











## MINI GREEN, SMART GREEN OR GREEN MASTER, HOW DO YOU RATE ON THE GREEN ECONOMY?





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#### **PROFILE**

## A source of progress for everyone

A European leader in electrical, mechanical and HVAC engineering, energy, and communication networks, SPIE improves the quality of our living environment by helping local and regional authorities and businesses to design, build, operate and maintain facilities that are more energy efficient and more environmentally friendly.



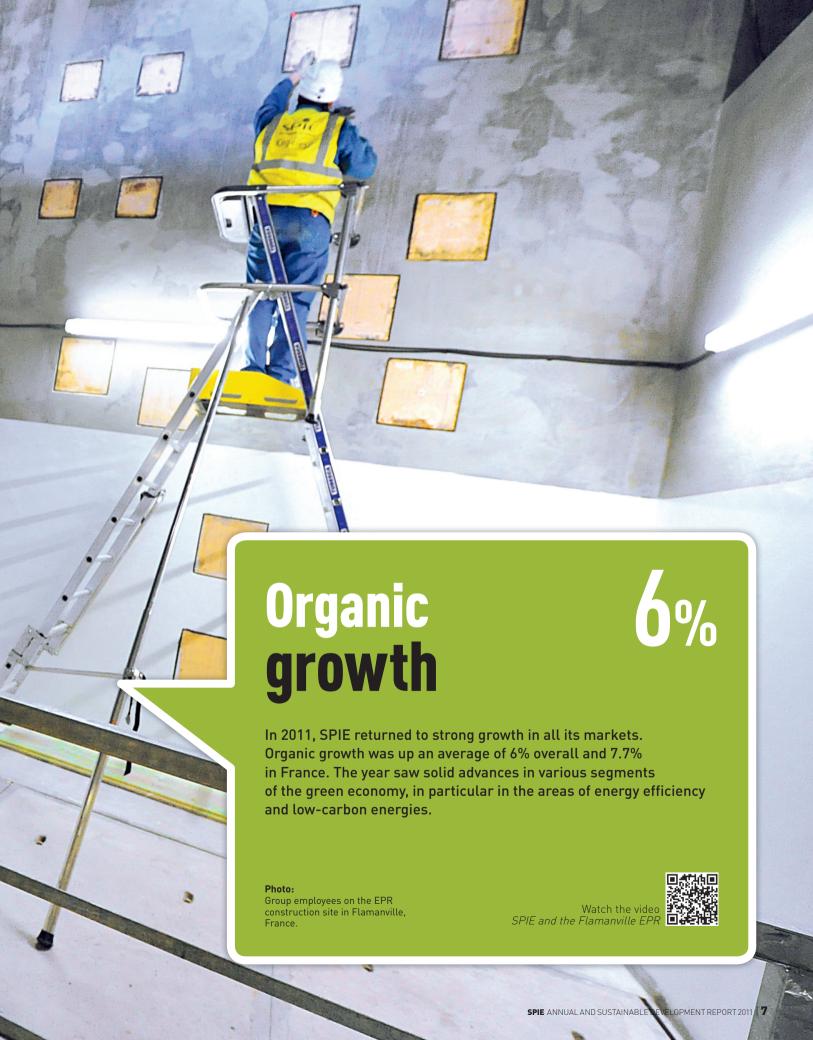
# rspective

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#### **2011 IN FIGURES**

## A good performance

In a year that saw the launch of a second leveraged buyout with the support of new investors, SPIE enjoyed very strong organic and external growth in all its markets.

See the press release on the Group's 2011 financial results



€4.047<sub>bn</sub>

IN REVENUE\*

**+9.4**%

+11.2%

**EBIT** 

IN 2011: €218.2 MILLION IN 2010: €196.2 MILLION

Pro forma EBIT totalled €218.2 million, a year-on-year increase of 11.2% that ranked SPIE alongside the leaders in its business. **BY REGION** 

66% France

**24%** Rest of Europe

10% Rest of the world

\* Pro forma.

