

Sharing a Vision  
for the Future

A World of  
Performance

A World of Local  
Relationships

A World of  
Responsibility

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# Inspiration

2015 ANNUAL AND SUSTAINABLE  
DEVELOPMENT REPORT



Smart city



e-efficient buildings



Energies



Industry services



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Tomorrow's world will be  
your world. A world that  
you are preparing today,  
alongside a responsible  
Group present at thousands  
of public, service-sector  
and industrial sites.



# FOUR COMMITMENTS THAT INSPIRE OUR PROJECTS

## USING LESS ENERGY, IMPROVING PERFORMANCE

As a leader in active energy efficiency services, SPIE provides its customers with cost-effective and environmentally friendly solutions that improve their long-term performance.

## DRIVING CHANGE IN THE ENERGY MIX

SPIE is present across all energy sectors in Europe and around the world and is committed to fighting global warming.

## DIGITAL TRANSFORMATION IS AN OPPORTUNITY

Smart buildings, connected cities, industry 4.0: SPIE is making the digital transition a key advantage for companies and communities.

## LASTING PROGRESS REQUIRES INFRASTRUCTURE

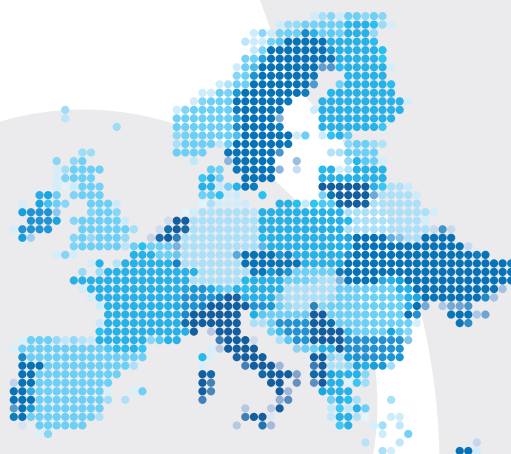
As a specialist in transport, energy and communications infrastructure, SPIE is contributing to the rapid growth of new networks and smart systems.



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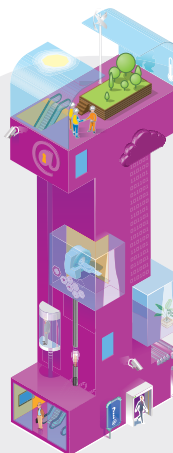
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Inspired by  
**JEAN COLDEFY**  
DEPUTY DEPARTMENT  
HEAD, MOBILITY PROJECTS  
AND SERVICES DIVISION,  
AND VICE-CHAIRMAN  
OF ITS FRANCE



*Lyon, France*  
**Lyon Metropolis,  
Grand Lyon**

Watch  
the interview.



## WITH SPIE, FOR SMARTER CITY TRAFFIC MANAGEMENT

At a time of shrinking budgets, how do you meet the growing urban mobility needs of France's second-largest agglomeration? For Jean Coldefy, the solution will involve intelligent traffic regulation systems, as seen in the European Opticités project that SPIE is supporting.

WITH SPIE,  
TO USHER  
OUR VISITORS  
INTO THE  
FUTURE



Inspired by  
**HANS GUBBELS**  
CHIEF EXECUTIVE  
OFFICER



*Kerkrade, Netherlands*  
**Museumplein Limburg**

Watch  
the interview.



To get visitors excited about exploring the future, how do you create the perfect symbiosis between the buildings of an avant-garde museum and its exhibits? For Hans Gubbels, SPIE offers the advantage not only of being on the leading edge of sustainable innovation, but also of sharing the same culture and acting with a European mindset.





Inspired by  
**IAN A. CAMPBELL**  
DIRECTOR, GROUP PROPERTY



*Derby, United Kingdom*  
**Rolls-Royce Plc**

Watch  
the interview.



## WITH SPIE, TO NURTURE OUR VALUES AND EXCELLENCE

When a high-tech company is looking for the best maintenance services, what should they do? For Ian A. Campbell, SPIE has become a real extension of his company, by helping it every day to reduce its costs, manage its buildings more efficiently and shrink its environmental footprint.

WITH SPIE,  
TO FOCUS ALL  
OUR ACTIVITIES  
ON THE USER

Inspired by  
**FATALAH KOUIDRI**  
MANAGER, SERVICE AND  
TRAINING SECTION/IT



*Ecully, France*  
**Groupe SEB**

Watch  
the interview.



When users become more demanding and digitization transforms the company, how do you deliver optimal efficiency across the IT support chain? For Fatalah Kouidri, this challenge is naturally addressed by the agility and flexibility of a partner like SPIE.





WITH SPIE,  
TO CONDUCT  
OUR RESEARCH  
IN CONFIDENCE

Inspired by  
**PETER REUTER**  
TECHNICAL DIRECTOR



*Dresden, Germany*  
**Fraunhofer IKTS**

When you're one of the leading application-oriented research organizations in Germany, how do you create a reliable, innovative, eco-friendly working environment? For Peter Reuter, SPIE delivers all the right responses to his demanding standards of day-to-day performance.

Watch  
the interview.





WITH SPIE,  
TO IMPROVE  
OUR BUILDING  
MANAGEMENT

Inspired by  
**JEAN VAN BUGGENHOUT**  
HEAD OF PROPERTY  
SERVICES & CSR



*Brussels, Belgium*  
**Cofinimmo**

Watch  
the interview.

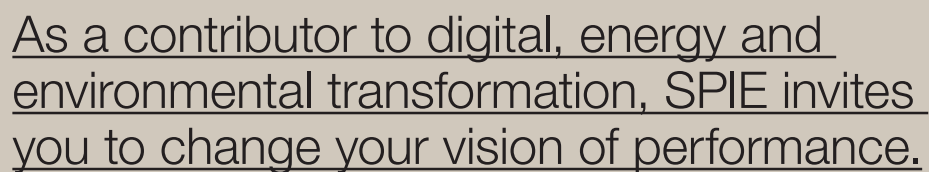


When new city lifestyles impact office properties, how do you optimize the management of their utilities? Jean Van Buggenhout found that, in addition to maintaining technical facilities in optimal condition, SPIE is a real partner in meeting his energy challenges and realizing all of his buildings' potential for smart operation.



A WORLD OF  
PERFORMANCE





You want your ecosystem to be more open, better connected, increasingly flexible, better suited to changing needs or a place of well-being, efficiency and safety for all? Whatever your requirements, SPIE provides you with a new vision of performance,

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# SPIE is the independent European leader in multi-technical services in the areas of energy and communications.

## ONE SPIE

### ONE COMPANY

As the leading independent group in Europe in its industry, SPIE has been built on a bedrock of shared values: local presence, ethical and professional responsibility, and high standards for performance and technical excellence. Enriched by its diversity that encompasses some one hundred nationalities, SPIE represents a community of entrepreneurs united by a strong corporate identity. Its employees thus share the same culture, exercise the same professions and meet the same challenges, particularly that of safety.

### ONE VISION

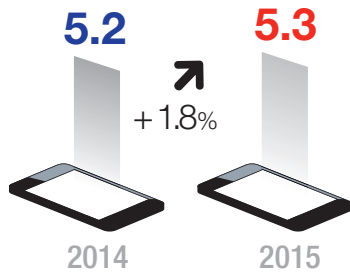
Customers are our core strategic concern. By their side, SPIE implements innovative, global and integrated solutions for the entire life cycle of their operations. These solutions benefit from local expertise adapted to its environment and from inter-subsidiary pooling of skills in order to access the best services. Customers are thus assured of aligned high quality offerings throughout Europe that meet their needs for global performance, a consistent approach and long-term support.

### ONE MISSION

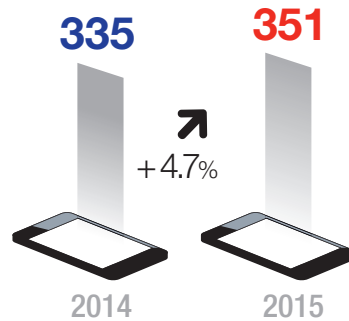
Thanks to its presence in all sectors of the economy, SPIE fully contributes to the transition to a post-carbon society. Its services are centred on technical, financial and environmental optimization and cover energy efficiency, energy production and distribution, the deployment of new technologies and ICT services and the sustainable improvement of infrastructure. SPIE is a recognized player in urban and regional transformation, with solutions that support the emergence of smart cities and the transition to new growth models.



## INCREASE IN REVENUE in € billions



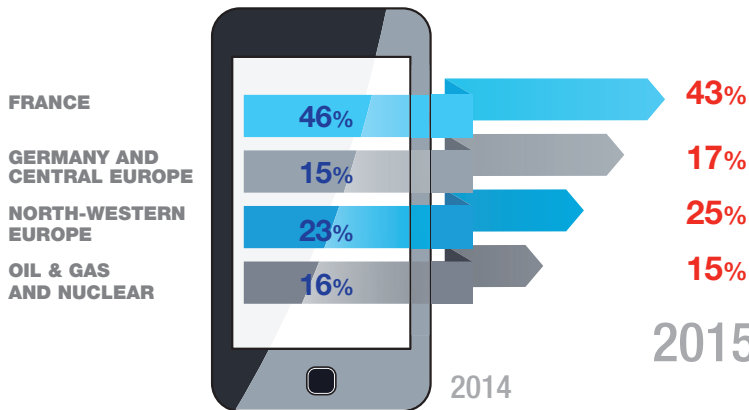
## INCREASE IN EBITA in € millions



close to **600**  
**SITES**  
**38** countries

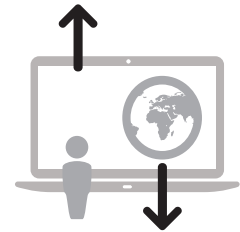
**25,000**  
**customers**

## CHANGE IN REVENUE by reporting segment



## WORKFORCE

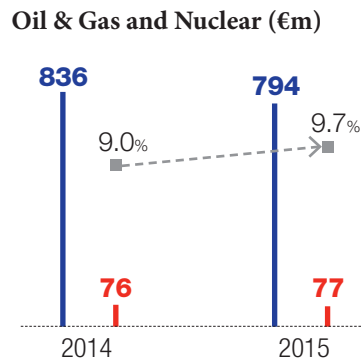
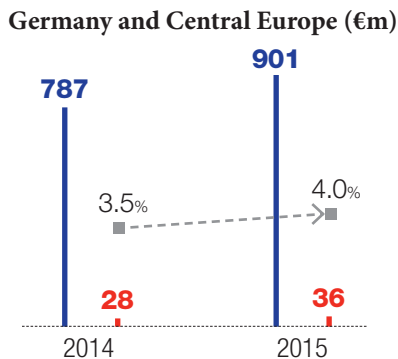
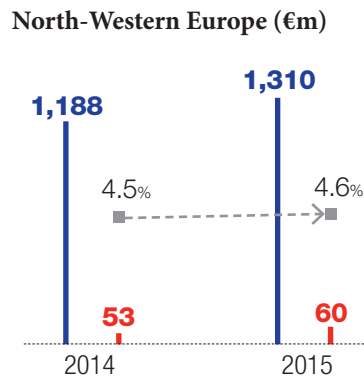
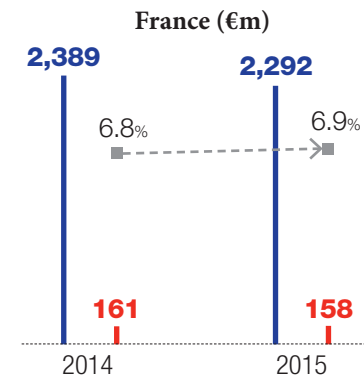
**38,000**  
employees representing  
120 nationalities



**89%** Europe  
**5%** Africa  
**3%** Asia  
**3%** Middle East

## PERFORMANCE by reporting segment

■ Revenue (€m) ■ EBITA (€m) ■ EBITA margin (%)



European advertising campaign  
on SPIE's 2015 results.



Read the press  
release about  
our 2015  
results.



SPIE is improving the living environment by helping its customers to design, build, operate and maintain facilities that are energy efficient and environmentally friendly.

## 3 FIELDS OF EXCELLENCE

### **MECHANICAL & ELECTRICAL SERVICES (M&E)**

SPIE designs and integrates high-level technical solutions, providing ongoing support to customers with their most complex projects and enabling them to maximize the return on their investments. Drawing on its expertise in the fields of electrical, mechanical and HVAC engineering, the Group meets the needs of companies and communities for high performance technical installations, from the environmentally responsible and cost-effective layout of buildings to the creation of new generation infrastructures such as smart lighting networks.



Watch our corporate video.

### **TECHNICAL FACILITY MANAGEMENT (TechFM)**

SPIE is present at thousands of sites throughout Europe, where it designs, implements and operates solutions that ensure effective long-term facility management and an optimal living environment for occupants. With its focus on operational and environmental efficiency and cost effectiveness, SPIE's Blue FM™ offering provides comprehensive customized services along the entire value chain: from the factoring in of each customer's critical requirements to the centralized management of facilities and the optimization of contractual performance.

### **INFORMATION & COMMUNICATIONS TECHNOLOGY SERVICES (ICT)**

Thanks to its expertise in urban-integrated technologies and the digitization of services, SPIE contributes to the sustainable improvement of the living environment in such crucial areas as smart mobility, connected buildings and new high-speed infrastructure. The Group is developing ICT expertise adapted to each business sector, such as the automation and supervision of industrial processes, and facilitates organizational change through its services in the areas of unified communication, IP infrastructure, information system security and data centres.



# 4 MARKETS



## SMART CITY

CONTRIBUTE TO A SUSTAINABLE MODEL OF URBAN AND REGIONAL DEVELOPMENT

- Smart public lighting
- Connectivity and telecommunications
- Video protection
- Transport and mobility
- Educational and healthcare infrastructure
- Public services equipment
- Water and waste treatment



## e-EFFICIENT BUILDINGS

OPTIMIZE LONG-TERM BUILDING PERFORMANCE

- High energy performance electrical and HVAC systems
- Information and communication systems
- Control and safety systems
- Energy multi-technical services



## ENERGIES

FACILITATE THE ENERGY TRANSITION AROUND THE WORLD

- Oil and gas extraction and production
- Nuclear cycle and energy production
- Thermal and renewable energies
- Power transmission and distribution networks



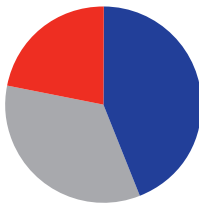
## INDUSTRY SERVICES

SUPPORT THE DEVELOPMENT OF EACH INDUSTRIAL SECTOR

- Local engineering
- Mechanical and electrical installations
- Instrumentation, automation and production management systems
- Optimization of energy consumption in industrial processes

## BREAKDOWN OF REVENUE BY BUSINESS

GLOBAL REVENUE: €5.3 BILLION

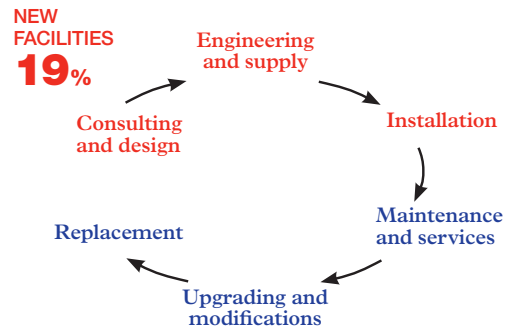


**22%**  
INFORMATION & COMMUNICATIONS TECHNOLOGY SERVICES ("ICT")

**44%**  
MECHANICAL AND ELECTRICAL SERVICES

**34%**  
TECHNICAL FACILITY MANAGEMENT

## PROVIDING SUPPORT THROUGHOUT THE BUSINESS LIFE CYCLE



ASSET SUPPORT  
**81%**



# A GROWTH AND INNOVATION DYNAMIC

**GAUTHIER LOUETTE**  
CHAIRMAN AND CHIEF  
EXECUTIVE OFFICER, SPIE

The success of SPIE's initial public offering,  
combined with its sustained performance  
in 2015, brings us to a new stage in  
the Group's development.



*Employee share offering  
meeting in Hanover, Germany,  
on 18 September 2015.*





“We are positioning ourselves on forward-looking projects, such as those linked to the Internet of Things (IoT) and the implementation of a new generation of digital infrastructure.”

---

**2015 WAS ANOTHER YEAR OF GROWTH IN EUROPE FOR SPIE. ARE YOU STAYING THE COURSE DESPITE THE ECONOMIC TURBULENCE?**

Our European ambition remains the same. We will continue to develop our local presence through targeted acquisitions in markets that are still highly fragmented and offer good growth opportunities. We are also actively engaged in an innovation dynamic, which is highlighted by our commitment to the energy and digital transition. Over the past two years, SPIE's presence in information and communication technologies has strengthened significantly. In Switzerland, for example, we are now among the leading companies in this sector. Our businesses and our solutions are evolving constantly, as demonstrated by our digital solutions for industrial maintenance and our recent partnership with IBM to create an ecosystem of services around electric vehicle charging stations. Internally, we have recently launched several initiatives with young employees to start building the

**80%**  
OF REVENUE  
GENERATED FROM  
RECURRING  
CONTRACTS.

company of the future, particularly during the POC21 (Proof of concept) innovation camp, which brought together some one hundred eco-inventors in the run-up to the COP21 climate conference. All of this requires a long-term vision, which guides our business activities and ensures sustainable growth.

---

**CAN YOU TELL US ABOUT THE BUSINESS TRENDS DURING THE YEAR IN YOUR VARIOUS MARKETS?**

Our financial results continued to improve in Europe despite the persistent weakness of the French economy, which led to a decline in business volume, particularly with public sector customers. In Germany, we successfully rolled out our business model, which once again demonstrated its effectiveness in a very demanding environment. Our growth also picked up pace in the Netherlands, the United Kingdom and Belgium, with strong momentum in the infrastructure market and an increasingly balanced business portfolio. In the oil and gas sector, the fall in prices led to an organic contraction in business, which was limited, however, by our presence in maintenance services and partially offset by a favourable shift in exchange rates. In the nuclear industry, business continued to grow in a favourable market environment, particularly following the launch of EDF's Grand Carénage programme designed to prolong its power plants' lifespans.

---

**IN FINANCIAL TERMS, ARE YOU SATISFIED WITH YOUR YEAR-END RESULTS?**

Our results were in line with the objectives announced for 2015 and demonstrate our ability to grow steadily, while remaining cautious in taking on new business. Annual revenue rose 2% to reach €5.3 billion, while our margins continued to improve in our four reporting segments. EBITA climbed by nearly 5% to €351 million. Our solid cash level enabled us to maintain our policy of targeted acquisitions in the Netherlands, Belgium, Germany and the United Kingdom. We acquired €174 million in revenue in 2015, a special year for SPIE thanks to its IPO, which

brings us to a new stage in our development. Two acquisitions were signed in early January and this cadence should accelerate in 2016, enhancing our means of consolidating our European leadership in multi-technical services.

