliable way for conformity assessors to identify companies that offer maximum reliability in their services.



Prysmian to help treatment of leukaemia

The Group has donated 10km of low voltage power cables to the new 'Maria Letizia Verga' Centre, part of the St. Gerardo Hospital in Monza, Italy, already established as a hospital of excellence in the research and treatment of childhood leukaemia.

Celebrating 100 years of manufacturing in UK

An all-new contemporary mace was donated at a ceremony to the Mayor of Eastleigh and Eastleigh Borough Council to celebrate Prysmian Group's centennial year of manufacturing in the UK, Eastleigh Borough Council's 40th anniversary and their long-standing relationship. The original mace was given to Eastleigh Borough Council in 1936 by Pirelli General Cable Works.

Supporting Nepal after earthquake

Prysmian Group decided to work closely with UNHCR, the Office of the United Nations High Commissioner for Refugees, to actively support the victims of the recent earthquake. In only one week, more than 500 Prysmian employees made their donations, especially from European countries and China, while the Company donated an equal amount. The fundraising was used for the supply of solar lamps through UNHCR.

LEADING THE WAY TO SAFETY

Prysmian aims at facilitating its major partners' path towards the implementation of the Construction Products Regulation.

The EU Commission has already published EN 50575 in the Official Journal, setting the date for the end of the co-existence period at 1 December 2016. The CPR project is of great strategic importance as it ensures reliable information on construction products in relation to their performance, by providing a common technical language and offering uniform assessment methods. It's a revolution in the construction of both buildings and civil engineering projects and Prysmian used the occasion to take action, asking all affiliates to define a road map for CE-marked products compliancy. Through strong R&D activity, central project coordination and a multifunctional team for each country, Prysmian stays fully committed to getting the best out of CPR.





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