**GROWTH** 

#### **PRO FORMA BY STRATEGIC SEGMENT** (in € millions)

	2010	2011	
MRS* France	1,855	2,049	10.50%
MRS* Rest of Europe	934	991	6.00%
SPIE Nucléaire	152	182	19.80%
SPIE Communications	294	326	10.80%
SPIE Oil & Gas Services	422	437	3.40%

<sup>\*</sup>Multi-technical regional services.

Pro forma consolidated revenue totalled €4.047 billion. an increase of 9.4% that was led by sustained organic growth, especially in France, and by continued external growth, with revenue provided by acquisitions amounting to 60% more than in 2010. Business in Europe was stimulated by the re-launch of capital spending projects, the development of services for energy and communications operators and dynamic expansion in the health and housing sectors. In oil and gas markets outside Europe, the slowdown in business was due to geopolitical instability in the Middle East, which was offset by vigorous demand in Africa. Lastly, in the area of low-carbon energies,



SPIE Nucléaire had strong organic growth and enjoys a promising outlook, both in France (with post-Fukushima modifications and longer power plant lifespans) and in the United Kingdom.

#### **BY SEGMENT**

**30%** Services sector **29%** Energy 18% Industry 13% National and local authorities **6%** Telecommunications **4%** Transport

#### **BY BUSINESS**

**33%** General electrical installations 13% External networks 11% Oil and gas services 10% HVAC engineering 10% Mechanical engineering 8% Communication systems and facilities management **6%** Building technologies **5%** Nuclear engineering 4% Industrial processes and automation

## **Interview**

### with Gauthier Louette, Chairman and Chief Executive Officer of SPIE



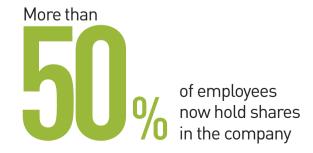
#### FIVE YEARS AFTER THE FIRST LEVERAGED BUYOUT, SPIE CONDUCTED A SECOND ONE WITH NEW INVESTORS. WHAT ARE THE KEYS TO SUCCESS IN THIS KIND OF OPERATION?

Our business model, like our corporate culture, is conducive to leveraged buyouts. First of all, our model is based on excellent fundamentals, with a broad, balanced portfolio of businesses, close-to-the-customer service, and recurring, small-scale contracts. This enables us to hold up well in times of recession and to take advantage of business opportunities wherever they arise.

During the first leveraged buyout, between 2006 and 2011, we demonstrated the validity of our model and built up our strength by considerably improving our margins and cash generation.

This cash allowed us to make approximately 60 acquisitions - 14 of which in 2011 - in markets that remain fragmented and in which potential targets are numerous.

Our corporate culture is very powerful. It is based on respect for the individual entrepreneur, a shared focus on the front line, a commitment to performance and the recognition of everyone's contribution. In this respect, I am delighted by the success of the recent corporate mutual fund, which led to an increase in the number of employee shareholders, from 7,000 to 15,000.





## **Interview**

## with Gauthier Louette, Chairman and Chief Executive Officer of SPIE



Once again, in the unsettled economic environment we experienced in 2011, our business model performed very well and we will continue to extend it while taking into account each region's particularities.

#### **SPIE COULD HAVE CHOSEN AN ALLIANCE** WITH ANOTHER INDUSTRIAL GROUP. WHY DID YOU OPT FOR A SECOND **LEVERAGED BUYOUT?**

Our confirmed ambition is to remain an independent European market leader. This LBO comes at the right time to speed up our development in Europe. It represents the best possible way to prepare for our initial public offering. Our new investors are also highly professional, very responsive and committed to our growth strategy. They provide us with additional room for manoeuvre so that we can envision major acquisitions in Scandinavia and Germany, in addition to regional acquisitions financed by our own cash flow.

The new leveraged buyout also involved a balanced financing package, with three times more equity than for our first LBO and a strong capacity to pay down debt.

In the previous LBO, our net debt-to-EBITDA ratio was 7, whereas this time we're at 4.5 after just a few months.