---

## HOW DO YOU EXPLAIN THE SUCCESS OF THE IPO?

Investors recognized the quality of the company, its resilience and its successful positioning in promising markets. For more than ten years, our financial performance has been among the industry's best. Our close relations with our customers provides us with a solid base of recurring contracts, which represent more than 80% of our revenue. We also pay particular attention to risk management and maintaining a well-balanced financial structure. Following the IPO, the capital increase enabled us to reduce our debt from a pro forma €1.77 billion to €925 million, while our net debt/EBITDA ratio decreased from a pro forma 4.8 times to 2.4 at year-end.

---

## IS THIS A TURNING POINT FOR YOU?

SPIE's IPO in June 2015 was the largest on the Paris stock market since 2007 and has significantly increased our visibility. SPIE is an independent European company with around 40,000 employees, a company anchored in the real economy and supported by a strong collective ambition – as demonstrated by the exceptional take-up rate during the new employee share ownership plan linked to the IPO. As a result of the plan, 53% of our employees are now SPIE shareholders, twice as many as the average for European companies. This is a source of pride for us and one that we share with all our stakeholders. But it also means more responsibility, a fact of which we are very aware.

---

## WHAT WILL BE THE KEY DEVELOPMENTS FOR YOUR GROUP?

More than half of our business is now generated outside France and the synergies between our subsidiaries are increasing in all fields, from the



sharing of best practices to the launch of pan-European solutions. Our businesses are also entering the era of collaborative development. The key is no longer solely our high level of technical expertise, but also the agility with which we respond in markets that are increasingly open and competitive. We are also positioning ourselves on forward-looking projects, such as those linked to the Internet of Things (IoT) and the implementation of a new generation of digital infrastructure. It's clear today that all our efforts are moving towards better management of the environment and quality of life, with new business models to which we fully intend to contribute.



2015 results.  
Watch the  
interview with  
Gauthier Louette.



# INSPIRED IN 2015 BY THE GROWING DIGITIZATION OF OUR SERVICES

For the management team, the year was shaped by SPIE's accelerated development in services that are increasingly smart and connected.

**DENIS CHÊNE**

*Chief Financial Officer,  
SPIE*

For many financial analysts and investors, SPIE's presence in the digital economy represents a major growth driver for the markets. The convergence of energy services and information technologies will enable us to scale up innovation and create high value-added services in all our businesses.

**GILLES BRAZEY**

*Chief Operating Officer for France,  
SPIE*

Our ORIOS offering, one of the most innovative on the EV charging infrastructure market, perfectly illustrates SPIE's commitment to digital services. Our partnership with IBM enables us to offer a comprehensive solution that meets the needs of both charging network operators and electric vehicle drivers.

**YVES COMPAÑY**

*Managing Director,  
SPIE Oil & Gas Services*

Our digital applications have been a resounding success with operators and help to differentiate us in the markets. Being able to monitor our customers' machinery in real time, or use digital applications to perform SMART analyses remotely, gives us a strategic position in the technologies of tomorrow.

**PHILIPPE BRUGALLÉ**

*Managing Director,  
SPIE Ouest-Centre*

Our services all tend to be built around the digital transformation, which is a priority growth driver in our businesses in all of our markets. For example, the ORIOS electric mobility solution being deployed in the Morbihan region includes not only charging point management and supervision, but also services for users, such as electronic payment systems and maintenance.





## JOHAN DEKEMPE

*Managing Director,  
SPIE Belgium*

The smart building movement represents one of the most promising areas for digital services, since it encompasses both improvement in facility management and adaptation to occupant needs. One of the key components is energy management, from the networking of equipment to the integration of renewable energies.

with the drive to digitize the nuclear power segment, providing assistance in locating equipment and access to operating procedures and risk analyses. Connected objects are also contributing to operational and technical excellence, particularly in our maintenance services.



## MARKUS HOLZKE

*Managing Director,  
SPIE GmbH*

We are now fully committed to smart energy, which is a more intelligent form of energy since it is responsive and gives greater control. The challenge involved is broadly shared, as demonstrated by the European Energy Service Initiative 2020 project to which we are actively contributing, with landmark projects such as our intelligent lighting concept for the major urban facilities of Deutsche Postbank.



## PHILIPPE GIRAULT

*Managing Director, SPIE  
Île-de-France Nord-Ouest*

We are already well and truly in a new era of services. The Internet of Things allows us to accelerate the networking of data on our customers' property portfolio and to increase the efficiency and effectiveness of its management. We presented these technological advances at the Galerie des Solutions show held at the Air and Space Museum in Le Bourget during COP21.



## OLIVIER DOMERGUE

*Managing Director,  
SPIE Nucléaire*

Our tablet deployment programme is fully in line



## PABLO IBÁÑEZ

*Director of Operational Support,  
SPIE*

Digitization is becoming a strategic driver for retaining customers through better services, but also for improving our effectiveness by closely involving our suppliers in our innovative solutions. Deploying digital tools and media also facilitates our employees' work, in terms of productivity, motivation and well-being.

**ALAIN LANGLAIS***Managing Director, SPIE Sud-Ouest, Morocco and Portugal*

SPIE's development of smart regions is a key factor in improving public services and creating innovative services such as telemedicine. A good example is the Digital Dordogne project, which aims to foster a new regional dynamic through the deployment of a 23,000 km broadband fibre optic network.

**VINCENT MAGNON***Managing Director, SPIE ICS\**

The digital transition has now become a priority for both companies and the public sector, raising the question of its impact on each organization. Rather than simply solving a technical issue or meeting a performance improvement objective, it's about supporting a major change in business practices and processes in an increasingly digital world.

\* SPIE Communications was renamed SPIE ICS on 25 March 2016.

**PASCAL PONCET***Managing Director, SPIE Sud-Est*

The digital economy is a factor in our businesses' development and the transformation of our portfolio of solutions. In public lighting, for example, SPIE ensures user comfort and safety through smart, interactive and cost-saving infrastructure, together with cost-effective digital services such as WiFi, video protection and public address systems.

**CYRIL POUET***Managing Director, SPIE Est*

The cities that are most actively involved in the energy transition are also on the cutting edge in the area of digital services.

In the French city of Belfort, for example, the local authorities asked us to implement continuous monitoring of its buildings' heating and HVAC systems, by using an energy monitoring tool combined with digital mapping of the sites.

**THIERRY SMAGGHE***Human Resources Director, SPIE*

The digitization of HR management processes has become a critical driver of the Group's internationalization. The STARS solution that we rolled out during the year is designed to address this trend by not only improving the efficiency of external recruitment but also supporting employees' professional development.

# CORPORATE GOVERNANCE

OUR CORPORATE GOVERNANCE PRACTICES ARE SYSTEMATICALLY DESIGNED TO ENSURE TRANSPARENCY, PREVENT AND MANAGE RISKS, AND CLEARLY DEFINE THE RESPONSIBILITIES ASSOCIATED WITH OUR VALUES.

## BOARD OF DIRECTORS

**SPIE SA** is a limited liability company incorporated in France as a *société anonyme* and governed by a Board of Directors. Its head office is located at 10 Avenue de l'Entreprise, 95863 Cergy-Pontoise, France.

### CHAIRMAN AND CHIEF EXECUTIVE OFFICER

**Gauthier Louette**

### DIRECTORS

**Michel Bleitrach\***,  
Former Chairman of Keolis

**Daniel Boscari**, employee  
representative, SPIE

**Denis Chêne**, SPIE

**Sir Peter Mason\*\***, KBE,  
Chairman of Thames Water

**Nathalie Palladitcheff**,  
Caisse de dépôt et  
placement du Québec

**Roberto Quarta**,  
Clayton, Dubilier & Rice

**Christian Rochat**,  
Clayton, Dubilier & Rice

**Sophie Stabile\***, Accor

**Regine Stachelhaus\***,  
E. On

**Gabrielle Van Klaveren-  
Hessel**, representative  
of the SPIE Actionnariat  
corporate mutual fund

### NON-VOTING MEMBERS

**Baudoin Lorans**, Caisse  
de dépôts et placement  
du Québec

**Alexandre Motte**, Ardian

*\*Independent Directors.*

*\*\*Senior Independent Director.*

## GENERAL MANAGEMENT COMMITTEE

The Group's General Management Committee meets regularly under the leadership of Gauthier Louette, Chairman and Chief Executive Officer. The committee comprises the Managing Directors of the Group's subsidiaries, as well as Denis Chêne, Chief Financial Officer, Thierry Smaghe, Human Resources Director, Jérôme Vanhove, Strategy, Development and M&A Director, Pablo Ibañez, Director of Operational Support, and Gilles Brazey, Chief Operating Officer for France. This 18-member committee defines and deploys the company's operating strategy, coordinates initiatives at Group level and develops company-wide synergies.



### JAMES THODEN VAN VELZEN

*Chief Executive Officer, SPIE UK*

One of the key elements of going digital is the ability to integrate services that were previously separate. Thus, as part of our work in tunnel renovation, we apply global solutions for LED lighting, control systems, safety and security to provide quality improvements for users, reduced CO<sub>2</sub> emissions and lower operating costs.



### LEI UMMELS

*Managing Director,  
SPIE Nederland*

Digital services have enabled businesses to introduce new methods in the way they operate and deliver value. Our new 'Datacenter as a Service' solution is one example: it offers all the advantages of cloud computing, with a shared site and a self-managed site, and avoids the need for clients to compile and manage their data centres themselves.



### JÉRÔME VANHOVE

*Strategy, Development  
and M&A Director, SPIE*

The digitization of the economy goes well beyond technical features and productivity objectives. The use of all of the technologies now available enables major changes and improvements in terms of service offerings, customer relations and internal processes.





# CONTINUOUS IMPROVEMENT IN OUR FINANCIAL PERFORMANCE

**DENIS CHÊNE**  
CHIEF FINANCIAL OFFICER,  
SPIE

---

## HOW WOULD YOU DESCRIBE SPIE'S PERFORMANCE IN 2015?

We were operating in a mixed economic environment in 2015. Markets were buoyant and fairly dynamic in most of Europe, but much of the French economy remained sluggish and the oil industry was seriously disrupted by the steep fall in crude prices.

SPIE showed once again that it could adapt swiftly to a variety of changing contexts, by virtue of a business model based on higher margins, top-quality and regular cash flow, and targeted acquisitions in growth sectors. Leveraging clearly defined and shared priorities and still-tighter risk control, we improved all of our financial indicators in 2015 and ended the year with an excellent balance sheet structure.

---

## CAN YOU TELL US ABOUT SPIE'S PERFORMANCE IN MORE DETAIL?

First, our EBITA margin jumped to 6.6% in 2015. It is gratifying to note that all of our business segments contributed to this result by posting higher margins. This goes to show that our teams are fully committed and that our business model is robust and applicable to a variety of situations.

Second, cash generation was also up to par: our cash conversion ratio – a key indicator that measures the proportion of EBITA converted to cash flow – once again broke the 100% mark, reaching 105% in 2015. All of us at SPIE are well aware that the results are not final until they have been banked, and that our good cash conversion ratio reflects the solid results we are achieving year after year.

Cash flow is also key to the substantial progress we made last year in three areas: forging ahead with our policy of self-financed acquisitions, with eight more companies acquired in 2015, paying down debt more quickly and planning a first dividend payment for 2015, wholly consistent with our IPO objectives.

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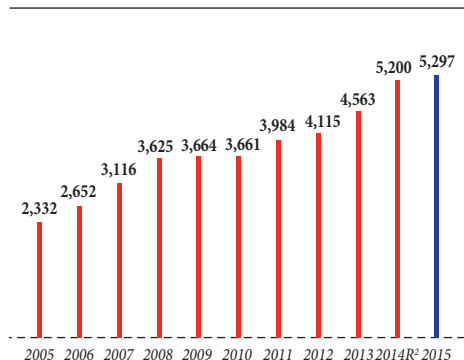
## WHAT IMPACTS WILL THE IPO HAVE ON SPIE'S FINANCIAL HEALTH?

Focusing solely on balance sheet quality, the IPO enabled us to move way ahead and enter the major leagues, exemplifying the progress we have made in recent years.

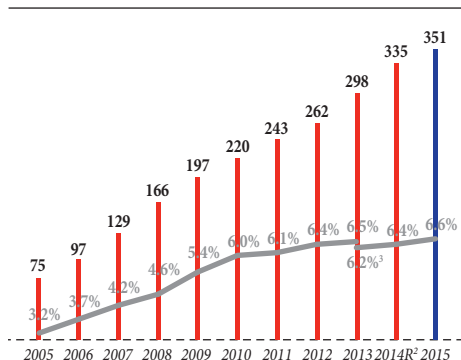
We carried out a €700 million capital increase in excellent conditions and refinanced all our debt, which is now much lower and less costly than before. Our net debt/EBITDA ratio at end-2015 fell to 2.4, comfortably in line with market expectations.

On a full-year basis, the restructured debt should only cost us about a third of what it did in 2014. That boosts our available cash flow, which we will use to get greater leeway for external growth, distribute a regular dividend to all our shareholders, and continue paying down our debt.

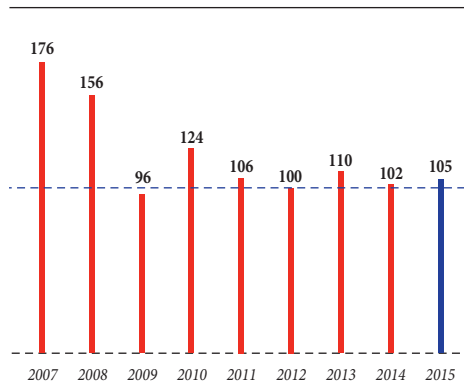
## REVENUE (€m)



## EBITA (€m) AND EBITA MARGIN (%)



## CASH CONVERSION<sup>1</sup> (%)



1. Cash conversion is defined as cash flow from Operations divided by EBITA. Cash flow from Operations corresponds to EBITA, plus depreciation, plus change in net working capital and in provisions related to expenses and income included in the EBITA, less capital expenditures (excluding investments for acquisitions).

2. Restated in accordance with IAS 19, IFRIC 21 and IFRS 5 (refer to the notes to the 2015 consolidated financial statements for further details).

3. 2013 PF EBITA margin.

Our stronger financial position was also welcomed by our two rating agencies. Post-IPO, Standard & Poor's raised SPIE's rating by two notches, from B+ to BB, and Moody's lifted it from B2 to Ba3.

## YOU MENTIONED TIGHTER RISK CONTROL. WHAT DOES THAT ENTAIL?

Our steadily improving performance – sometimes in contrasting economic environments – obviously requires us to exercise constant vigilance and to keep our strong risk-control culture, which is central to all of our operations, at the highest possible level. We can take nothing for granted in this respect and we need to constantly

re-evaluate. Our ability to manage risk effectively from both a technical and an economic standpoint is one of our key competencies and gives us a real competitive edge.

We have made major efforts in recent years to update and streamline our operating procedures and internal control framework, especially in light of the Group's rapid expansion in Europe. This commitment is now part of a carefully structured continuous improvement process. In early 2015, we set up a Risk Control and Internal Audit department, which encompasses risk control, internal control and internal audit. The department strengthens not only the Group's resources in this area but also the consistency and visibility of its approach and its capabilities in the fields of auditing, consulting and best practice sharing.

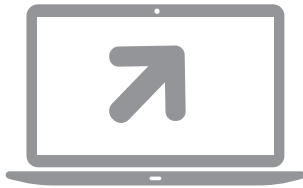


# A NEW DYNAMIC ON THE FINANCIAL MARKETS

To ensure its long-term performance, SPIE chose to closely link its IPO to a new employee share offering at the international level.

## LARGEST IPO IN FRANCE SINCE 2007

More than  
**€1 billion**  
raised in shares



**4.7%**  
of the capital held by SPIE  
employees



**53%**  
of employees are SPIE  
shareholders  
(twice the European average)



**W**hen it listed in Paris on 10 June 2015, SPIE became one of the 100 largest capitalizations on the French market. The IPO enables SPIE to better manage future developments and mobilize the greatest number of employees in order to take the Group forward to a new growth horizon.

### IPO: A MAJOR SUCCESS FOR SPIE

- An offering of more than €1 billion, including a €700 million capital increase
- Successful concurrent refinancing and net debt reduction

SPIE successfully launched its IPO on 10 June 2015 on the Euronext Paris regulated market, under more favourable market conditions than

those in previous months. The offering was several times oversubscribed, reaching the offer price of €16.50 per share, in the upper end of the proposed range. On that basis, the company was valued at €2.5 billion.

The capital increase allowed the Group to significantly pay down its financial debt. The new credit facilities amounted to €1.3 billion compared with €2.0 billion prior to the IPO. After the offering, Moody's and Standard & Poor's both raised SPIE's long-term rating by two notches, to Ba3 and BB respectively (with a stable outlook) from B2 and B+.



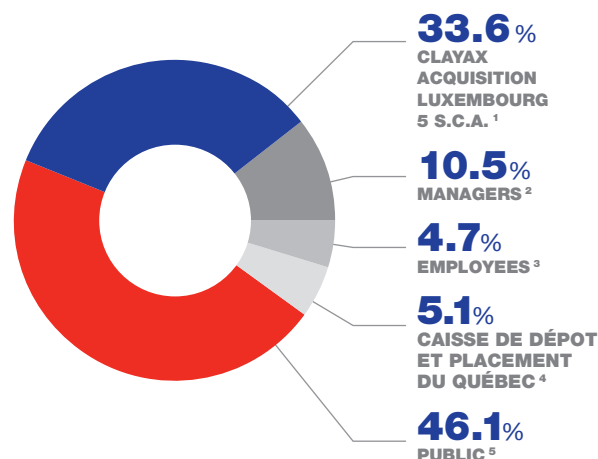
SPIE's initial public offering.  
Watch the video.





## DIVERSIFIED, HIGH-QUALITY SHARE OWNERSHIP, WITH A 37% FREE FLOAT

Ownership structure at 25 march 2016



1. Clayax Acquisition Luxembourg 5 S.C.A. is controlled directly or indirectly to 63.4% by Clayton, Dubilier & Rice, to 19.5% by Caisse de dépôt et placement du Québec and to 17.1% by Ardian.

2. Current and former managers, on the basis of the information known at December 31, 2015.

3. Shares held by employees, directly or through the FCPE SPIE Actionnariat, on the basis of the information known at December 31, 2015.

4. Stake controlled through funds managed by Caisse de dépôt et placement du Québec.

5 On the basis of the information known at December 31, 2015 on the number of shares held by managers and employees.

## A SUCCESSFUL EMPLOYEE SHARE OWNERSHIP POLICY



**20,000**  
employee shareholders



**7,000**  
investors in the SPIE 2011 corporate mutual fund reinvested in 2015

**Nearly €54 million**  
invested

(including employer matching)



### EMPLOYEE SHARE OWNERSHIP: THE WORKFORCE SHOWS ITS TRUST IN SPIE

- Share for You 2015: a near-43% take-up
- 7,000 shareholders from the 2011 corporate mutual fund reinvested in 2015
- Nearly €54 million invested (including employer matching)
- 20,000 employees are now shareholders

The Share for You 2015 employee shareholding plan was offered 1-12 October 2015 to 33,800 eligible employees. The plan was a resounding success with a take-up rate of nearly 43% at Group level and 56% in France. After including previous participation in the 2011 corporate mutual fund, this result places SPIE among the European companies with the highest proportion of employee shareholders.