#### IN THIS REGARD. HOW WOULD YOU **CHARACTERISE YOUR GROUP'S 2011 RESULTS?**

SPIE's performance is in line with its goals and ambitions. All of our subsidiaries returned to strong organic growth, which averaged nearly 8% in France and 6% for the Group as a whole.

As for external growth, our solid cash performance enabled us to pursue a sustained programme of acquisitions that generate nearly €125 million in additional full-year revenue. Overall, we ended the year with a 9.4% increase in revenue to more than €4 billion and record backlog for 2012.

EBIT totalled €218.2 million, a year-on-year increase of 11.2% that ranked SPIE among the leaders in its business. This seventh consecutive annual increase reflects the quality of the Group's positioning in its markets as well as its disciplined management of operations. We're present in very buoyant markets such as energy, telecommunications and industry, as well as in targeted services businesses like health and housing. Last year, we also benefited from an economic environment that was more favourable than in 2010. This was due to a solid performance in the services sector and to the impact of the end of a cycle, which incited our customers to relaunch their spending programmes. Lastly, our teams took the offensive in certain important aspects of our offerings, in particular energy efficiency, which has become a key consideration for most of our customers, given the increase in energy prices.

The past year also demonstrated our ability to develop despite a still contrasting European business environment. In the Netherlands and Belgium, we saw very satisfactory growth in sectors like petrochemicals and energy infrastructure. In France, our multi-technical services enjoyed sustained growth, as did our communications businesses in such areas as information systems and hosted services. In the field of nuclear energy, where safety requirements are underpinning demand for our services, we acquired two companies during the year.



What's more, we made the right decisions whenever and wherever we were faced with problems.

In the United Kingdom, for example, the collapse in the regional services market was partially offset by our diversification into industry, which began in 2009. And we decided to withdraw from Spain, even if it was a hard choice to make. Lastly, in oil and gas markets outside Europe, the slowdown in business was due to geopolitical instability in the Middle East, which was offset by vigorous demand in Africa.

#### **GIVEN THE CONTRASTING SITUATION THAT** YOU MENTIONED, IS THE GREEN ECONOMY **STILL ONE OF YOUR PRIORITIES?**

The green economy is a long-term phenomenon that is continuing to assertive itself in all aspects of society. The cost of energy is rising and global warming is advancing. Everyone feels concerned about the need to protect our environment, even if the corporate and political timeframes are not the same. Our mission is to respond to this increasingly strong, structured market demand, especially for energy

## **Interview**

## with Gauthier Louette, Chairman and Chief Executive Officer of SPIE

## grams of CO<sub>2</sub> equivalent emissions per euro of revenue

efficiency and renewable energies. In 2011, we signed our first energy performance contract in the housing services sector. We also joined with EDF to install one of the world's largest photovoltaic plants in Toul-Rosières. With peak capacity of more than 100 MWp, it will be able to power a city of more than 60,000 inhabitants by 2013.

> From another standpoint, the green economy gives meaning to our actions. I firmly believe that we need not only to support this economy but also to be a source of new solutions for our customers. Thanks to our network of local operators, customers know they can rely on us to help them improve their technical, economic and environmental performance, respond proactively to change and more effectively manage the impact of regulatory requirements. For SPIE, the goal is to be a fully committed player in the change process. We took part, for example, in the first nationwide conference on charging stations, which is a crucial sector for the success of the electric car.

#### WITHIN THE ORGANISATION. WHAT **COMMITMENTS HAVE YOU MADE TO SUPPORT** SUSTAINABLE DEVELOPMENT?

Our operations require us to constantly enhance our technical culture and listen closely to customers, as well as to manage risk, behave responsibly and adjust to each project's specific features. Employee safety is our top priority and to honour that commitment we need to be present on all fronts. In our front-line operations, it's also a question of attitude. Identifying hazardous situations is not enough. We also need to avoid them at all costs and at all times. It's not just about statistics, even if our accident rate is half that of the industry average. There should be no deaths or injuries on the job. The only acceptable organisation is one that is entirely accident-free.

Our Group also brings together many different professions and people of some 75 nationalities. Given this diversity, it is crucial to provide managers with multicultural, international experience and to encourage mobility. We want to promote all forms of diversity, which represents both an opportunity and an asset for the company. Over the past year, we made progress in hiring the disabled by setting up a network of contacts extending across all subsidiaries to facilitate the integration process. Our regional teams have also been working with young people from disadvantaged backgrounds.

In other areas - such as gender parity change is coming more slowly. We need to confront persistent false ideas and to change mentalities because women too have a role to play on worksites.

Lastly, I want to remind you of the importance of our commitment to environmental stewardship. We know that at present our emissions of CO<sub>2</sub> equivalent amount to 215 grams per euro of revenue, and this fact is enabling us to effectively structure our action plans. All areas of our operations are concerned, from introducing sustainable purchasing policies to recycling electrical waste and finding more environmentally friendly ways of travelling. This is reflected in our decision to purchase more than 700 electric vehicles last year. We are also very attentive to our day-to-day actions and to our culture of environmental responsibility. This year, we received several awards in Europe, notably the Top Com corporate business award in recognition of our responsible communication initiatives

#### **ACQUISITIONS**

## 14 companies joined SPIE in 2011

Pursuing its external growth policy at a sustained pace in 2011, SPIE improved its coverage of European markets and strengthened its multi-technical capabilities.

**NADDITIONAL REVENUE\*** THROUGH ACQUISITIONS

m ADDITIONAL REVENUE

THROUGH ACQUISITIONS

#### **SPIE ÎLE-DE-FRANCE NORD-OUEST**

€16 m PORRA7 €4.6 m POIRET

#### **SPIE EST**

€5.4 m ANQUETIL Climaticiens

#### **SPIE SUD-EST**

€3.4 m TRENTO €0.7 m Ent. Gilles Terras

#### **SPIE BELGIUM**

€12.3 m Chauffage Declercq

#### **SPIE NEDERLAND**

€10.5 m KIN Sprinklertechniek B.V.

#### **SPIE NUCLÉAIRE**

€15.6 m ATMN

#### **SPIE SUD-OUEST AND SPIE OUEST-CENTRE**

€18.3 m Groupe SOFIP-ENELAT

#### **SPIE SUD-OUEST**

**€2.9** m Sono Technic **€5** m Boisson et Eri **€1.7** m Chambouleyron

#### **SPIE SUD-EST AND SPIE NUCLÉAIRE**

**€28.2** m Reyes Industries



SPIE acquires SOFIP-ENEL AT

<sup>\*</sup> Calculated on a full-year basis.

#### SENIOR MANAGEMENT TEAM

# Working together in full synergy

The composition of the Management Committee reflects the Group's European governance structure. The Management Committee, which determines and deploys the Group's operating strategy, is comprised of the Chairman and Chief Executive Officer, the Finance and Administration Director, the Human Resources Director. the Strategy and Development Director, and the subsidiary Managing Directors.



Gilles Brazev Managing Director, SPIE Communications



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



**Johan Dekempe** Managing Director, SPIE Belgium



Philippe Guidicelli Managing Director, SPIE Ouest-Centre



James Thoden van Velzen Managing Director, SPIE UK



Lei Ummels Managing Director, SPIE Nederland



Pierre Vanstoflegatte Managing Director, SPIE Northern Europe until June 30th. 2012



**Gauthier Louette** Chairman and Chief Executive Officer, SPIE SA



**Thierry Baussart** *Managing Director, SPIE Sud-Est* 



**Francis Butel** Managing Director, SPIE Nucléaire



Denis Chêne Finance and Administration Director, SPIE SA



**Yves Compañy** *Managing Director, SPIE 0il & Gas Services* 



**Cor Kloet** Managing Director, SPIE Nederland



**Pascal Poncet** Managing Director, SPIE Est and Germany



**Thierry Smagghe** Human Resources Director, SPIE SA



**Alain Langlais** *Managing Director, SPIE Sud-Ouest* 



Alfredo Zarowsky Strategy and Development Director, SPIE SA

#### CORPORATE GOVERNANCE AND SHAREHOLDER STRUCTURE

## Deciding together transparency

For years, SPIE has been attentive to maintain transparency, responsibility and integrity in its corporate governance, in line with the Charter that expresses the Group's core values and principles. The Board of Directors applies the highest standards of governance and involves all stakeholders in the corporate decision-making process.