The new offering was rolled out in 14 countries and was designed to involve the maximum number of employees after SPIE went public. More than a hundred meetings were organized around the world in order to explain the mechanisms and procedure for employees to take part in the offering. Among its specific features were very advantageous terms for buying shares. A 20% discount was applied to the average opening price of the SPIE SA share for the 20 days preceding the date for setting the subscription price, resulting in a per share price of €13.05 for employees compared with a market price of €16.50. Moreover, SPIE matched 100% of the subscription up to €1,000, 50% between €1,000 and €3,000, and 20% above €3,000, with a limit of €5,400 gross.



# SUSTAINED GROWTH IN EUROPE

A multi-technical services provider, SPIE has become a key player in its industry's consolidation in Europe and is continuing to expand around the globe.

8  
COMPANIES  
ACQUIRED  
IN 2015.

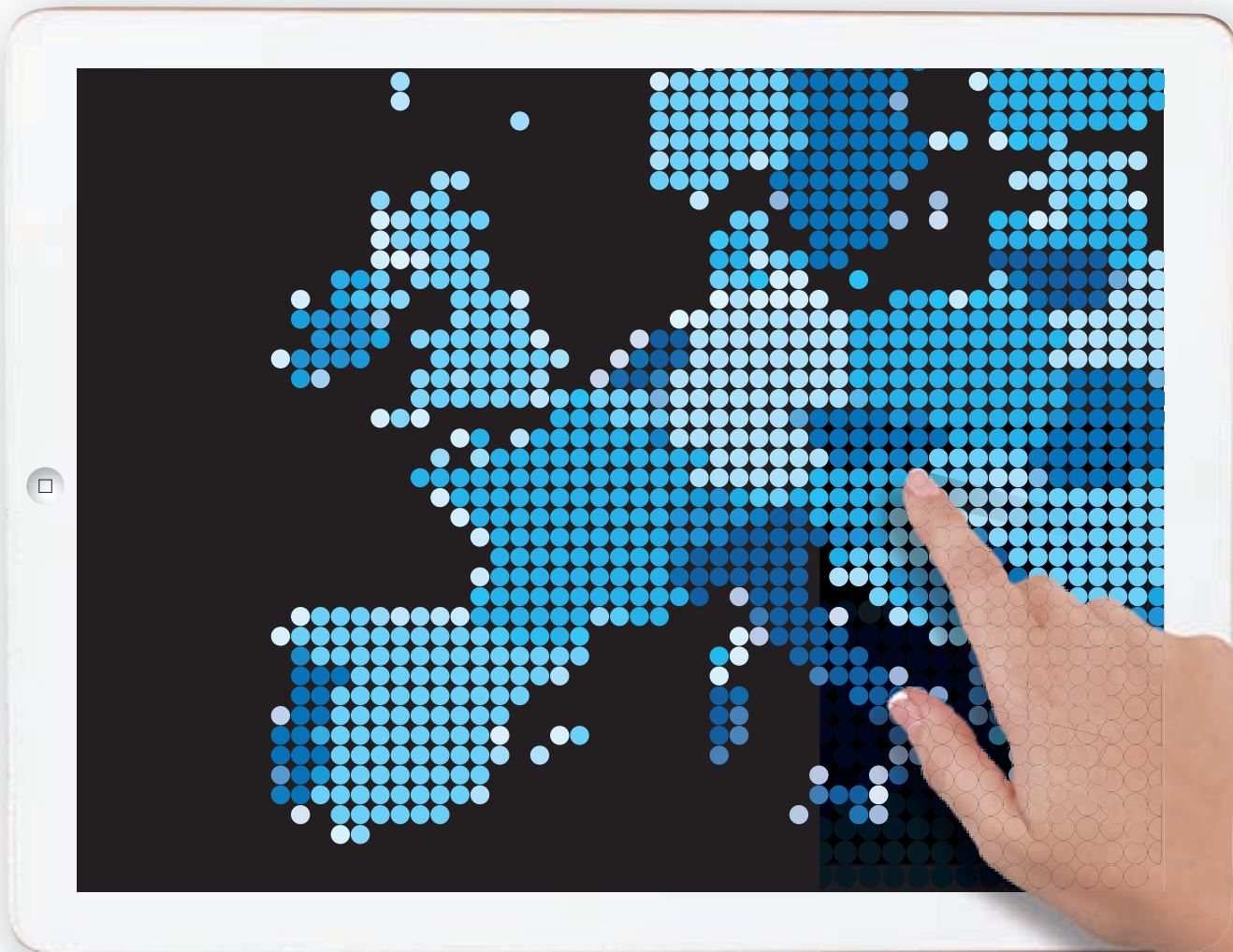
**In a European economy that improved slightly overall in 2015 despite regional disparities, SPIE strengthened its business model in local markets, acquiring eight companies in the United Kingdom, the Netherlands, Germany and France during the year. In addition, we expanded our business in oil & gas markets around the world.**

The past year was shaped by such strong underlying trends as the digitization of the economy and the fight against climate change, in markets that are increasingly sensitive to these issues. In the transport sector, for example, we renovated 11 motorway tunnels in the United Kingdom, helping to reduce urban carbon dioxide emissions, and continued to work on the European Opticities smart mobility project. More broadly, we reaffirmed our commitment to the green economy, with achievements honoured by prestigious awards during the year.

## FRANCE

Despite weak demand, due primarily to the drop in local public spending, SPIE enjoyed an increase in business in the manufacturing, housing and telecom segments. Another success factor was the development of digital services, leading to significant contracts with such key customers as PMU, Décathlon, Stade de France, and the La Sarthe General Council. In addition, the growing trend towards outsourcing boosted demand for our facility management business, which landed the integrated multi-technical management contract for L'Oréal's global headquarters during the year.

In response to the cooling economy, we also expanded our long-term partnerships with local authorities, through design, build, operate and maintain (DBOM) and public energy performance contracts, and strengthened our presence in such promising segments as clean rooms, HV power grids and video surveillance systems.



Lastly, we improved our positioning in a variety of future-facing projects, such as the partnership with IBM in EV charging points and the development of new solutions to meet energy efficiency needs in the future Grand Paris community.

#### **GERMANY AND CENTRAL EUROPE**

After acquiring Fleischhauer in 2014, SPIE continued to broaden its footprint in Germany with the purchase of Cromm & Co and Hartmann Elektrotechnik, which brought in new expertise in ICT services and multi-technical solutions. A variety of contracts were renewed during the year, such as those with Siemens and Fujitsu in manufacturing and Munich Re in services, while new Europe-wide contracts were won, for example, with Airbus, for multi-technical services on five sites, and the Charité university hospital in Berlin, for power supply system management.



Watch the Hartmann Elektrotechnik video.

**SPIE FURTHER STRENGTHENED ITS PRESENCE IN EUROPE IN 2015 WITH THE ACQUISITION OF EIGHT COMPANIES THAT BROADENED ITS REGIONAL BUSINESS PORTFOLIO.**

#### **EUROPE**

*BELGIUM  
FRANCE  
GERMANY  
HUNGARY  
NETHERLANDS  
POLAND  
PORTUGAL  
SWITZERLAND  
UNITED KINGDOM*





Watch the Leven Energy Services video.



Watch the CRIC video.

The year also saw the merger of Connectis and Softix in Switzerland to form SPIE ICS AG, which is now one of the country's leading providers of ICT services. We also expanded our business in Poland, where SPIE Polska was voted Facility Management Company of the Year at the very prestigious Eurobuild Awards 2015 real estate competition.

#### **NORTH-WESTERN EUROPE**

With the acquisition of Leven Energy Services in 2015, SPIE has become a leading provider of power grid infrastructure services in the United Kingdom. We remained on a strong growth trend during the year, with projects ranging from airport renovations and the fit-out of eco-innovative buildings like Capgemini's Merlin data centre, which won the Green Data Centre Award, to facility management services in such diverse sectors as finance, manufacturing and education.

In the more vibrant Dutch economy, SPIE stepped up the pace of growth in the industrial segment with the acquisition of Numac and deepened its presence in the commercial segment by acquiring the assets of Secure 4 U B.V. in Limburg. We also remain involved in long-term energy projects, like the construction of the North Sea's largest wind farm and the reconfiguration of the power transmission network with TenneT.

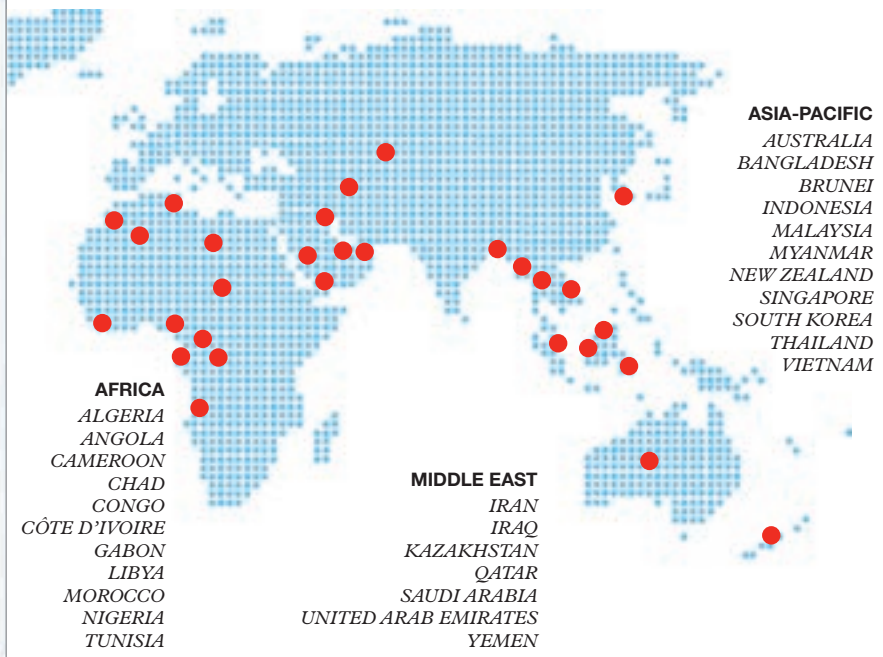
We also enjoyed firm demand in Belgium, particularly in the chemical and petrochemical segment, commercial real estate and power infrastructure, such as HV substations. While continuing to expand in facility management, we completed such innovative projects as the fit-out of Kärcher Belux's new head office and the installation of a clean room for Thales Alenia Space Belgium.

#### **OIL & GAS AND NUCLEAR**

The oil industry's difficulties prompted SPIE to take a series of adjustment measures to reduce customer operating expenses and respond more effectively to the slowdown in deliveries of its oil-field tubular goods. Nevertheless, we capitalized on the robust demand for maintenance and operating services, as illustrated by many new contract wins during the year. Examples include the contract to maintain the instrumentation, control and telecommunications network at QCG's LNG plant in Australia and the project to expand the Petro Rabigh refining and petrochemical complex in Saudi Arabia.

In the expanding nuclear power market, we benefited from the launch of EDF's Grand Carénage refit programme, which saw the start-up of a mega-project at the Paluel power station, and from the solid growth dynamic in the maintenance and rotating machine segments. Present across the power plant life cycle, SPIE continued to successfully install cabling at the Flamanville EPR plant and won two major new contracts for on-site work at in-service facilities, one with the CIPN Nuclear Engineering Centre in Marseille and the other with the CNEPE National Power Generation Equipment Centre in Tours.





Watch the NUMAC video.

WITH A SOLID LOCAL FOOTPRINT AROUND THE WORLD,  
 SPIE IS SUPPORTING OIL & GAS COMPANIES ON AROUND 60 SITES.

## 2015 ACQUISITIONS

### **SPIE NEDERLAND**

#### **Numac – €57 million**

Numac offers leading-edge industrial services, including multi-disciplinary maintenance, metal processing equipment maintenance, electrical installation and panel assembly, and support services for original equipment manufacturers.

#### **Jansen Venneboer – €18 million**

Specializing in the engineering, inspection and maintenance of river infrastructure, Jansen Venneboer offers advanced expertise in electromechanical facilities, bridges, flood defences and sluice gates.

### **SPIE UK**

#### **Leven Energy Services – €52 million**

With operations in the power, gas and water industries, Leven Energy Services provides a comprehensive range of engineering and utility services, from overhead line management to underground cabling.

### **SPIE GMBH**

#### **Hartmann Electrotechnik – €36 million**

Strategically focused on ICT and electrical engineering services, Hartmann Electrotechnik offers the automotive, aerospace and petrochemical industries a wide array of capabilities, ranging from security technologies and network management to industrial automation.

#### **Cromm & Co GmbH – €1 million**

Based in Karlsruhe, Baden-Württemberg, Cromm & Co is a specialist in communications, data networks and fibre optic installation and service.

### **SPIE BELGIUM**

#### **CRIC – €4 million**

CRIC offers HVAC installation and maintenance services to industrial and commercial customers in Wallonia.

### **SPIE SUD-EST**

#### **Entreprise Villanova – €2 million**

Specialized in high and low-voltage electrical installations, Villanova serves the new-build multi-family housing market in the Auvergne region.

#### **THERMAT – €2 million**

Based in the Haute-Savoie *département*, Thermat contributes its expertise in heating, plumbing and mechanical ventilation to new-build multi-family housing projects.

**€184<sup>m</sup>**  
 IN ACQUIRED  
 REVENUE IN  
 EUROPE.





# A WORLD OF LOCAL RELATIONSHIPS



Smart city



e-efficient buildings



Energies



Industry services



**DIDIER BONNET**

SENIOR VICE PRESIDENT &  
GLOBAL PRACTICE LEADER,  
DIGITAL TRANSFORMATION,  
AT CAPGEMINI CONSULTING  
IN LONDON

# THE KEYS TO SUCCESSFUL DIGITIZATION

Faced with competition that has rewritten the established rules, companies now see digital transformation as a sustainable phenomenon requiring major change. They thus reinvent themselves, sometimes hastily, by addressing two major questions: “Where should we be going?” and “How do we get there?” Didier Bonnet tells us about the keys to a successful digital transformation.

**A**mong the companies that stand out, some have focused on improving the customer experience. Starbucks has worked a lot on services, such as WiFi and payment systems, in order to offer an increasingly rich and differentiating experience. Others have worked on operational aspects. In the United States, UPS has adopted this approach by investing in logistics to optimize lorry routes and provide its customers with accurate information on parcel movements and delivery times. The outcome is greater efficiency and reliability. Other companies have made changes in their business model. General Electric, for example, has chosen to concentrate on the Industrial Internet.

#### **MOVING AT DIFFERENT PACES**

Our study shows that there are disparities between sectors and countries. Some companies in sectors such as banking and car making are in the midst of a vast transformation and paving the way for more traditional sectors such as industry and insurance, which are investing in digital without changing their business model. In all cases, good leadership appears to be a prerequisite for effective change, regardless of the business or the geographic region. And although the United States remains in the lead, noteworthy achievements can also be found in Europe, Asia and Australia.

#### **A QUESTION OF LEADERSHIP AND INVESTMENT**

I think that a successful digital transformation goes through several stages, with the first, fundamental one being when top management realizes its importance. Homing in on opportunities and risks, management must be able to define a strategic vision as well as a roadmap, year by year, before launching the implementation phase. Digital transformation also entails a major investment programme. The entire process requires harmonized governance. Lastly, the monitoring stage inevitably includes learning and corrective phases. Large, multi-business or decentralized groups may tailor the transformation process for each business, geography or product line, but they still have to maintain consistent alignment.



Watch the interview with Didier Bonnet.

“We have observed a 26-point difference in profitability in favour of companies that have carried through an effective digital transformation.”





### OPENING UP TO INNOVATION

By working on the customer experience, companies increase consumer satisfaction, but also sales volumes and profit margins. And by working on operations, they can generate gains in efficiency and productivity. In addition, the necessary experimentation leads to a new degree of agility within the organization. But a real effort at openness is necessary, which means widening the field of view and knowing how to observe and get ideas from best practices, whatever the industry. Innovation is everywhere and the only companies that stand out are those that know how to search for it. Digitization entails identifying and acquiring the necessary resources and production capabilities externally, through new partnerships.

### CHANGING CORPORATE CULTURE

While many companies go digital because the concept is in fashion, we have observed that real transformations were achieved as a result of a very strong conviction among the company's leadership and a clear view of what direction to take. It is also important to focus on the programmes that have a real impact on the company's industrial or financial performance and to support change in the corporate culture by teaching employees to work differently, particularly by adapting to more peer-to-peer communication methods. Human and cultural aspects are the keys to success. I am convinced that we mustn't underestimate the inevitable changes in skills: digital transformation requires specific or new

“HR’s involvement is fundamental to effectively help employees enter the digital world.”

*The keys to a successful digital transformation.*

**INNOVATION**  
LEADERSHIP  
**STRATEGIC VISION**  
**HARMONIZED GOVERNANCE**  
AWARENESS  
ROADMAP  
INVESTMENT PROGRAMME  
**CORPORATE CULTURE**  
CHANGES IN SKILLS

“When you invest  
€1 in a tool, invest  
€5 to get employees  
to use it!”

aptitudes and cannot be approached like a technological project.

HR teams must be able to assess the required skills as well as those already available and then find out where to get new ones. Having the right talent is becoming a real competitive advantage, so it's important to roll out a very far-reaching programme encompassing recruitment, training, incubation, partnerships, and relations with universities or other companies. Chief Digital Officer can be a key position for accelerating transformation, provided that senior managers all share the same strategic vision.

You change a company's culture by changing the way people work. To bring about this cultural shift, facilitate understanding of the digital world and harmonize employees' skills, some big companies have created digital transformation universities. Cultural change is a complex subject because it is tied to the company's history and the skill sets of its employees. It can only occur once employees have adopted new tools and ways of working together, particularly through coaching or reverse mentoring.

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#### # SPIE transforms itself

For a successful digital transformation, a company must be able to understand and measure the impact on its very diverse range of businesses. It has to provide consistency during this transition by harmonizing certain skills and creating platforms to increase efficiency, but also by defining a real programme that includes a vision for the company and a vision for the business.

SPIE ICS has an important role to play in the area of the Internet of Things. Among the three main stages – collecting information, communicating and processing the data collected – the key issues for the Group are data security, standardization and analysis. It must be able to make its mark by deploying applications, particularly for smart cities, an area it knows very well.

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#### WHAT ABOUT TOMORROW?

I don't see any limits to digital transformation. We are just starting out and we haven't seen anything yet because the potential is unlimited, particularly in such areas as 3D and artificial intelligence. Technologies are developing exponentially and will be disseminated ever more rapidly within companies, which will have to become more nimble in order to be able to constantly change and adjust.

Digital transformation is essential and must go from the status of “nice to have” to “must have”, with the risk that some organizations may not survive.

The effect of digitization and automation inevitably means that some non-specialized businesses may disappear, disadvantaged by more advanced and perpetually evolving functions. In some cases, machines will replace humans, but digitization will also result in a better man-machine balance and greater overall performance.

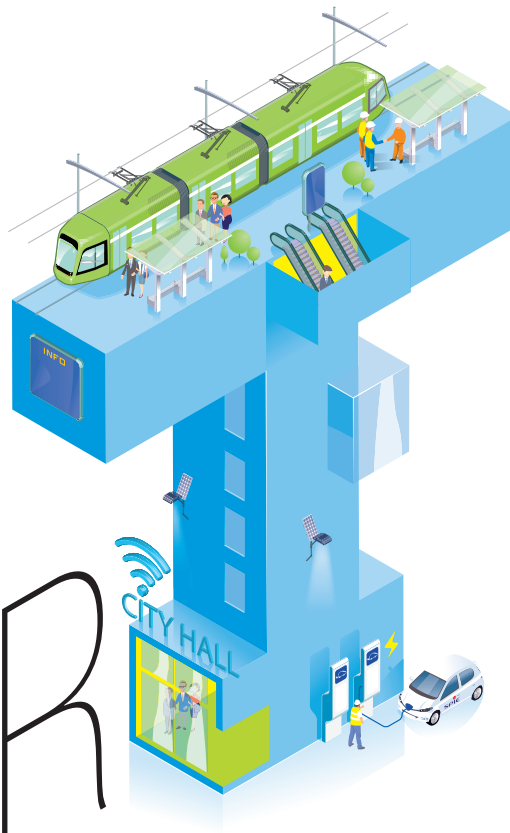


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#### For more information...

In their book *Leading Digital: Turning Technology into Business Transformation*, George Westerman (MIT), Andrew McAfee (MIT) and Didier Bonnet (Capgemini Consulting) present the findings of a study on digitization carried out in 400 major organizations from all over the world. They share the fundamentals of a successful digital transformation by pointing to companies that are lagging behind but have the opportunity to change, compared with those that have already made the transition.

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# SMART CITY

Meeting in Nantes in June 2015, the 12 members of the Executive Committee of the Eurocities network made an undertaking to get their residents more engaged in addressing urban issues, develop synergies to respond to climate change and step up the digital transition.

Read the Smart city brochure.



## Urban challenges

### SMART CITIES

# 240

EUROPEAN UNION CITIES HAVE IMPLEMENTED OR PROPOSED SMART CITY INITIATIVES REPRESENTING NEARLY 95 MILLION PEOPLE, OUT OF A TOTAL POPULATION OF 508 MILLION.

### EUROPEAN COMMITMENT

# 50%

OF THE EUROPEAN SMART CITIES ARE ACTIVELY ENGAGED IN SMART INITIATIVES, BUT ONLY 28% HAVE REACHED A SATISFACTORY MATURITY LEVEL.

### AREAS OF INVESTMENT

# 50%

OF EUROPEAN SMART CITY INITIATIVES RELATE TO THE "SMART ENVIRONMENT" (33%) AND "SMART MOBILITY" (21%).

Sources: Mapping Smart Cities in the EU – European Parliament.



## REINVENTING THE CITY AROUND NEW USER PRACTICES AND A COMPETITIVE LOW-CARBON ECONOMY.

**A**s a European leader in quality-of-life engineering, SPIE expresses a holistic vision of the city that combines innovative services, industrial ecology and digital technologies. In addition to the technical aspects, the real challenge is to foster a new urban development dynamic based on smart systems, by encouraging social and environmental innovation.

.....  
# Steven Henry, SPIE UK – SPIE has had great success maintaining and upgrading the infrastructure of Britain's busiest tunnels. We should continue to develop this expertise.  
.....

Spurred by the EU's energy and climate package for 2030, Smart city initiatives undertaken during the year focused on energy efficiency in the region's leading urban communities. In Germany, for example, SPIE won the 2015 European Energy Service Award for its smart lighting project deployed in Deutsche Postbank facilities in six of the country's largest cities. In London, the comprehensive renovation of the famous Blackwall Tunnel under the Thames will help to reduce the city's carbon emissions. In France, the city of Belfort commissioned SPIE to sharply improve the energy efficiency of its public buildings, thereby avoiding the release of 464 tonnes of CO<sub>2</sub> a year. In this way, a wide array of local innovations are being rolled out across Europe, where they are helping to improve energy performance and more effectively combat global warming.

At the same time, the very notion of a smart city is shifting as disruptive new digital technologies dramatically alter urban lifestyles. For instance, the massive deployment of smart grids and the growing use of Big Data and its related applications are transforming public spaces into vast user services eco-systems. For example, in 2015, SPIE formed a partnership with IBM to launch a comprehensive solution for the supervision and management of public electric vehicle charging ▶



COP21 climate conference, France

When the COP21 world energy and climate summit was held at the Le Bourget exhibition park outside Paris, SPIE installed all of the digital infrastructure and provided IT managed services, in accordance with an eco-friendly methodology. An area of 180,000 sq.m was covered in record time with nearly 200 km of networked cables. The 400 VIP users were delighted with the smooth operation of the IT and telephone communication systems during the event.

.....  
# Jérôme Nier, SPIE ICS – Our project for the COP21 was to adjust to non-standard building spaces the size of a digitally networked town of 25,000 people.  
.....

The ORIOS solution.  
Watch the video.



ORIOS ID Charge.  
Watch the video.





# SMART CITY

## GOAL

### CONTRIBUTE TO A SUSTAINABLE

URBAN AND REGIONAL DEVELOPMENT MODEL,  
TAILORED TO THE CHALLENGES OF IMPROVING THE  
QUALITY OF LIFE AND WELL-BEING OF THE LOCAL  
POPULATION.

## OBJECTIVES

ENSURE *SUSTAINABILITY*

IMPROVE *QUALITY OF LIFE*

FACILITATE NEW *URBAN USES*

## AREAS OF EXPERTISE

### URBAN LIFE

INTELLIGENT PUBLIC TRANSPORT  
ELECTRIC VEHICLES  
CITIZEN INFORMATION SYSTEMS  
ROAD INFRASTRUCTURES  
VIDEO SURVEILLANCE  
INTELLIGENT LIGHTING  
MONUMENT LIGHTING  
TOURIST TRAILS

### BUILDINGS OPEN TO THE PUBLIC

OCCUPANT SERVICES  
COMFORT AND CONVENIENCE  
ENERGY EFFICIENCY  
COMMUNICATION AND OTHER NETWORKS  
SAFETY AND SECURITY  
HEALTH AND ENVIRONMENT

### ENERGY TRANSITION

RENEWABLE ENERGIES  
COGENERATION  
SMART GRIDS

### DIGITAL SOLUTIONS

4G NETWORK  
VERY-HIGH-SPEED DATA NETWORKS  
FTTH

- points. The new service, which includes usage analytics, online booking and equipment status tracking, has radically changed the way that EVs are used and operated in urban environments.

### A DIFFERENT APPROACH TO REGIONAL DEVELOPMENT

The resilience of regional communities, as measured by their ability to absorb and support multiple transformations while continuing to serve their residents effectively, represents a major challenge in the transition to a post-carbon world. SPIE is helping to meet this challenge in many European countries, in particular by working with power companies to reconfigure large power transmission networks. We are also involved in digital infrastructure projects, especially in France as part of the drive to create public initiative networks (PINs). For example, deployment of the broadband network in the Dordogne region, which got underway in 2015, will help to revitalize the local economy and deliver such innovative services as telemedicine and remote learning systems. Lastly, our local operations are helping to improve the management of natural resources. In 2015, for instance, we renovated a sewage treatment plant near Bordeaux equipped with an innovative bio-filtration process to scrub wastewater before its release into the Garonne River.

Meeting the rising demand for multimodal transport is also an important aspect of environmentally managing a region's land use, from the development of maritime shipping routes and railways to the modernization of harbour and airport infrastructure. Following on from the refitting in Belgium of the Lanaye lock complex, a crossroads of European river traffic, SPIE renovated the Fessenheim lock in Alsace as part of the full automation of the Rhine River lock system. We also installed the overhead line power supply for the new Paris-Strasbourg high-speed train, upgraded safety systems in the Channel Tunnel and completed a wide range of projects to improve overland transport, for example to encourage car-pooling with a system that automatically detects passengers at toll stations.



Download the  
Smart city app.



Electromechanical  
works for the Lanaye  
waterway lock project.  
Read the press release.

### # Frank Vougie, SPIE Ouest-Centre –

One way to reduce energy use is to install less energy-intensive LED lighting. You can also dim the lighting at night and remotely manage installations.

## REINVENTING THE URBAN LIVING ENVIRONMENT

Today's cities are striving to reinvent themselves by transforming the living environment in a variety of ways, such as by wiring public spaces, creating sustainable urban neighbourhoods (SUNs), offering alternative transport options and experimenting with new opening hours for urban amenities. Addressing these issues is one of SPIE's core competencies, and across Europe we are capitalizing on our innovative projects to support communities in their public policies. In Lyon, for example, we pioneered smart mobility solutions for city logistics users and operators, which are now being deployed in five other major European cities. The installation of electric vehicle charging points and parking spaces has proven highly popular in a large number of European cities, most recently Liege, Belgium. SPIE fosters the daily well-being of city-dwellers in many different areas, from tramways and other public transport systems to urban video-surveillance systems, smart lighting networks and monumental lighting for heritage sites.

SPIE is also helping to improve the quality of the user experience and the safety of people and property in public buildings, museums, cultural and sports venues, train and metro stations, and airports. In 2015, for example, we continued to upgrade installations at Heathrow Airport Terminal 4 near London, while in the Netherlands, the Delft bus station was fully renovated, including the installation of dynamic route information systems (DRISs). In the same way, a large number of public buildings are being entirely refitted with the latest user amenities.

## EXPANDING THE DIGITAL LIFESTYLE

The emergence of digital cities, organized around the processing of exponential volumes of cloud-stored data, is no longer the stuff of science fiction. The digital transformation is already impacting most urban activities and changing everyone's daily routine. In 2015, for example, the La Sarthe General Council commissioned SPIE to implement France's National Digital Plan for Education in the region's 57 high schools. We also supported the Stade de France sports arena in its bid to build customer loyalty by transforming the fan experience with a range of services leveraging new digital technologies, including high-definition slow-motion replays, HiFi audio commentary, live statistics feeds,

# Eang Ang Ong, IBM – With SPIE, there is real convergence between our ideas on what “smarter cities” should offer: efficient, interoperable services capable of providing end users with unparalleled convenience.



SPIE signs a contract with the Charité university hospital in Berlin. Read the press release.

online betting and the ability to order food or team merchandise online with in-seat delivery. At the same time, benefits for stadium management include such innovative applications as the high-density WiFi system that can simultaneously connect 20,000 users, as well as fan profile analytics and geolocation services.



University of Bradford, United Kingdom

To showcase the commitment of the prestigious British university to “Making Knowledge Work”, SPIE updated and improved existing staff offices and teaching spaces in the Pemberton Building.





## Energy efficiency

SI-Erlebnis-Centrum, Germany

**TO MORE EFFICIENTLY SUPPLY ONE OF STUTTGART'S LARGEST URBAN ENTERTAINMENT CENTRES** with heat, cooling, electricity and drinking water, SPIE upgraded the supply systems. Thanks to the new measurement and control technologies, the replacement of four cooling units will enable precisely the required amount

of cooling to be produced at any given time, with additional annual savings of around €420,000. The project represents a new phase for a complex that comprises several hotels, concert venues and cinemas, as well as apartment buildings, a casino, restaurants and office buildings.



## Smart infrastructure

Road transport, United Kingdom

The refurbishment of the UK's road infrastructure is gaining momentum, with 11 tunnels upgraded by SPIE in 2015. All of the tunnels were equipped with smart systems, to improve safety, protect the environment and reduce costs.



## Electric vehicles

Morbihan Énergies, France

In Brittany, SPIE is paving the way to regional eco-mobility by deploying 250 EV charging points across the Morbihan *département*, in a commitment to fostering the development of greener smart cities.



## Satellite telecommunications

Eutelsat, France

**ONE OF THE WORLD'S LEADING SATELLITE OPERATORS HAS COMMISSIONED SPIE** to secure the power supply for its teleport in Rambouillet. The challenge is to ensure

uninterrupted operation of the more than 200 parabolic antennas based on the 10-hectare site, which transmit communications and services for applications like broadband Internet.



## Energy transition

**Eindhoven University of Technology, Netherlands**

**RANKED AMONG THE WORLD'S TOP 20 RESEARCH CENTRES IN THE FIELD OF NEW ENERGIES,** Eindhoven

University of Technology chose SPIE to maintain all of its mechanical installations. Services cover the university's air conditioning, water and gas installations, as well as the

applications used to measure and regulate energy consumption. They also include the maintenance of its thermal energy storage installations – among the largest in Europe – based on the eco-innovative Aquifer Thermal Energy Storage (ATES) system.

## SPIE and United Security Providers secure the city of Berne's web applications

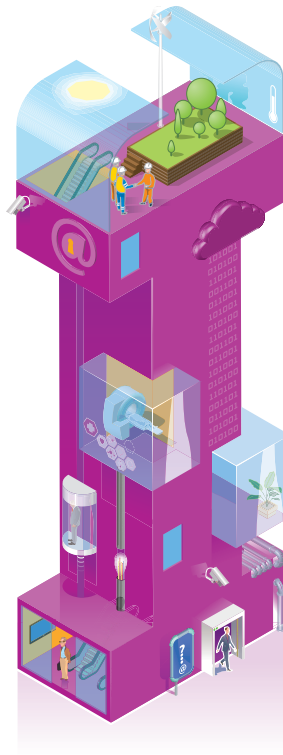
**City of Berne, Switzerland**

**A LONG-TIME PARTNER TO THE CITY OF BERNE, SPIE HAS NOW INTEGRATED A STATE-OF-THE ART SOLUTION**

developed by United Security Providers, the Swiss information security specialist. The solution has improved Berne's ability to withstand attacks on its wide range of web-based applications. It was successfully deployed after being tested to ensure that it complies with Switzerland's e-government scheme and is aligned with the city's IT strategy. Contrary to the other security products tested, this solution covered every need, with a latest generation firewall designed for web applications and a flexible, powerful and unique authentication system capable of meeting the complex requirements of its users. In all, the flexible, scalable solution offers the guarantee of total data security and privacy protection.



Read the e-Initiative  
buildings brochure.



# ENT

# e-EFFIC BUILDINGS

Presented on “Buildings Day”  
during the COP21 climate  
conference, France’s Sustainable  
Building Plan is designed to reduce office  
building final energy use by 60% by 2050,  
with carbon footprint and lifecycle assessments  
performed as from 2018.



## Construction challenges

### ENERGY ISSUES

**40 %**

OF FINAL ENERGY USE IN EUROPE  
COMES FROM BUILDINGS,  
OR AROUND A QUARTER OF THE  
EU’S DIRECT CO<sub>2</sub> EMISSIONS,  
ACCORDING TO THE EUROPEAN  
COMMISSION.

### COMMITTED EUROPEANS

**95 %**

OF GERMANS AND FRENCH  
PEOPLE SAY THAT THEY ARE  
CAREFUL ABOUT REDUCING  
ENERGY USE, FOLLOWED CLOSELY  
BY PEOPLE IN THE OTHER  
EUROPEAN COUNTRIES,  
ACCORDING TO A HARRIS  
INTERACTIVE SURVEY.

### SMART BUILDINGS

**38 %**

PROJECTED GROWTH IN  
THE GLOBAL SMART BUILDING  
MARKET FROM 2015 TO 2020,  
MAINLY IN EUROPE AND  
THE ASIA-PACIFIC REGION,  
ACCORDING TO A MARKETS &  
MARKETS REPORT.



## SUPPORTING PROPERTY MANAGERS BY DEPLOYING INNOVATIVE USER AMENITIES AND MANAGEMENT SERVICES.

**T**o meet the challenge of developing buildings with outstanding energy and environmental performance, smart management systems and multi-purpose flexibility, SPIE is working on thousands of sites across Europe, including offices, public buildings, shopping centres and sensitive defence and industrial facilities.

.....  
**# Ben Meesters, SPIE Nederland –**  
With “Datacenter as a Service”,  
we offer optimal uptime, flexibility and  
uninterrupted service, while customers  
retain control over their data and  
their costs.  
.....



Deutsche Postbank, Germany

SPIE won the European Union's 2015 European Energy Service Award for its innovative lighting solution combining LED technology and intelligent control systems. The solution enabled Deutsche Postbank to save some €330,000 a year and reduce its annual CO<sub>2</sub> emissions by 1,100 tonnes compared to average German power use.

Driven by the energy transition and the quickening spread of digital technologies, today's buildings are undergoing an unprecedented transformation. In addition to ensuring compliance with changing standards and legislation, this is about creating a new technical, financial and environmental performance model capable of fostering an optimal environment for building managers and users alike. In Berlin, for example, SPIE's upgrade of a steam generation unit into a combined heat and power plant will enable the Charité university hospital to reduce its carbon emissions by 15% and significantly cut its energy costs, while securing uninterrupted steam supply, for sterilization for example, and adding the ability to power the cooling system used to ensure occupant comfort during the summer months.

At the same time, infrastructure is increasingly being digitized by smart grids, which improve building operating efficiency and enhance user amenities and practices. Thanks to the smart management of lighting and HVAC utilities and the general improvement in access control, safety and IT systems, the entire building becomes an ecosystem of interoperable services. This type of transformation can extend to the redeployment ►

.....  
**# Vincent Magnon, SPIE ICS –**  
We're shifting from reactively  
managing an information system to  
a more proactive approach, thanks to  
big-data-based network and security  
analytics.  
.....



Europeans and energy  
efficiency. A Harris  
Interactive survey for SPIE.  
Read the press release.



# e-EFFICIENT BUILDINGS

## GOAL

**OPTIMIZE LONG-TERM BUILDING PERFORMANCE** THROUGH A CONVERGENCE BETWEEN DIGITAL TECHNOLOGIES AND INNOVATIVE BUILDING MANAGEMENT SERVICES.

## OBJECTIVES

ENHANCE ENERGY EFFICIENCY

CREATE COMMUNICATION-CAPABLE BUILDINGS

IMPROVE OCCUPANT AND MANAGER PRACTICES

## AREAS OF EXPERTISE

### USER COMFORT AND BUILDING OCCUPANT SERVICES

ELECTRICAL AND HVAC SYSTEMS  
BUILDING MANAGEMENT SYSTEMS  
EQUIPMENT MAINTENANCE  
LIFTS AND MOVING WALKWAYS  
INDOOR RADIO COVERAGE  
MANAGEMENT OF BUILDING AREAS  
CONCIERGE SERVICES

### ENERGY EFFICIENCY

LOW-CONSUMPTION EQUIPMENT  
HYPERVISION AND BUILDING MANAGEMENT SYSTEMS  
ENERGY USE MONITORING

### COMMUNICATION AND OTHER NETWORKS

DATA SECURITY  
IT INFRASTRUCTURE  
TELEMEDICINE

### HEALTH AND ENVIRONMENT

COLD CHAIN  
FLUID DISTRIBUTION AND MANAGEMENT  
WATER AND WASTE TREATMENT

- of organizations and office activities, as illustrated by the SPIE solution implemented in 2015 in the more than 700 production and broadcasting facilities operated by French media group NRJ. Thanks to our Big Data platform and related services, the management teams will be able to proactively plan their operations rather than just reacting to events, while substantially improving their system's ability to resist malicious online attacks.