#### SPIE SA



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

#### **CHAIRMAN AND CHIEF EXECUTIVE OFFICER:** Gauthier Louette

#### **DIRECTORS:**

Michel Bleitrach

Keolis

Denis Chêne

SPIE SA

Dominique Gaillard

AXA Private Equity

Sir Peter Mason KBE

Balfour Beatty Limited

Roberto Quarta

Clavton. Dubilier & Rice

**Christian Rochat** 

Clayton, Dubilier & Rice

Éric Rouzier

Clayton, Dubilier & Rice

Alfredo Zarowsky

SPIE SA

Chrystelle Marthus-Richelin

SPIE SA

#### NON-VOTING MEMBERS AND OBSERVERS:

Justin Méthot

Caisse de dépôt et placement du Québec

Alexandre Motte

AXA Private Equity

Jean Artur

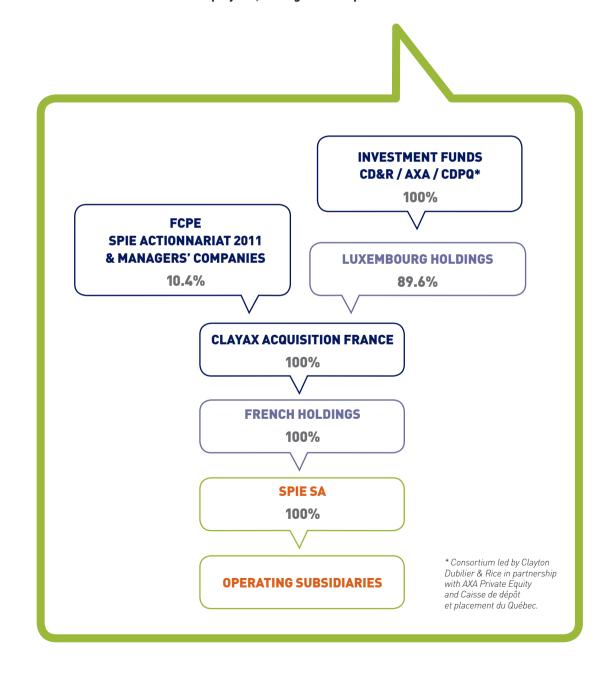
SPIE Sud-Ouest

Pascal Castagné

SPIE Communications

## Shareholder structure, a new dynamic for the future

Completed on 30 August 2011, the acquisition of SPIE brings together three major shareholders: the Clayton Dubilier & Rice investment fund and its partners, AXA Private Equity and Caisse de dépôt et placement du Québec. The shareholder base also includes more than 50% of all SPIE employees, through the Corporate Mutual Fund.



#### CORPORATE GOVERNANCE AND SHAREHOLDER STRUCTURE

## Deciding together in total transparency



Pascal Castagné, Director of Development, SPIE Communications, Observer and non-voting member of the SPIE SA Board of Directors.

#### YOU WERE RECENTLY NAMED TO THE SPIE BOARD OF DIRECTORS AS A NON-VOTING MEMBER AND OBSERVER. IS THIS THE FIRST TIME THAT SPIE HAS USED THIS SYSTEM?

No, it's not. In 2006, when the first leveraged buyout took place, there was already at least one representative of the Managers' Companies on the Board of Directors, although the nomination process was different at the time. I was a nominee in 2009, although not elected, then again this year when a new voting system was used to choose two observers for the Managers' Companies. At the time, I expressed an interest in representing my fellow employees at SPIE Communications, as well as a number of managers from other subsidiaries with whom I have been in regular contact through inter-subsidiary committees or other bodies.

#### WHAT IS YOUR ROLE DURING BOARD MEETINGS?

I was elected along with Jean Artur, Director of Purchasing at SPIE Sud-Ouest. Unlike other directors, we do not have the right to vote according to the bylaws. We do, however, take part in discussions, give advice and in some cases answer questions from members of the Managers' Societies who elected us, while complying with the rules of confidentiality that govern exchanges at Board meetings.

#### WHAT DOES THIS NOMINATION MEAN FOR YOU. FROM BOTH A PERSONAL AND A PROFESSIONAL STANDPOINT?

Since 1994, I have had the opportunity and the good fortune to be in contact with many colleagues from very different backgrounds and professions, first at the regional level, then at SPIE headquarters and currently at the SPIE Communications head offices. Clearly, our Group's success is underpinned by their individual qualities and their diversity, which lends itself to a sort of collective discipline. As a lover of team sports – in which success is likewise based on a concerted effort – I have always felt that it's important for each individual to fully understand what we want to accomplish together. That's a key driver of day-to-day performance.

Lastly, my position as an observer has bolstered my professional skills. One of my responsibilities is to oversee SPIE Communications' acquisitions in an IT market whose fundamentals are not the same as those of the Group's other markets. If I more fully understand SPIE's strategy with regard to shareholders' expectations, I will be better able to make decisions and implement actions that will help me to attain my own goals.

## Five standing committees

#### **MANAGEMENT COMMITTEE**

The Management Committee, which meets once a month, is comprised of the Chairman and Chief Executive Officer, the Finance and Administration Director, the Human Resources Director, the Strategy and Development Director, and the subsidiary Managing Directors. It defines and deploys the company's operating strategy and coordinates initiatives.

#### **AUDIT COMMITTEE\***

The role of the audit committee is to review and control the financial and accounting information, the mission and independance of the statutory auditors, the internal audit procedures and to monitor the efficiency of the internal control and risk management systems.

#### \* SPIE SA.

#### **ACQUISITIONS AND DISPOSALS COMMITTEE\***

The Acquisitions and Disposals Committee studies proposed acquisitions or disposals totalling more than €5 million and representing revenue of over €15 million. It then submits a written report to the Board of Directors.

#### THE COMPENSATION COMMITTEE

The Compensation Committee makes recommendations to the Board of Directors on the compensation of other executives, and on any significant changes in collective agreements or the Group's employee relations strategy. It also informs the Board of decisions concerning managers other than officers.

#### THE RISK ASSESSMENT COMMITTEE\*

The Risk Assessment Committee authorises project feasibility studies, capital projects and legal proceedings, and ensures compliance with internal competitive bid procedures. It meets at least twice a year.

<sup>\*\*</sup> Clayax Acquisition 4.





www.cdr-inc.com

Since its founding in 1978, Clayton, Dubilier & Rice has pursued an investment strategy of building value by strengthening the development and operating performance of the companies in its portfolio. CDR's professionals include a combination of experienced financial executives and senior managers from major corporations such as ABB, Unilever, BAE, BBA, Disney, Dow, Emerson Electric, Gap, General Electric, IBM, Procter & Gamble and Tesco. Based in New York and London, CD&R manages the investment of approximately \$16 billion in 49 US and European businesses – mostly subsidiaries or divisions of large multinational corporations -representing a broad range of industries with an aggregate transaction value of around \$80 billion.





www.axaprivateequity.com

AXA Private Equity is a world leader in private equity, with assets of \$28 billion managed or advised in Europe, North America and Asia. The company offers its investors a wide choice of funds covering the full range of asset classes: funds of funds (primary, early secondary and secondary), direct funds including infrastructure, small and mid-market enterprise capital, innovation & growth, co-investment and private debt. With offices in Paris, Frankfurt, New York, Singapore, Milan, London, Zurich and Vienna, AXA Private Equity is committed to supporting companies in their long-term growth by providing access to its international network. AXA Private Equity provides regular, high-quality reporting on the performance of its funds and the companies in its portfolio, as a service to its investors.