### DEPLOYING ACTIVE ENERGY EFFICIENCY SOLUTIONS

To deliver its benefits – energy security, lower costs, improved comfort and greater environmental performance – energy efficiency requires a drastic change in the way energy is produced and managed in a building. Based on an in-depth review of the building, its use and its installations, SPIE designs a solution capable of measurably and sustainably improving performance through a combination of superior service levels and the use of the latest smart lighting, hybrid boiler, heat recovery and renewable energy technologies. Near Antwerp, for example, Kärcher Belux's head office will reduce energy use to a minimum following the installation of heat pumps, an innovative underfloor heating and cooling system and solar panels.

At a time when the energy efficiency of around 75% of European housing is poor, SPIE is also active in the housing sector, backed by its local presence and speciality business units. In Normandy, for example, our teams renovated the HVAC installations of more than 1,000 public housing units on around 90 estates during the year. Actively involved in the development of low-energy buildings, we also offer innovative approaches, such as energy performance contracts for public housing estates and the installation of micro-CHP systems.



Read the healthcare brochure.



SPIE ICS earns "Channel Customer Satisfaction Excellence" distinction from its partner, Cisco. Read the press release.

### SUSTAINABLY OPTIMIZING BUILDING

**# Eric Everaerd, SPIE Belgium –**  
We responded to Kärcher's desire to have a sustainable, environmentally responsible head office. And it's a great showcase for our expertise.

## MANAGEMENT

Ensuring fail-safe service continuity, no matter how complex the building installations, is a challenge that SPIE meets in thousands of offices, homes and industrial facilities. In 2015, the multi-technical maintenance contract for L’Oreal’s global headquarters illustrates our commitment to excellence, from the design of a solution addressing all of the cosmetic giant’s highly demanding specifications to the day-to-day management of buildings covering 87,000 sq.m. over eight sites.

In addition to installing and maintaining building utilities, more and more property owners and managers are looking to outsource the management of their assets, so as to lower operating costs and improve overall building performance. In the insurance industry, for example SPIE and Munich RE extended their facility management contract until 2023, based on a collaborative model designed to drive continuous improvements in some 20 properties and their technical systems. Building managers can therefore deploy their property strategy alongside building services specialists, from handling the regulatory, legal and financial aspects to providing maintenance and operational support solutions, regardless of how many sites are involved. This is the case for Generali in France, which has commissioned SPIE to manage 96 sites nationwide, including related soft services like cleaning and grounds keeping with the support of a specialized partner.

## CREATING EFFICIENT, INNOVATIVE ENVIRONMENTS

Today, building design is integrating new systems, such as web-based lighting management, indoor geolocation systems, presence detectors and EV charging points, that are profoundly transforming how facilities are used. In the Paris La Défense business district in 2015, for example, SPIE installed indoor radio coverage in the Tour Neptune and the Tour One, which will be the new head office of the Allianz insurance group. We already provide multi-technical maintenance services for Tour One, which has been certified to French HQE® standards. The challenge for the new project was to ensure that the radio waves reached even the most enclosed workspaces. More broadly, architectural innovation and smart building design are advancing hand-in-hand on the road to a carbon-free economy. In London, the top-to-bottom refurbishment of the Synergy

.....  
**# Markus Holzke, SPIE GmbH** – The early renewal of our contract with Munich Re attests to the success of our working relationship model, which is based on trust and partnership.  
.....

House calls for the integration of the latest technical amenities into a new environmental architecture concept. In the data centre segment, SPIE’s installation of a modular data centre for Capgemini earned it the Green Data Centre Award for the wide range of innovations that have reduced the facility’s environmental footprint.



**20 Minutes, France**

France’s most popular newspaper with the under-50 set chose SPIE for the high quality of its digital data transmission and cloud computing services.



## Eco-smart building

Europa, France

**AFTER A 16-MONTH PROJECT ENTIRELY MANAGED AND CARRIED OUT BY ITS TEAMS,** SPIE's new head office offers a compelling showcase for our expertise in sustainable fit-outs and smart buildings. Certified to HQE® and BREEAM standards, the building delivers outstanding energy and environmental

performance, from its geothermal heating system and reversible, radiating office ceilings to its rainwater recovery basins for use in outside watering. It also features open, collaborative workspaces designed to encourage the sharing of information, while maximizing ease-of-use and the occupant experience.

## The Shell Centre in London is replacing its electrical and HVAC installations

Shell, United Kingdom

**SHELL'S LONDON HEADQUARTERS, A 107-METRE HIGH TOWER** that was the UK's tallest when it was built in 1962, is installing new, ultra-modern electrical and HVAC equipment. In particular, SPIE's works will involve the strip-out and replacement of the building's chillers. Scheduled for completion in October 2016, the project will install a wide range of new facilities to improve occupant comfort and optimize building operation, including a river water cooling system, low temperature hot water boilers, and low voltage switch panels and transformers. All of the works will be carried out in a live building environment, a sign of confidence in SPIE, which has worked with Shell for more than seven years.





## Energy performance

Kärcher Belux, Belgium and Luxembourg

**KÄRCHER'S NEW HEAD OFFICE BUILDING STANDS OUT FOR ITS SUSTAINABLE, LOW-ENERGY INSTALLATIONS**

that regulate temperature with heat pumps and an innovative underfloor heating and cooling

system. It is also equipped with solar panels. The high energy performance solution demonstrates SPIE's expertise in complex technical installation projects.



## Facility Management

Munich Re, Germany

SPIE will continue to manage all of the infrastructure facilities and technical systems in 19 buildings for insurer Munich Re, through an operating company providing both multi-technical and cleaning services, right through until 2023.



## Electrical engineering

European Synchrotron Radiation Facility, France

At one of the world's largest synchrotrons, equipped with a particle accelerator about 320 metres in diameter, SPIE is involved in a three-year project to improve laboratory performance, in particular by installing new beamlines.



## Multitechnical maintenance

L'Oréal, France

**COVERING AROUND 87,000 SQ.M ACROSS EIGHT SITES JUST OUTSIDE PARIS,**

L'Oréal's global headquarters are staffed by people who demand exceptional quality of service and an outstanding user experience. This represents a daily challenge for SPIE, which has to demonstrate responsiveness and agility while maintaining

performance at the highest levels. Following a trial period to confirm our capabilities, we will manage all of the HQ's maintenance for three years, from electrical and HVAC installations to building sanitation and hotline services, based on an integrated quality management system.



Published in May 2015,  
the International Energy  
Agency's 2015 report emphasizes  
the importance for Europe to have  
a long-term strategy focused on green  
growth, which simultaneously improves energy  
security and energy efficiency, while reducing  
greenhouse gas emissions.

Read the SPIE  
Nucléaire brochure.



#### Energy challenges

##### POWER GRIDS

**€150<sub>bn</sub>**

TO BE INVESTED IN THE EUROPEAN  
POWER TRANSMISSION GRID  
BY 2030, ACCORDING TO THE  
EUROPEAN NETWORK OF  
TRANSMISSION SYSTEM  
OPERATORS FOR ELECTRICITY  
(ENTSO-E).

##### SUSTAINABLE DEVELOPMENT

**40%**

REDUCTION IN GREENHOUSE GAS  
EMISSIONS IN EUROPE BETWEEN  
1990 AND 2030, WITH RENEWABLES  
ACCOUNTING FOR 27% OF THE  
ENERGY MIX, ACCORDING TO  
EU TARGETS.

##### COP21

**1.5<sup>degree</sup>**

LIMIT ON GLOBAL WARMING  
BY 2100, ADOPTED ON  
12 DECEMBER 2015 BY  
195 COUNTRIES AT THE PARIS  
ENERGY AND CLIMATE SUMMIT.

## IMPROVING THE PERFORMANCE OF ENERGY OPERATORS, BY CONTRIBUTING TO A BALANCED, DIVERSIFIED, FLEXIBLE ENERGY MIX.

**W**orking alongside European and global energy operators, SPIE is helping to meet the major challenge of making energy safer, more competitive and sustainable. Active in every segment of the energy production sector, from solar and wind farms to nuclear power stations, we are designing and implementing innovative solutions across the energy life cycle.

While energy prices have continued to rise in Europe, the shift to a more acceptable energy mix is being held back by such factors as oil and gas dependence and ageing energy infrastructure. That's why the priority focus is on improving energy efficiency and renovating existing

.....  
**# James Thoden van Velzen, SPIE UK –**  
We are looking forward to developing our reach further in the Distribution and Transmission market and becoming one of the biggest players in the utility sector.  
.....



Areva, France

Equipped with an instrumentation and control system entirely designed and built by SPIE, the new Areva biomass-fired CHP plant will strengthen Adisseo's leadership in animal feed additives. Located in the Auvergne region of central France and fired with local wood, the facility will supply half of the site's steam and generate 102 GWh a year, while reducing carbon emissions by 46,000 tonnes.

installations, in an energy market that is more tightly integrated and open to renewables. This situation is encouraging the development of digital technologies and innovative services, in which SPIE is actively participating alongside energy producers and suppliers.

In the global oil and gas markets, the ongoing decline in oil prices has prompted operators to drastically cut their production costs and scale back capital expenditure. While business contracted somewhat over the year, SPIE benefited from its dynamic positioning in recurring maintenance and operating services, as well as from its sustained growth in the downstream segment. In Saudi Arabia, for example, the Saudi Aramco & Sumitomo Chemical consortium awarded us the commissioning and start-up services contract for the expansion of the Petro Rabigh refining and petrochemical complex, an ambitious project bringing together a multi-disciplinary team of around 100 specialists.

### UPGRADING EUROPEAN POWER GRIDS

Driven by the liberalization of the European energy sector and the development of renewable energies, the large national operators are continuing to reconfigure the region's power grid infrastructure. In the United Kingdom, where the industry is expected to expand by 6.5% over the next five years, SPIE has become one of the country's leading suppliers of power distribution services and is supporting the power grid refurbishment programme led by Ofgem, the British energy regulator. ►

.....  
**# Yves Company, SPIE Oil & Gas Services –** SPIE is recognized for its expertise in the management of complex commissioning and start-up projects in Saudi Arabia but also in the rest of the Middle East.  
.....



# ENERGIES

## GOAL

### FACILITATE THE ENERGY TRANSITION

THROUGH A WIDE RANGE OF TECHNOLOGIES AND SERVICES AIMED AT IMPROVING ENERGY PRODUCTION, USAGE AND TRANSMISSION MODES.

## OBJECTIVES

*PROVIDE SUPPORT TO  
ENERGY OPERATORS*

*SHRINK THE  
ENVIRONMENTAL FOOTPRINT*

*CONTRIBUTE TO ENERGY  
INNOVATION*

## AREAS OF EXPERTISE

### OIL AND GAS

WELL SERVICES AND GEOSCIENCES  
PROJECT ENGINEERING AND MANAGEMENT  
OPERATIONAL SUPPORT  
SKILLS DEVELOPMENT

### NUCLEAR POWER

NEW SITES  
PROJECTS AT EXISTING SITES  
MAINTENANCE  
FACILITY MANAGEMENT  
DECOMMISSIONING

### RENEWABLE ENERGIES

PHOTOVOLTAIC  
WIND  
BIOMASS  
HYDROPOWER  
GEOTHERMAL ENERGY

### POWER TRANSMISSION AND DISTRIBUTION

ELECTRICITY GRIDS  
TRANSFORMER SUB-STATIONS  
GAS NETWORKS  
STORAGE SITES  
LNG TERMINALS

- In France, SPIE worked with transmission system operator RTE to commission a new smart sub-station, a world premier designed to extensively integrate green energies and improve electrical infrastructure operation and maintenance. Based on local weather forecasts, for example, the sub-station will be able to predict wind turbine output and automatically adjust when it comes on-grid. In particular, in the event of a line fault, it will be able to “self-heal” by analysing the situation and independently restoring power when all lights are green.

In the same way, SPIE is helping to improve natural gas storage and transmission infrastructure, from refurbishing large LNG terminals, such as the ones in Zeebrugge and Antwerp, to making cross-border gas pipelines more dependable. For GRTgaz, the French owner and operator of the longest high-pressure natural gas transmission network in Europe, we continued to renovate equipment on all of its natural gas delivery sub-stations, including electronic volume correctors and remote transmission units, which enable the centralized management of installations spread over a wide geographic area.

### FACILITATING THE USE OF RENEWABLE ENERGIES

For many years, SPIE has been participating in a diverse array of renewable energy projects, based not only on photovoltaic and wind generation, but also biomass, geothermal, biogas and hydroelectric technologies. They have ranged from equipping large solar power plants, such as the one in Abu Dhabi, UAE, to working on solar and wind farms in regional areas. In the Netherlands, for example, in 2015 we helped to build the largest wind farm in the North Sea, with 150 turbines capable of supplying electricity to 785,000 homes. To build an onshore high-power sub-station connected to two offshore wind farms, the project leveraged all of our expertise in design engineering, civil engineering works and high-voltage installations. In addition, given the growing number of wind turbines in the Zeeland province, SPIE is participating in



Working with Northern  
Ireland Electricity.  
Read the press release.

# Guy Emmel, SPIE Île-de-France  
Nord-Ouest – Our project is a  
forerunner of tomorrow's smart grid,  
which will optimize a sub-station's  
capabilities and enable it to handle the  
massive influx of power from renewable  
sources.



.....  
**# Philippe Bellot, SPIE Ouest-Centre –**  
Public authorities realized that the photovoltaic industry could generate business across an entire value chain, in panel design or inverter manufacturing, for example.  
.....

the large-scale project to reconfigure the power transmission network managed by Dutch transmission system operator TenneT.

However, increasing the use of green energies, as part of the EU's commitment to reducing greenhouse gas emissions by at least 70% by 2050, will require more than just building large power plants. In Germany, for example, the national Energiewende project calls for citizens and communities to get increasingly involved in locally generating electricity from renewable sources. SPIE is helping to move this process forward by enabling regional participants to capture all of the benefits of these new energies. In western France, we built five solar fields that are remotely managed thanks to fully featured video surveillance, intrusion detection, access control and SCADA systems.

#### MEETING GLOBAL CHALLENGES IN OIL AND GAS

Despite the difficulties affecting the global oil and gas markets in 2015, SPIE's business remained robust during the year, reflecting its broad portfolio of local services and its operations in regions where production costs are still relatively low. We also benefited from the deployment of innovative digital solutions, with applications like Plexsys, Plexispec and Plexalarm in Australia, and from our contribution to alternative energy projects, such as the Petrixio biofuel refinery in Fujairah, UAE.

In West Africa, where we deliver recurring maintenance and operating services, revenue rose slightly in 2015. Already supporting Total in its Moho Nord offshore exploration and production project in the Republic of the Congo, SPIE was asked to oversee works and start-up on the oil company's on and offshore facilities in Gabon, with a focus on hiring and training Gabonese supervisors.

Business also held firm in the Middle East, notably in Saudi Arabia, where demand for refining and petrochemical services is rising in response to falling oil prices and a new contract was awarded for the Petro Rabigh complex north of Jeddah. In addition, a new technical support ►



**TenneT, Netherlands**

To bring wind power to the national grid, the power line network is being extended in the Flevoland province, with the installation of four new 110 kV transformer sub-stations.



**Langa, France**

The five solar fields installed by SPIE in the Sarthe, Indre and Tarn et Garonne regions represent total installed capacity of nearly 30 MWp.

.....  
**# Dean Paton, SPIE Oil & Gas Services –**  
We look forward to growing our footprint in the coal seam gas industry in Australia by delivering system improvements and efficiencies to enhance production.  
.....



Visit the SPIE Oil & Gas Services website.



- contract was won for the Sadara project in Jubail Industrial City, whose 26 integrated manufacturing plants will make it the world's largest chemical complex.

In the Asia-Pacific region, SPIE is continuing to redeploy into promising markets, particularly in Australia, which is expected to soon become the world's leading producer of liquefied natural gas (LNG). In Chinchilla, Queensland, for example, QGC, a BG Group business, has contracted with us to maintain the instrumentation, control and telecommunications network for the world's first project to turn gas from coal seams into LNG.

#### SUPPORTING NUCLEAR POWER COMPANIES

The nuclear power market continued to expand in 2015, led by the growing demand for competitively priced, low-carbon energy. In addition to new power station construction projects, such as Hinkley Point near Bristol in the United Kingdom, SPIE remains well-positioned in EPR projects after successfully pursuing its work at the Flamanville plant during the year, with already more than 1,000 km of electric cables installed. In addition, the industry continues to be driven by on-going post-Fukushima upgrades and the start-up of EDF's Grand Carénage refit programme. The latter was launched in 2015 in response to France's ageing nuclear power

plants, most of whose reactors were commissioned before 1990. It is designed to extend the plants' service lives, while improving their availability coefficients.

This situation is buoying demand for our services, especially in maintenance and on-site work at existing plants. In one example, we began to renovate the Paluel power station near Dieppe, in Normandy, with up to 200 employees working on-site to refurbish electrical installations, upgrade the control room and perform a full range of maintenance tasks.

Backed by our nuclear power skills training centre in Bèlignieux, we are keeping pace with this €55-billion programme that is ramping up and scheduled to last until 2025.

More broadly, our nuclear power operations are being boosted by the demand for improved plant security, safety and efficiency. For example, our contract to maintain emergency diesel generators is guaranteeing the permanent availability and back-up power supply of nearly 60 nuclear units, attesting to the technical experience of our teams working alongside EDF. A large number of projects have also been undertaken to renovate or improve existing assets, such as the upgrade of the Areva TA electrical test bench in Cadarache, designed to assess naval propulsion nuclear reactors, and the refit of sensitive rotating machines, like pumps and turbines, in a dozen power plants. Decommissioning of contaminated facilities also continued throughout the year, for example at the CEA's Marcoule storage area in the Gard.



DF Energy, United Kingdom

In Manchester, the new gas-fired Carrington power station will be equipped with generators and a powerful lighting system with 2,500 fixtures, particularly suited to hazardous environments.

#### # Olivier Domergue, SPIE Nucléaire –

The outlook for our nuclear power business is good not only in the medium term, but also over the longer term if we think about the upcoming deployment of next-generation EPR technology in France between now and 2030.



### THREE QUESTIONS FOR BRICE FARINEAU

*Director of the Paluel Nuclear Power Station (France), EDF*

#### WHAT ARE THE MAIN CHALLENGES YOU FACE IN YOUR BUSINESS?

With its four 1,300 MW reactors, the Paluel plant produces around 7% to 9% of France's electricity every year. That in itself is a pretty big challenge! But Paluel was also the first of the 1,300 MW series power plants, whose four reactors came on stream between 1985 and 1986. So we're celebrating its 30 years in service, which is why we have been the first to deploy the Grand Carénage maintenance and refit programme, which will be gradually implemented at every nuclear power plant in France as part of their ten-year inspections. The programme is designed to further enhance the security performance of the nuclear units and make it possible to think about extending the reactors' operational life beyond 40 years. In the case of Paluel, it includes more than 100 upgrades, of which more than half have never been performed in a French nuclear power plant.

While we're proud of being pioneers, that doesn't lessen the challenge we have to meet. Over the 2015-2019 period, each of the station's generating units will be shut down for around 120 days, so that they can be refitted and upgraded to meet the latest security standards. This will entail more than 20,000 tasks to be performed on each unit by EDF employees and contractors, such as SPIE Nucléaire. With up to 4,000 people working on-site at the same time, we expect the Paluel power station to be as busy as the EPR construction project in Flamanville. All of these aspects demand heightened attention to safety and security, as well as an extensive managerial presence on the ground.

#### TO MEET THESE CHALLENGES, WHAT DO YOU EXPECT FROM A SERVICES CONTRACTOR LIKE SPIE?

Clearly, our service partners are key performance enablers for us. First of all, I expect the SPIE Nucléaire teams to share our challenges and our values. The Paluel power station has defined ten standards concerning its safety and security rules. Everyone working on-site, whether for EDF or

a contractor, must embrace these standards and ensure strict compliance.

I also expect SPIE employees to act as professionals, fully engaged and totally committed to the quality of their work, so that they get it right the first time.

This requires extensive preparation, working alongside their EDF customers. Lastly, I feel that SPIE managers absolutely have to be present on-site to ensure that the projects come in on-time and on-budget, and to respond effectively to incidental events.

#### HOW DO YOU FEEL ABOUT THE SERVICES DELIVERED BY SPIE TEAMS?

SPIE Nucléaire is a long-time EDF partner.

That's why we signed a cooperation agreement, to leverage all of the mutual benefits. Back in 2014, to put everything in place for a successful Grand Carénage refit, SPIE Nucléaire assigned Paluel a single contact person, which was an excellent idea. This person worked closely with us throughout the preparatory phase, and today we're reaping the benefits of our collaboration as mutually responsible partners. More generally, SPIE's services at the Paluel plant have been assessed positively. So I expect this to continue, with the goal of driving continuous improvement and guaranteeing nuclear power production for our customers that is safe, competitive and environmentally friendly.



EDF UTO, France

To verify the security of its nuclear pressure equipment, EDF UTO asked SPIE to design a set of hydraulic tests.





## Nuclear fuel remote handling systems

Areva Marcoule, France

ON THE BANKS OF THE RHÔNE RIVER, AT ONE OF FRANCE'S OLDEST NUCLEAR FACILITIES

where obsolete nuclear power plant installations are decommissioned, SPIE is going to maintain 600 in-service remote manipulator arms. Designed for work in sealed, radioactive environments to support decontamination and

dismantling operations, these articulated "master-slave" arms are used by operators to remotely perform manual tasks in direct sight (i.e. they are not programmable). The assignment leverages all of our expertise in safety and operating security, as well as our experience demonstrated at the La Hague nuclear fuel reprocessing plant in Northern France.



## LNG production

Queensland Gas Company (QGC), Australia

Tasked with maintaining and optimizing the controls and communications network for the QGC plant, SPIE is participating in the world's first project to turn gas from coal seams into liquefied natural gas.



## SPIE to supervise all of Total Gabon's on-shore and off-shore installations

Total, Gabon

THE FOURTH LARGEST OIL PRODUCING COUNTRY IN SUB-SAHARAN AFRICA,

Gabon is relying on Total to develop its estimated two billion boe in oil and gas reserves and extend the life of its 30 or so producing fields. A Total partner since 2005, SPIE has been chosen to supervise the construction and start-up of all of the oil company's on-shore and off-shore operations with services ranging from securing wells to supplying material, tools and equipment. One of the new contract's challenges is to improve the flexibility of work crews to support the large number of projects under way, so as to pool resources and optimize costs. Another is to focus on hiring Gabonese supervisors and locally transferring skills via effective training programmes.



## Overhead power lines

Scottish Power Energy Networks, United Kingdom

TO IMPROVE POWER DISTRIBUTION IN SCOTLAND, SPIE services range from high

and extra-high voltage rebuilds to customer connections and emergency response works.





## Grand Carénage refit programme

EDF, France

FRENCH NATIONAL POWER UTILITY EDF HAS CALLED ON SPIE'S MULTI-TECHNICAL CAPABILITIES TO EXTEND THE SERVICE LIFE OF THE CHINON NUCLEAR POWER PLANT, which is located on the banks of the Loire River and generates some 25 billion KWh of electricity a year. Launched as part of the utility's Grand Carénage refit programme, the Chinon project involves replacing pneumatic level control in the high-pressure heaters and superheater separators with a more dependable digital system. SPIE will initially engineer and install digital systems on 20 of the station's 32 units, as part of a project scheduled to last until 2025.

## Refining & Petrochemicals

Saudi Aramco & Sumitomo Chemical, Saudi Arabia

North of Jeddah, the expansion of the Petro Rabigh plant is leveraging all of SPIE's skills in managing a complex industrial project. Under the contract, we will handle the commissioning and start-up of the naphtha, aromatics and cumene/phenol units at the giant refining and petrochemicals facility, which processes around 400,000 barrels of crude oil per day.



SPIE has partnered  
Airbus for more  
than 15 years.  
Find out more.



TRY

INDU  
SERVICES

The backbone of the European economy, manufacturing accounts for 80% of EU exports and private-sector R&D spending, although the European Commission estimates that the recent recession has reduced its share of GDP by 15%.



#### Industrial challenges

##### ENERGY USE

**26%**

OF FINAL ENERGY IN EUROPE IS USED IN THE INDUSTRIAL SECTOR ACCORDING TO THE EEFIG, ESPECIALLY IN THE CHEMICAL AND PETROCHEMICAL INDUSTRIES.

##### ENERGY EFFICIENCY

**740<sub>Mt</sub>**

IS THE TARGET FOR THE AGGREGATE ANNUAL REDUCTION IN GREENHOUSE GAS EMISSIONS SET BY THE EUROPEAN COMMISSION FOR 2020.

##### ECO-DESIGN

**426<sub>TWh/year</sub>**

SAVED IN EUROPE BY 2020, ACCORDING TO THE TARGET SET IN THE EU DIRECTIVE ON THE ECO-DESIGN OF ENERGY-RELATED PRODUCTS.

## INCREASE THE RELIABILITY, FLEXIBILITY AND PERFORMANCE OF INDUSTRIAL FACILITIES WHILE PRESERVING THE ENVIRONMENT.

**A**ctive right across the industrial sector, SPIE delivers a full range of skills and capabilities focused on operating efficiency, energy savings and superior technical and environmental performance. This commitment provides an effective response to the world's most complex, innovative projects, through an approach carefully aligned with each industry's issues and challenges.

To strengthen its manufacturing base, the European Union is primarily counting on innovation, a source of growth in a low-carbon economy. A large number of programmes are therefore being developed around the energy transition and digital technologies, such as the

.....  
**# Hans Loest, SPIE GmbH** – By taking charge of planning, building and operating new technologies, we can provide our customers with guaranteed savings over a period of many years.  
.....



Fujitsu, Germany

At its ultra-modern factory in Augsburg, Fujitsu asked SPIE to design, install and maintain for ten years a highly efficient combined heat and power unit that will secure supply, improve energy efficiency and facilitate factory operation.

European Energy Service Initiative (EESI) in the areas of energy efficiency and energy savings. In 2015, for example, SPIE was awarded a new contract in Germany, at the Fujitsu factory in Augsburg, one of the IT industry's most innovative production centres in Europe. The 800-kWh combined heat and power plant will save more than €2 million in costs over the life of the contract and reduce carbon emissions by around 1,200 tonnes a year.

Sustainable innovation is also driven by the disruptive technologies arising from the growing digitization of utilities and processes. For example, to improve its industrial maintenance services, which represent hundreds of hours per person per year, SPIE worked with Toulouse-based start-up UBleam to develop a solution using a new type of 3D tag that can be printed or embossed on any surface. The augmented reality interface provides real-time access to data on every installation, from technical documentation and the related procedures to service logs.

### ENSURING THE QUALITY AND RELIABILITY OF INSTALLATIONS

To address the complexity of certain installations, and more generally the critical issues of security and reliability, SPIE delivers leading edge expertise in each industry, thereby helping to enhance Europe's competitiveness in the global marketplace. In Belgium, for example, SPIE led an innovative instrumentation and control project for the ►

.....  
**# Guillaume Roubichou, SPIE Sud-Ouest** – With UBleam, we are providing solutions for the connected, digital factory of the future, offering greater responsiveness and efficiency.  
.....



# INDUSTRY SERVICES

## GOAL

**SUPPORT MANUFACTURERS RIGHT ACROSS THE VALUE CHAIN** IMPROVING PERFORMANCE, REDUCING COSTS, AND FACILITATING COMPETITIVE INNOVATION.

## OBJECTIVES

*IMPROVE THE QUALITY OF PRODUCTION FACILITIES*

*SUPPORT THE DIGITIZATION OF MANUFACTURING*

*SHRINK THE ENVIRONMENTAL FOOTPRINT*

## AREAS OF EXPERTISE

### INDUSTRIAL BUILDINGS

BUILDING MANAGEMENT SYSTEMS  
COMMUNICATION AND OTHER NETWORKS  
SAFETY, SECURITY AND COMPLIANCE WITH STANDARDS  
INDUSTRIAL FACILITY MANAGEMENT

### ENERGY EFFICIENCY

ENERGY EXCHANGE, RECOVERY AND STORAGE  
COGENERATION AND RENEWABLE ENERGIES  
ENERGY PERFORMANCE OPTIMIZATION FOR UTILITIES AND PROCESSES

### ELECTROMECHANICAL INSTALLATIONS

ELECTRICAL: SUB-STATIONS, CABINETS, PANELS, ETC.  
HEATING, VENTILATION AND AIR CONDITIONING  
MECHANICAL: PIPING, FABRICATION, ROTATING MACHINES, ETC.

### INDUSTRIAL PROCESSES AND AUTOMATION

INDUSTRIAL ELECTRICAL SYSTEMS  
INDUSTRIAL INFORMATION SYSTEMS  
ROBOTICS  
HYDRAULICS AND PNEUMATICS  
CONTROL AND SUPERVISION



SPIE is revolutionizing industrial maintenance with augmented reality solutions. Read the press release.

- Tihange nuclear power plant, by reconditioning a nuclear fuel fabrication facility for export to China. Also, China-based Shuanghui Group commissioned SPIE to build two robotic blister-pack filling lines in France for its new processed pork plant in Zhengzhou.

Through its European network of local operations, SPIE also offers manufacturers the business-critical responsiveness and agility they need. In the Netherlands, for example, Tata Steel asked us to transform a charging machine for one of the IJmuiden coke ovens in record time. In Brest, DCNS Group called on us to repair and upgrade installations in three of France's four nuclear submarines, in a project that involved 120 employees over the year. While consistently demonstrating our technical proficiency, we also address major industrial safety issues, from compliance upgrades to equipment inspections on sensitive sites.

### SUPPORTING THE INDUSTRIAL TRANSITION

After winning Germany's prestigious Contracting Award 2014 from energy efficiency association AGFW, SPIE continued to develop innovative energy services during the year. In France, we helped to build the world's first positive energy whey processing plant for Savoie Lactée, equipping it with a solution based on a single 800-kW boiler, instead of the four that would have theoretically been required, and a system that recovers and stores a maximum amount of heat produced by a cogenerator. In the utilities segment, Thales Alenia Space Belgium is now equipped with an ultra-modern clean room that delivers maximum energy savings and supports the company's leadership in onboard electronics for satellites and launchers. In the process industry segment, where we offer advanced expertise in robotics and industrial automation, the European leader in electrical insulation SEG Diélectriques delivers never before reached levels of quality thanks to its new production line built entirely by one of our regional subsidiaries.

SPIE also intends to facilitate industrial ecology projects, inspired by the largely closed-loop cycling of natural ecosystems. In the area of waste recovery and reuse, for example, our Netherlands-based Numac subsidiary, acquired in 2015, has initiated

**# Thomas Fetten, Getronics –**  
Companies are counting on digital to make them more agile, improve their operating efficiency, drive innovation and enhance their customer focus.



a circular economy process alongside AEB, a company in Amsterdam that recovers reusable metals from incinerated waste. Thanks to Numac, availability at the AEB incinerators has increased by 7.6% and the tonnage of waste processed is up 47% to 1,400 tonnes per day.

### A LEADER IN INDUSTRIAL FACILITY MANAGEMENT

Operating and maintaining production centres, while optimizing their long-term performance, is a process that requires close, partnership-like relations with each manufacturer, such as Siemens in Germany, where a thousand SPIE employees are working on nearly 60 sites, or Rolls-Royce in the United Kingdom. In recognition of this commitment, we won a Manufacturing Excellence Award 2015, presented in Warsaw by Europa Property based on the votes of executives from some of the world's leading manufacturers.

Thanks to our European footprint, we are supporting a growing number of manufacturers in their own multi-site expansion, by delivering comprehensive management solutions for buildings and mission-critical installations. This is the case at Airbus, where for more than 15 years we have been providing services ranging from the maintenance of innovative buildings, such as the Bouguenais "factory of the future" where the A350 aircraft is built, to the fitting out of assembly lines and the upgrading of data centres. In 2015, we took charge of the maintenance and upkeep of five new Airbus facilities in northern Germany, comprising a total of 370 buildings and hangars. In addition to maintaining equipment and systems, these services are supporting Airbus's operational excellence in its high-tech facilities, by delivering responsive, around-the-clock service, 365 days a year.

# Bas Hemmen, AEB – SPIE helps us in fulfilling our mission, which is to consider waste as a recoverable resource and to work towards a more sustainable world.



International agricultural cooperative Limagrain chooses SPIE to upgrade its IT and communications infrastructure. Read the press release.



**Cargill, Switzerland**

In Lucens, in the canton of Vaud, SPIE helped to expand the Protector animal nutrition plant and increase its capacity, from the electrical installations and automated systems to the fibre optic network.



**DSM Sinochem Pharmaceuticals (DSP), Netherlands**

At its Delft plant, the world's most advanced facility for producing 7-ADCA for use in antibiotics, DSP renewed and extended its maintenance contract with SPIE, based on a jointly defined improvement plan for the installations.



## Multi-technical expertise

**Monument Chemical, Belgium**

**A LEADER IN THE PRODUCTION OF SPECIALITY HYDROCARBONS.** Monument Chemical has been relying on SPIE to maintain installations at its Kallo plant near Antwerp for more than ten years. This experience proved invaluable

when the time came to connect a 45-metre high distillation column to increase its output, requiring capabilities in electrical contracting, instrumentation, piping and mechanical engineering.

## Upgrading electrical and technical installations

**Mars Chocolate, France**

**RANKED SECOND IN THE 2015 GREAT PLACES TO WORK IN FRANCE SURVEY.** Mars France pays special attention to maintaining the superior technical and environmental performance of its production plant in the Bas-Rhin *département*. That's why it awarded SPIE a contract to renovate the chocolate plant's electrical and technical installations, from the power and instrumentation systems to the communications networks. Following a four-month engineering and preparation phase, the challenge was to successfully complete the switchover to the new installation in just three days, a task that involved 35 employees.





## Technical maintenance

Siemens, Germany

**IN CHARGE OF TECHNICAL MAINTENANCE FOR THE ENTIRE SIEMENS PRODUCTION PLANT IN KREFELD,** north of Düsseldorf, SPIE demonstrated its ability to keep pace with the facility's output which has increased

significantly since 1 January 2016. In keeping the buildings, production facilities and machinery in perfect running order, SPIE is delivering all the flexibility the fast growing business needs.



## Energy security

Nordmark Arzneimittel GmbH & Co. KG, Germany

Nordmark Arzneimittel, a manufacturer of biologically-sourced active ingredients, has entrusted SPIE with securing the energy supply at its plant near Hamburg.



## HVAC engineering

Savoie Lactée, France

In the new Savoie Lactée plant built for the Beaufort cheese producers association in Savoy, SPIE's eco-innovative power generation and HVAC solution is delivering benefits to the entire Beaufort cheese industry.



## Waste recovery and reuse

Afval Energie Bedrijf (AEB), Netherlands

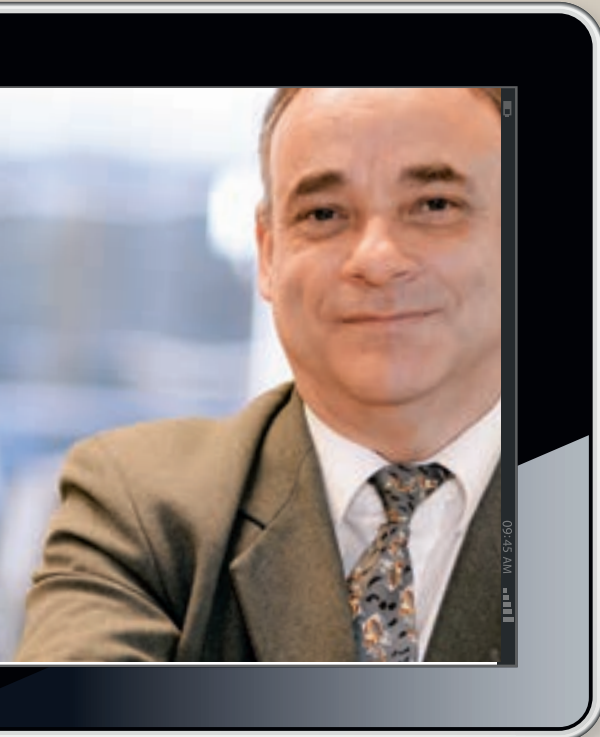
**RANKED AMONG THE EUROPEAN UNION'S MOST ENVIRONMENTALLY CONSCIOUS CITIES.**

Amsterdam has invested heavily in smart waste recycling schemes. For AEB, which produces enough electricity for 300,000 households and hot water for around 10,000 homes by recovering and incinerating the city's waste, the solution requires superior

industrial maintenance services across the life cycle of its operations. The contribution of our local subsidiary, Numac, considerably improved incinerator uptime and increased the tonnage of waste processed by nearly 50%. The performance was led by a continuous preventive maintenance plan, aligned with circular economy precepts.

# A WORLD OF RESPONSIBILITY

SPIE actively supports employee initiatives to make our world a better place to live, by transforming companies, reducing environmental footprints and building a socially inclusive economy.



**Digitizing business:** unified communications expert Joseline Trachsel shares her vision of the digital transformation of companies in Switzerland.

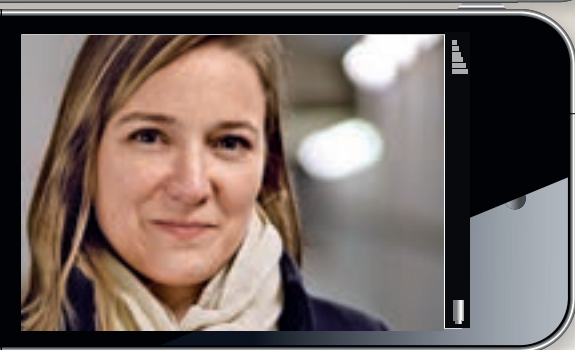
**Business ethics:** Daniel Mercier, our Infrastructure Division Manager in Belgium, puts our shared commitment into perspective.

**Safety management:** as someone well acquainted with the progress made in Germany, Lars Buchwald explains how he achieved a “zero accident” performance at an ExxonMobil facility.

**COP21 climate conference:** while attending a meeting of eco-inventors from around the world, Florent Jeanson decided to nurture a start-up spirit at SPIE.

**Gender parity:** in charge of a major project in the Paris area, Marion Aumand advocates a certain idea of equality that she is proud to practice in her job.

**Humanitarian outreach:** Nepali electrician Lalit Hamal talks about his assignment after the terrible earthquake that devastated his country.



*Top: Daniel Mercier, Infrastructure Division Manager, SPIE Belgium*

*Below: Marion Sire Aumand, Head of Activity, SPIE Île-de-France Nord-Ouest*





*Left:*  
**Lalit Hamal**,  
Electrician,  
SPIE Oil & Gas  
Services

*Below:*  
**Lars Buchwald**,  
Project Management  
Engineer,  
SPIE GmbH



*Top:* **Joseline Trachsel**, Manager ICT Consulting & Engineering, SPIE ICS

*Below:* **Florent Jeanson**, Business Development Manager, Nuclear Maintenance, Facility Management and Decommissioning, SPIE Nucléaire





# WORKING TOGETHER TO INSTIL BEST PRACTICES

In its corporate social responsibility (CSR) process, SPIE takes an aligned, consistent approach to human resources development, environmental stewardship and community outreach. This long-standing commitment is backed by deep synergies with stakeholders and the expertise of independent organizations like EcoVadis and Vigeo.

**L**ed by the General Management Committee, the corporate social responsibility governance system comprises several bodies:

- The Sustainable Development Department, which coordinates the CSR process across the organization.
- The CSR Committee comprised of representatives from the subsidiaries, which recommends CSR policies to the General Management Committee and supervises their implementation.
- The CSR Commission of the European Works Council, which gives employee representatives a voice in the process.
- The Responsible Purchasing Committee, which expresses our commitments to suppliers and contractors.

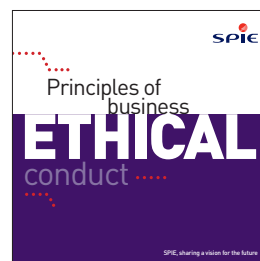
## A HOLISTIC COMMITMENT, BUILT ON STRICT STANDARDS

Deeply committed to respecting human rights, SPIE has pledged to uphold the United Nations Global Compact's ten environmental, labour and ethical principles.

We pay careful attention to employee relations and working conditions, and are proud of our long tradition of putting safety first. We also support diversity and equal opportunity, as well as professional growth, in particular through training, job transfers and promoting from within. On the environmental side, we are steadily reducing our carbon emissions in a variety of ways, from introducing hybrid and electric vehicles in our corporate fleet to helping customers recycle their electric and electronic waste. To ensure ethical behaviour, all of our employees have pledged to apply our ethical business practices and can report any infringement of the rules to the Ethics Committee.

In regards to consumer and user issues, a quality process, certified by independent organizations, has been put into place.

Lastly, to reaffirm our commitment to good corporate citizenship, we are nurturing long-term partnerships with schools, supporting non-profit associations and participating in local economic development.



*Handbook presenting SPIE's eight commitments in relation to business ethics.*



# GLOBAL COMPACT: A WORLDWIDE COMMITMENT

In 2003, SPIE pledged to support the United Nations Global Compact, which invites companies to embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labour standards, the environment and anti-corruption.

	<i>Principles</i>	<i>Examples of application at SPIE</i>
<b>HUMAN RIGHTS</b>	<ul style="list-style-type: none"> <li>• Businesses should support and respect the protection of internationally proclaimed human rights, within their sphere of influence; and</li> <li>• make sure they are not complicit in human rights abuses.</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment of the OHSAS 18001 (or equivalent) occupational health and safety management system.</li> <li>• International business travel safety guide.</li> <li>• National agreements in Africa and the Middle East to employ locals.</li> <li>• Stress management agreements.</li> <li>• Supplier assessment studies with EcoVadis.</li> </ul>
<b>LABOUR</b>	<ul style="list-style-type: none"> <li>• Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;</li> <li>• the elimination of discrimination in respect of employment and occupation;</li> <li>• the elimination of all forms of forced and compulsory labour; and</li> <li>• the effective abolition of child labour.</li> </ul>	<ul style="list-style-type: none"> <li>• A forum for social dialogue within the European Works Council.</li> <li>• CSR committee responsible for such initiatives as:               <ul style="list-style-type: none"> <li>- improving employment opportunities for the disabled;</li> <li>- increasing gender parity;</li> <li>- providing work opportunities for the young as well as for older employees;</li> <li>- promoting diversity.</li> </ul> </li> </ul>
<b>ENVIRONMENT</b>	<ul style="list-style-type: none"> <li>• Business should support a precautionary approach to environmental challenges;</li> <li>• undertake initiatives to promote greater environmental responsibility; and</li> <li>• encourage the development and diffusion of environmentally friendly technologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment of the ISO 14001 environmental standard.</li> <li>• Participation in the Galerie des Solutions show during COP21.</li> <li>• Extension of the carbon footprint analysis programme.</li> <li>• Environmentally friendly management of the corporate vehicle fleet and eco-driving courses for employees.</li> <li>• Deployment of electric vehicles and hybrids within the corporate vehicle fleet.</li> <li>• Environmentally friendly digitization and reprinting of corporate publications.</li> <li>• Environmental criteria used to assess suppliers.</li> <li>• Special training programmes at the SPIE Technology Institute.</li> </ul>
<b>ANTI-CORRUPTION</b>	<ul style="list-style-type: none"> <li>• Businesses should work against corruption in all its forms, including extortion and bribery.</li> </ul>	<ul style="list-style-type: none"> <li>• Ethics charter, handbook on ethical business practices.</li> <li>• Ethics Committee.</li> <li>• Services Agreement Procedure.</li> <li>• Training in business ethics, with a special module on the Bribery Act in the United Kingdom.</li> <li>• Supplier assessment studies with EcoVadis.</li> </ul>



More about  
the Global Compact  
[www.unglobalcompact.org](http://www.unglobalcompact.org)



INSPIRATION

TRANSFORMATION



Switzerland  
**SPIE ICS**

*Inspired by*  
**JOSELINE TRACHSEL**  
*Manager ICT Consulting & Engineering*

Digital transformation specialist Joseline Trachsel wants all her customers to enjoy the benefits of unified communications, business mobility, smartphone management and other emerging digital technologies.

# TRANSFORMATION



Watch the interview.





**J**oseline Trachsel could talk for hours about the deployment of Lync, a unified communication platform that Microsoft has upgraded under the name of Skype for Business. That's because things are changing very quickly in this digital world, where organizations are constantly being upended and reconfigured. What's more, she will soon complete the deployment of a similar solution for some 600 users in a company in the canton of Fribourg, who are impatient to try out new practices. She knows that the digital transformation is real, just as real as melting glaciers.

#### **SUPPORTING THE EMERGENCE OF NEW BUSINESS PRACTICES**

For many years now, SPIE has enthusiastically embraced this change dynamic, not only in Switzerland but everywhere around the world. "Companies are having to deal with a major shift to digitization, as well as the move to virtual workplaces. Our mission is to offer customers the possibility of upgrading to these technologies, while enabling them to refocus on their core competency, as a hospital, school or government agency." Customers have little choice but to digitize, but there are risks if they grope around for the best way forward, pushed by the expectations of millennials and pressure from manufacturers.

This is where SPIE can bring all its skills to bear, "first to help them make the technological leap, and then to guarantee that they get the support they need once the products or solutions are up and running." Because the digital transition involves a lot more than just IT applications. It also requires flawless support to help organizations integrate new user practices and behaviours into the very heart of their business models.

For Joseline, the whole of society is concerned. "I think that business models are changing and are going to change even more radically in the years ahead". Some countries are moving faster than others, according to their culture. Switzerland remains cautious, but the general trend is inevitable. Joseline feels that this is in fact an advantage for SPIE, which enjoys a convergence of expertise from each of its units. "There are still great things to develop and synergies to build," she says mischievously, as if the adventure has only just begun.

#### ***Open Digital: a challenge for future digital engineers***

A total of 38 students in the International Business Engineering masters programme at the Télécom École de Management (TEM) responded to SPIE ICS' challenge to create innovative services in four areas: Retail, the Connected Traveller, Public Services and the "Hotel of the Future". Mentored by SPIE managers for two months, they produced a benchmark and an executive summary of the recommended solution. In the end, the top prize was taken by the "Hotel of the Future team", with a particularly innovative "e-customer-care" and "e-concierge" project.



Belgium  
**SPIE Belgium**

*Inspired by*  
**DANIEL MERCIER**  
*Infrastructure Division Manager*



Watch the interview.



# ETHICS

After starting as a project manager, Daniel Mercier moved up the ranks at SPIE Belgium to become Infrastructure Division Manager. Along the way, he has formed some strong opinions about business ethics.



**W**hen you ask him about his interest in business ethics, Daniel Mercier smiles and notes that most people would agree that honesty is the best policy. But the problem is that companies are faced with aggressive competition, which means that contracts are sometimes awarded in ways that are blatantly unfair. To resist these practices, you need strict rules based on a zero tolerance policy.

#### **EMBEDDED IN OUR SUSTAINABLE TRANSFORMATION**

Like other companies, SPIE has addressed this challenge holistically, by gradually deploying a panoply of measures “to put our ethical house in order,” says Daniel. An Ethics Committee coordinates all of the legal, business and financial aspects, supported by information media like the handbook on ethical business practices and a wide array of control procedures. This represents an uncompromising commitment to fighting against corruption, “which is especially important now that SPIE has gone public and has to be even more careful about the consequences of its actions and its business operations.”

But is ethical conduct just about our business practices? Actually, he explains, it is a factor driving continuous change in the organization. Using an electric car, for example, is also a way to demonstrate an ethical commitment to the environment. The same thing goes for the measures taken to attenuate stress and improve employee well-being. There’s also the protection of private data, a hot topic in the digital society. In the end, the degree of ethical behaviour becomes a marker of sustainable improvement across the organization. “Through their contacts with us, customers quickly realize that our employees feel good at SPIE.”

Nevertheless, Daniel recognizes that there will always be shady areas, which is why he wants to embed this commitment deep in our corporate culture. “During the induction process, somebody presents our ethical vision to new hires, who are asked to fill out a questionnaire or participate in a role-playing game,” he explains. This concerns everyone, from the boardroom to the shopfloor. “A lot of meetings are organized to enable people to talk about these issues and contact the Ethics Committee if they have any doubts,” he notes with satisfaction. Ethical practices are not only about doing business, they are an integral part of an ambitious continuous improvement process for the entire organization.

### ***SPIE’s eight rules of ethical business conduct***

Our ethical principles handbook defines eight fundamental rules of business: compliance with host country legislation; fair and accurate invoicing; confidentiality of information; prohibition of any agreements capable of distorting or restricting competition; compliance with labour legislation; rejection of all forms of corruption, including bribes, kickbacks and gifts given or received; respect for SPIE’s property and intangible assets; and prevention of conflicts of interest.



# DEPLOYING NEW BUSINESS MODELS

To address the changes now under way, SPIE is counting not only on its digital transformation, but also on the development of an agile, collaborative culture leveraging all the strengths of its networked organization. One example of this process is the participation of young SPIE employees in the international POC21\* innovation camp outside Paris, which brought together eco-inventors to share the innovative energy-related technologies that will shape the world of tomorrow.

**D**igitization is impacting every aspect of our business, in such areas as digital platforms, augmented reality and co-innovation with partners and suppliers.

In 2015, for example, the SPIE Talents Appraisal & Recruitment Solution (S.T.A.R.S.) was deployed to enable job applicants and employees to actively manage their career paths with the Human Resources Department. The upgrade focuses on encouraging online interaction, a feature that is increasingly found in local applications as well. In the Netherlands, for example, “Young SPIE” is facilitating knowledge sharing and the organization of multi-year get-togethers to support young employees.

At the same time, SPIE continued to explore the digital technologies of tomorrow, like the high-speed Li-Fi wireless communication networks that use light instead of radio frequency waves, or the immersive video conferencing systems that create the impression that meeting participants are actually in the room. This process

is being supported by our stepped-up cooperation with highly innovative partner companies, as illustrated during the year by the first Supplier Innovation Challenge organized by SPIE Sud-Est.

## THINKING OUTSIDE THE BOX

Spurred by digital disruption and globalization, the workplace environment is changing very quickly. SPIE is responding in a variety of ways, for example by developing a proactive skills management process focused on cross-business mobility, the construction of personalized career paths and the upgrading of job descriptions as professions evolve. SPIE ICS has also set up a new Innovation and Digital Transformation Department, tasked in particular with creating more motivating workspaces by digitizing the user environment.

Another priority is to attract a new generation of entrepreneurs, capable of addressing our future challenges with a fresh vision. With this in mind, the second “Business Case in Paris” exercise brought together 24 Dutch and German students in the hopes that the most talented among them would join the Company.

\* *Proof of concept.*





Participants were asked to imagine responses to SPIE's future challenges during their Thalys train trip to Paris, with the only stipulation being that they "think outside the box." Their solutions were then presented to a panel of SPIE executives.

#### A COLLABORATIVE, OPEN ENTERPRISE

SPIE continued to globalize in 2015, broadening and deepening synergies across the organization with a focus on transferring best practices and developing joint offerings. As part of this process, SPIE's commitment to providing opportunities for young French graduates to

work abroad under France's government-sponsored Volunteering for International Experience scheme (VIE) was expanded with the introduction of the International Exchange Programme. Previously limited to our global oil and gas markets, the new programme offers jobs in all of our European subsidiaries, in both support and operating positions. More generally, employees were encouraged to work outside their home countries, even on short assignments, in a commitment to improving skills sharing and cross-fertilization among our country organizations.



The second "**Business Case in Paris**" exercise. 24 Dutch and German students worked on a business case during their Thalys train trip to Paris and presented their conclusions to a panel of SPIE executives.



Watch the video.

Dedicated to our young Dutch employees, the **Young SPIE** platform was created by SPIE Nederland to facilitate knowledge sharing and the organization of get-togethers.



INSPIRATION

SAFETY



Germany  
**SPIE GmbH**

*Inspired by*  
**LARS BUCHWALD**  
*Project Management Engineer*

After successfully renovating the ExxonMobil head office, Lars Buchwald is a happy man. Thanks to the commitment of his teams, the two-year project, which involved up to one hundred SPIE employees a day, was entirely accident-free.

# SAFETY



Watch the interview.



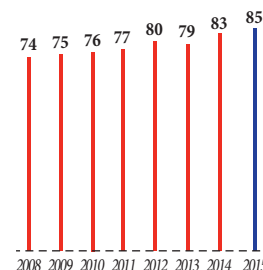
**W**hen you talk to Lars Buchwald about safety, he first wants to explain how things have changed since his company joined SPIE. Now there's a broad awareness of the company's responsibility. "Legal regulations, strategic objectives, special programmes and support measures, as well as the qualification and motivation of managers and employees, have all led to a positive change," says Lars. To get management involved, a two-day "occupational safety for managers" course was created in 2015. "I think leadership and cultural change are the two main factors for continuous improvement regarding safety," he notes.

#### ACHIEVING ACCIDENT-FREE EXCELLENCE

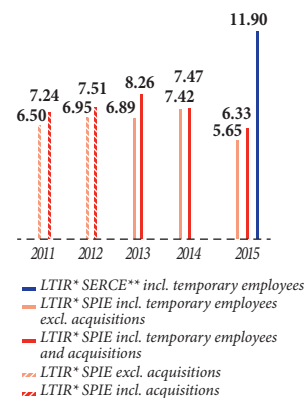
As an expert construction engineer, Lars is thoroughly familiar with this issue and even won a "Safety Award" as project leader on the ExxonMobil renovation. "In April 2012, we initiated the process to earn SCC\* certification, the first step to increasing safety awareness." The customer then asked him to refurbish all of the fire-protection infrastructure in their Hanover offices, a 40,000-sq.m, in-use building, where every task had to be precisely determined. The 29-month long project was successfully completed without a single accident, including among subcontractor and customer staff. "Every day, 'Tool-Box Talks' were organized with all the participants," he remembers. Observing the different work tasks also enabled him to spot weaknesses, correct them and define new standard operating procedures. However, Lars feels that know-how is not enough. "Excellent performance – zero accidents – can be achieved only if everyone sees safety as his or her own personal task," he says. This means that assessing risks and analysing workplace safety also have to take into account employee awareness of unsafe conditions. "We have to develop a culture where everyone takes care of each other," he adds. This can be done by creating Safety Champions and diligently following the whole risk assessment chain, including last-minute reviews, "to ensure that work doesn't begin until the situation is entirely safe and secure." You can never be too careful.

\* The Safety Checklist for Contractors (SCC) is a safety management system based on safety, health and environmental protection standards.

#### EMPLOYEES WORKING IN UNITS WITH HEALTH AND SAFETY MANAGEMENT SYSTEMS CERTIFIED TO OHSAS 18001/VCA/MASE as a % of total workforce



#### LOST-TIME INJURY RATE (LTIR)



\* LTIR: Number of accidents with lost time per million hours worked.

\*\* SERCE: France's association of electrical and environmental engineering companies.



Health and Safety.  
Watch the video.





INSPIRATION

INNOVATION



France

**SPIE Nucléaire**

*Inspired by*  
**FLORENT JEANSON**

*Business Development Manager,  
Nuclear Maintenance, Facility  
Management and Decommissioning*

# INNOVATION

After attending POC21, an energy innovation camp organized in the run-up to the COP21 climate conference, Florent Jeanson analyses the event's impact on SPIE and its involvement in the green economy.



Watch the interview.



**C**limate change is ushering in a new era of innovation in technical services, in a bid to address the ambitious challenge of radically transforming project management by capitalizing on the wide array of initiatives emerging from the energy and digital transitions. “You have to stay connected with all these changes,” believes Florent Jeanson, as do the other young SPIE employees who came from Germany, Belgium, the Netherlands and the United Kingdom to attend the POC21\* innovation camp near Paris. A twist on the COP21 conference, this unique event brought together eco-inventors from around the world.

#### MAKING SPIE A LEADER IN OPEN INNOVATION

For makers devoted to open-source solutions and cross-disciplinary collaboration, it's time to come out of the closet. “There were a dozen projects related to sustainable lifestyle technologies, with new modes of collaboration, development and innovation, all of which were applicable to contracting,” comments Florent. Is SPIE ready? At any rate, the management team listened attentively to Florent's detailed four-part report, intended to step up deployment of these practices.

Because aside from the novel technologies, Florent noted the constant interaction among designers, inventors, financiers and marketers. “Some projects could be interesting for SPIE, like the shower loop with an integrated water recycling and filtering system, or the portable solar-powered generator. But what was really interesting was the entire ecosystem developed around the projects – how new technologies are being used for collaborative working, the 3D printers, the relationship platforms, etc.” he explains, confident in SPIE's agility and ability to embrace the new.

So it seems that everything is in place to get started. “There are new concepts emerging, like the collaborative economy, everything that has to do with fab labs”, and the development of experimental activities to create, develop and innovate as a group.” But where to begin? You just have to take the open source approach, i.e. create a platform to redeploy innovation and best practices, encourage interaction with start-ups, etc. All the workshop needs is its participants.

\* Proof of concept.

\*\* A fab lab, short for fabrication laboratory, is a shared, open workshop capable of making things digitally.



#### ***Young SPIE: a collaborative platform focused on urban innovation***

Designed to facilitate discussion and knowledge sharing among young SPIE Nederland employees, the Young SPIE platform is much more than a simple means of communication. The aim of the first meeting, held in Rotterdam, was to prepare the city's future and explore ways that SPIE can contribute to it in such areas as smart manufacturing, the Internet of Things and the safety of port facilities. It also enables young people to work on their innovations collaboratively, by organizing several get-togethers a year.



*The eight SPIE employees attending the POC21 camp. From left to right: Florent Jeanson (SPIE Nucléaire), Guillaume Alcaraz (SPIE Oil & Gas Services), Frédéric Herin (SPIE Sud-Est), Mario Brusselmans (SPIE Belgium), Boudewijn Arts (SPIE Nederland), Florian Leunig (SPIE GmbH), Zahra Essi (SPIE ICS) and Sanket Mehta (SPIE UK).*



# FACILITATING THE EMERGENCE OF A CARBON-FREE ECONOMY

As a stakeholder in the energy transition, SPIE reaffirmed its commitment to the green economy in 2015 by participating in the Galerie des Solutions show organized during the COP21 energy and climate summit in Paris. The event offered an opportunity to present our vision and latest innovative solutions for supporting the transition to a post-carbon society.



One Planet.  
Watch the video.

**M**ore than 70% of our employees now work in a unit with an environmental management system certified to ISO 14001 or equivalent standards, which are also being gradually rolled out in the newly acquired companies. Environmental issues, such as energy efficiency, carbon footprints and waste recycling, are now fully integrated across our value chain, as we constantly strive to improve our environmental performance by getting every employee involved in the process.

In the Netherlands, for example, SPIE has joined with the Climate Neutral Group to finance green energy projects in emerging economies, to offset its transport-related carbon emissions. In Cergy, France, we inaugurated Europa, our new global head office, that offers a compelling showcase for our capabilities. Certified to HQE® and BREEAM standards, the smart building features the latest technologies, including radiating office ceilings supplied by a heat pump with geothermal harnessing.

## RAISING OUR CORPORATE STANDARDS

Year by year, SPIE is steadily improving the way it manages the environmental impact of its operations. In 2015, for example, the partnership with the Recylum producer responsibility organization in France enabled us to collect more than 142 tonnes of waste electrical and electronic equipment (WEEE). We intend to strengthen this commitment with new environmental practices that will



SPIE, engaged  
at COP21.  
Watch the video.

*During the COP21 conference,  
SPIE employees presented our  
innovative solutions at the Galerie  
des Solutions show.*

eventually act as powerful performance drivers for the entire organization. During the year, SPIE Ouest-Centre earned ISO 50001 certification, a highly demanding energy performance standard that we would like to extend to other subsidiaries, in energy procurement, fleet management and corporate building design.

With the same goal in mind, we participated in a broad range of discussions on how to improve lifecycle management, for example during the third Midi-Pyrénées purchasing awards. This is all part of a wider commitment to green innovation, including in partnership with institutions. For years, for example, we have supported The Shift Project, a laboratory of ideas that seeks to intensify the fight against global warming and reduce our economic dependence on fossil fuels.

#### **TOWARDS A MORE ECO-FRIENDLY SOCIETY**

Through its capabilities and European footprint, SPIE intends to play an assertive role in enabling companies and organizations to integrate new technologies and innovative services. In 2015, for example, we began installing ultra-fast EV charging stations that can quick-charge a bus in just 15 seconds. In Germany, where SPIE is a leading provider of industrial services, our customers reduced their carbon emissions by 160,000 tonnes in 2015. Designed by SPIE UK, the CoolSafe cold water management system eliminates the risk of legionellosis and wastes much less water.



***Europa**, our new head office, is an efficient, responsible smart building  
certified to HQE® and BREEAM standards.*



Europa, a showcase  
for SPIE expertise.  
Watch the video.





INSPIRATION

EQUALITY



France  
**SPIE Île-de-France Nord-Ouest**

Inspired by  
**MARION SIRE AUMAND**  
Head of Activity

# EQUALITY

Starting as a works supervisor, Marion Sire Aumand quickly rose up the SPIE ranks and now leads a team of employees – an emblematic position that has given her a better understanding of the challenges of gender parity.



Watch the interview.





**M**arion Sire Aumand is comfortable being a woman at SPIE. But don't tell her that being a woman in a job like hers is easy when, for example, she has to pick up the tab in a restaurant surrounded by a dozen men. "For a long time, I felt that I wasn't the same as my colleagues, just because I was a woman. Too many people still think that it's odd for a woman to be a project leader. 'Odd' isn't at all pejorative; it's more like 'surprising', as if there were a certain admiration. But at the same time, they seem to be waiting to see if failure isn't around the corner, because some people feel that it is just so weird."

#### CHANGING THE WAY WOMEN ARE SEEN

Moving beyond feelings, Marion takes a more analytical view. "I wouldn't say that women aren't appreciated in this job. Sometimes, it's just the opposite. When I'm congratulated, I often wonder if the person is thinking 'that's good' or 'that's good for a woman'." For there to be more recognition and less weirdness, she feels that there should be more women in operational or managerial positions. And also, "female students should be encouraged to get into these jobs" because being a woman often turns out to be an advantage. We're a long way from the usual clichés.

In the meantime, she knows how to listen to others and doesn't complain. "With my every-day colleagues, I don't feel any difference in terms of the job. My relations with them are excellent and I don't feel that my authority is questioned." But what about the others? Sometimes she shows a flash of irritation when "certain people think they can kiss a woman hello cheek-to-cheek instead of shaking her hand," but also a certain tolerance. "The jokes I hear are usually more funny than offensive."

She has to be tolerant, because the issue is long-standing. "The difference between men and women starts right when the question of parity is raised," she explains, thinking about the corporate quotas that, strangely enough, place her alongside a variety of categories in difficulty. "Meetings often start with a 'good morning gentlemen... and LADIES', with an emphasis on the latter." After all, she thinks, that's better than if a man is rude or standoffish. She doesn't even respond when men treat her with that kind of attitude, because they wouldn't understand why.

### *The So'SPIE Ladies support network*

Launched in 2015, the new So'SPIE Ladies network is committed to changing the situation of women in the corporate community, with the goal of increasing gender equality in the workplace, improving the gender balance in our teams, providing better career development opportunities for women and raising gender diversity awareness among both men and women. According to international studies, gender diversity opens the way to better performance and a greater sense of well-being in the workplace. To address it more effectively, men are also invited to participate in the So'SPIE Ladies workshops.



INSPIRATION

COMMITMENT



On 25 April 2015 a severe earthquake hit Nepal. As a partner to Electricians Without Borders, SPIE immediately decided to provide logistical and humanitarian support by sending Nepali employee Lalit Hamal to the devastated region.

# COMMITMENT



*Qatar*  
**SPIE Oil & Gas Services**

*Inspired by*  
**LALIT HAMAL**  
*Electrician*



Watch the interview.



**S**PIE responded quickly to news of the disaster, aware that the many Nepalis working for SPIE Oil & Gas in Qatar could contribute their knowledge of the local situation and language, in addition to their professional skills. The emergency team was led by Brice Augey, Operations & Maintenance Manager, who reached out to Electricians Without Borders to deploy the logistics.

#### **A FOUR-WEEK ODYSSEY**

In the end, Nepali electrician Lalit Hamal was chosen to fly to Kathmandu on 8 May 2015 to carry out the assignment in Barpak and Laprak, two large villages located north west of the capital at an altitude of nearly 2,000 meters that are home to some 12,000 people. “I was accepted right away,” he says, “I was happy to be able to help my country.” This was a critically important assignment, because the most urgent thing was to restore basic services like water, lighting and telecommunications, which depend on the electrical infrastructure. Local conditions were chaotic, with the rugged mountainous terrain and total lack of communication severely hampering relief work. “Just 50 km outside Kathmandu, the roads were so damaged that we had to walk to Barpak and Laprak, a trek that took eight hours with all our equipment on our backs,” remembers Lalit. Once there, he had to move quickly. “Every day,” he says, “I worked on my assignment from 7 in the morning to 9 in the evening. At night, I slept in a tent, despite the aftershocks that made us worry that another quake was happening.”

Eventually, around thirty solar lamps were installed, along with two generators and dozens of solar cellphone chargers. “We supplied all of the accessories, like extension leads and power cables,” he says. Alongside the NGO volunteers, Lalit also served as interpreter for the local authorities and villagers in distress. This was an unforgettable experience, but also one that left him feeling very thankful: “Electricians Without Borders are really helping the Nepalis. They’re doing a remarkable job. On behalf of my people, I’d like to say how grateful we are to them.”

### ***SPIE and Electricians Without Borders, long-time partners***

Working alongside the NGO for many years, SPIE has participated in emergency relief after such disasters as the Haiti earthquake, Typhoon Haiyan in the Philippines and, more recently, the Nepal earthquake. To respond quickly, we set up a skills volunteering programme and raised funds to help electrify the devastated regions. Chairman and Chief Executive Officer Gauthier Louette also donated funds to the association on 10 June 2015 when SPIE was first listed on the stock exchange.



# SHARING OUR VALUES WITH OTHERS

Attentive to the principles of quality of life for everyone and caring for communities, SPIE is leading a social responsibility process that is driving improvements in the company and supporting community involvement and engagement around the world.



Meet So'SPIE Ladies.  
Watch the video.

*SPIE launched its So'SPIE Ladies network to promote gender diversity.*

**S**PIE is making equal opportunity a powerful driver of progress in the company, by facilitating disabled employment, extending cross-generation contracts and promoting gender equality in the workplace.

In 2015, SPIE took assertive action to improve gender diversity in its technical jobs, which traditionally have not been very open to women. Initiatives ranged from leading conferences in partner schools to assisting support networks designed to encourage women to become engineers and technicians. In eastern France, a partnership was formed with the Elles Bougent association, and support was provided to the Capital Filles programme to offer career orientation advice to female high school students.

In addition, a further milestone was reached in our commitment to diversity with the launch of the So'SPIE Ladies support network. Led by a woman in each subsidiary in liaison with corporate human resources, the new network aims to improve gender equality in the workplace and encourage the fielding of more gender diverse teams on customer sites. The challenge is also to enable women employees to express their full potential by raising male awareness as well, so as to drive progress across the entire organization.





## PROMOTING YOUNG TALENT

To prepare young employees to move up the company ranks, programmes such as SPIE Talents, which supports our young high potentials, have been in place for many years. Every year, we also take on more than 1,000 apprentices of every level, who are supported by mentors trained in-house. In our increasingly complex jobs, we are all very proud of these young people's success, as illustrated in 2015 by the participation of Jérémy Lefoulon, one of our fibre-optic supervisors, in the world final of the WorldSkills Competition in Brazil.

Another focus of our social responsibility commitment is helping disadvantaged young people to enter the workforce, often in association with specialized organizations like the Second Chance Schools in France. In addition to vocational skills, these programmes instil a professional mindset aligned with the accountability

and empowerment practices applied on our worksites. In Belgium, for example, SPIE has become the primary sponsor of the SODA project, designed to help young people demonstrate outstanding behaviour in their jobs.

## ACTING AS A GOOD CORPORATE CITIZEN

SPIE's social responsibility commitment also covers Group-wide corporate philanthropy initiatives and the support subsidiaries provide to regional associations in such areas as healthcare, the environment, culture and education. Employees play an active role in these initiatives, both in choosing where to send donations and in supporting humanitarian programmes. In recent years, for example, SPIE has supported La Parisienne, the largest women-only run in Europe, led by an association that is fighting breast cancer. No less than 235 women employees participated in 2015 in this uniquely Parisian event, which was run by people of many nationalities on a magnificent route along the banks of the Seine.



*Top left: 235 SPIE employees from France, the Netherlands, the United Kingdom, Belgium and Germany participated in the **La Parisienne** women-only run.*

*Top right: **Jérémy Lefoulon**, SPIE fibre-optics supervisor, finalist at the WorldSkills Competition in Brazil in August 2015.*

*Left: **Alain Rozet**, named Best Plumber in France in 2015, with his complex construction of pipes made of galvanized steel, black steel, copper and lead.*



Jérémy Lefoulon.  
Watch the video.

# EXTRA-FINANCIAL INDICATORS

Committed to the green economy and guided by its core principles, SPIE deploys a corporate responsibility process that takes into consideration every stakeholder.

<b>Social</b>	<b>2015</b>	<b>Scope</b>	<b>2014</b>	<b>Scope</b>
<b>TOTAL WORKFORCE<sup>1</sup> *</b>	37,662	World	38,245	World
Europe	33,509		33,823	
Asia	981		1,096	
Middle East	866		893	
Africa	2,305		2,430	
Other	1		3	
<b>WORKFORCE BY BUSINESS</b>		World		World
Multi-technical regional services	28,093		28,417	
SPIE Communications and SPIE ICS	3,611		3,634	
SPIE Nucléaire	2,118		2,115	
SPIE Oil & Gas Services	3,840		4,079	
<b>WORKFORCE BY JOB CATEGORY*</b>		World		World
Operators	13,446		13,690	
Administrative employees, technicians and supervisors	17,455		17,404	
Managers	6,761		7,151	
<b>EMPLOYMENT</b>				
New hires <sup>2</sup>	2,343	World	2,637	World
% of workforce on permanent contracts	88	World	88	World
Average seniority	10.5	World	10	World
<b>DIVERSITY</b>				
% of employees that are women*	13	World	13	World
% of managers that are women	14	World	14	World
Average age	42	World	42	World
% of employees over 57*	10	World	8	World
% of employees under 26*	8	World	8	World
Number of nationalities represented in the Group	120	World	121	World
% of employees with a disability	4.84	France	4.52	France
<b>TRAINING</b>				
Training outlays as a % of payroll	3.03	Europe	3.39	Europe
% of employees on work/study or apprenticeship contracts	3.60	Europe	3.40	Europe
<b>CAREER OPPORTUNITIES AND EMPLOYER APPEAL</b>				
Number of partnerships with schools and universities	150	World	151	World
<b>SOCIAL DIALOGUE</b>				
Number of collective bargaining agreements signed during the year*	69	World	74	World
% of employees covered by a collective bargaining agreement	52.8	France	61.6	France
<b>EMPLOYEE SHARE OWNERSHIP</b>				
Employee shareholders as a % of the workforce	54	World	34	World
Employee shareholders as a % of the workforce	78	France	50	France

1. Number of employees on payroll at 31 December, including acquisitions.

2. New hires on permanent contracts, excluding acquisitions.

## Occupational Health and Safety

	2015	Scope	2014	Scope
<b>OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM</b>				
% of employees working under an OHSAS 18001-certified or equivalent <sup>1</sup> system	85	World	84	World
<b>ACCIDENTS<sup>2</sup> INVOLVING SPIE EMPLOYEES*</b>				
		World		World
Total recordable injury rate <sup>3</sup> (at constant scope of consolidation)	9.9		11.1	
Total recordable injury rate (including acquisitions in 2015)	9.8		11.2	
Lost time injury rate (at constant scope of consolidation)	5.7		6.4	
Lost time injury rate (including acquisitions in 2015)	5.7		6.5	
<b>ACCIDENTS INVOLVING SPIE EMPLOYEES AND TEMPORARY WORKERS*</b>				
		World		World
Total recordable injury rate (at constant scope of consolidation)	10.9		12.7	
Total recordable injury rate (including acquisitions in 2015)	10.9		12.7	
Lost time injury rate (at constant scope of consolidation)	6.3		7.4	
Lost time injury rate (including acquisitions in 2015)	6.3		7.5	
<b>FATAL ACCIDENTS</b>				
	3	World	3	World

1. VCA in Belgium.

2. Number of accidents per million hours worked.

3. Number of accidents with or without lost time, per million hours worked.

**195 g CO<sub>2</sub>/€**  
**CARBON EMISSIONS<sup>1</sup>**  
**IN GRAMS OF CO<sub>2</sub> PER**  
**€ OF REVENUE**  
**(2014 carbon audit)**

**1,017,000 tonnes**  
**TOTAL GREENHOUSE GAS**  
**EMISSIONS<sup>1</sup> IN TONNES**  
**OF CO<sub>2</sub> EQUIVALENT**  
**(2014 carbon audit)**

1. Scopes 1, 2 and 3.

## Environment

	2015	Scope	2014	Scope
<b>ENVIRONMENTAL MANAGEMENT SYSTEM</b>				
% of employees working in ISO 14001-certified units	77	World	73	World
<b>WASTE MANAGEMENT</b>				
% of permanent facilities with a waste storage and sorting area	71	Europe	76	Europe
Tonnes of waste electrical and electronic equipment collected from customers in partnership with Recylum	142	France	133	France
<b>ENERGY USE AT PERMANENT FACILITIES*</b>				
Electricity used, in millions of kWh	49.3	World	47.9	World
Gas used, in millions of kWh	24.3	World	21.6	World
<b>CORPORATE VEHICLE FLEET</b>				
Fuel used, in millions of litres	29.5	Europe	27.7	Europe
Average carbon emissions from corporate vehicles on a long-term lease in grams of CO <sub>2</sub> per kilometre	138	Europe	143	Europe
Average carbon emissions from long-term lease vehicles added to the fleet during the year in grams of CO <sub>2</sub> per kilometre	115	Europe	125	Europe
Number of electric and hybrid vehicles	644	Europe	460	Europe

## Responsible Purchasing

	2015	Scope	2014	Scope
<b>SUPPLIER CSR AUDITS*</b>				
% of total purchases from suppliers audited for CSR compliance	26	World	24	World
<b>SOLIDARITY PURCHASING</b>				
Total purchases from supported and sheltered workshops	1.6	France	1.4	France

\*Data verified by our Statutory Auditor in accordance with French regulations and more particularly Article 225 of the Grenelle II Act.



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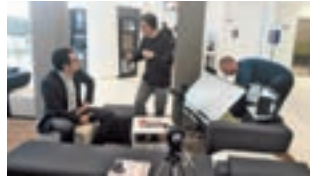
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Find out about our  
global locations.





# ACKNOWLEDGEMENTS

We would like to thank everyone who helped to prepare this 2015 Annual Report.

Special thanks are due to the people who agreed to take part in the features and share their views.

## OUR CUSTOMERS:

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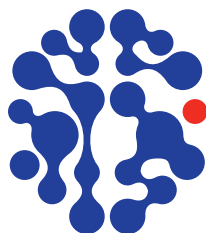


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