www.lacaisse.com

The Caisse de dépôt et placement du Québec is a financial institution that manages funds primarily for public and private pension and insurance plans. At 31 December 2010, it had net assets of \$151.7 billion. One of the leading institutional fund managers in Canada, the Caisse invests in the main financial markets, as well as in private equity and real estate. Its Private Equity unit, including the Infrastructure portfolio, had net assets of \$21.8 billion at 31 December 2010. The unit invests in companies across a wide range of industrial sectors, including manufacturing, distribution and services, media and telecommunications, natural resources, financial services, energy and infrastructure. The Private Equity team also invests in specialised investment funds.

On 30 August 2011, the Clayton Dubilier & Rice investment fund and its partners **AXA Private Equity and Caisse de dépôt** et placement du Québec acquired SPIE through a new leveraged buyout.

Five years after the first leveraged buyout, SPIE conducted a second one with new investors. Following PAI Partners, a consortium comprised of the US investment fund Clayton Dubilier & Rice in partnership with AXA Private Equity and Caisse de dépôt et placement du Québec became the Group's new shareholder. "With the first LBO winding down, we wanted to start a new cycle in order to significantly improve the Group's room for manoeuvre, especially to finance acquisitions." explains Denis Chêne. Administrative and Financial Director of SPIE Group.

#### **GREATER ROOM FOR MANOEUVER**

The first LBO was a clear success. The Group's revenue increased from €2.8 billion in 2006 to €3.7 billion in 2010, while EBIT margin improved from 3.6% to 5% and debt was reduced from 6.5 to 2.4 times EBITDA<sup>[1]</sup>. Backed by these good results, the SPIE management team is confident about the new LBO, especially since the initial prospects are in many respects more favourable. Internationally present and financially solid, SPIE's new shareholders are among the world's leading private equity funds<sup>(2)</sup>. The initial equity provided at the outset is greater and the room for manoeuvre is superior than for the first LBO.

#### STRENGTHENING THE BALANCE **OF THE BUSINESS PORTFOLIO**

The strategy underpinning this new leveraged buyout is to finance acquisitions in addition to the semi-organic growth financed by cash flow from SPIE's businesses. The objective is to increase the Group's territorial coverage in Europe while continuing to diversify and balance the business portfolio and enhancing awareness of SPIE across the region, with the goal of generating €5 billion in revenue by 2015. This strategy of profitable organic and external growth is perfectly in line with the LBO's financial policy to reduce the debt ratio.

"By improving the Group's margins, in particular for subsidiaries that have not yet reached the target level, and actively managing working capital to generate cash flow, we hope to quickly decrease our financial leverage [3], as with the first LBO," says Denis Chêne.

- (1) Earnings before interest, taxes, depreciation and amortisation.
- (2) Collective investment schemes that generally invest in unlisted companies.
- (3) Paying down leveraged buyout debt.

## Core **Shareholders**



Denis Chêne. Finance and **Administration** Director, SPIE Group.

We have entered into this secondary leveraged buyout with partners that share SPIE's two main management objectives: pursue external growth opportunity with new capacity for debt and prepare for an initial public offering once the second LBO winds down.

58-2% Clayton, Dubilier & Rice

15.7% AXA Private Equity

To Caisse de dépôt et placement du Québec



See the press release about the change in the SPIE shareholder structure

#### **SPIE AROUND THE WORLD**

## **Asserting** our leadership in Europe

To contact us



## Europe

In 2011, SPIE continued to extend its network of operations in Europe, targeting acquisitions that improve its regional coverage and enhance its multi-technical capabilities. During the year, 14 companies joined the Group, in Belgium, France and the Netherlands.

#### **FUROPF**

- Germany
- Belgium
- France
- Netherlands
- Portugal
- United Kingdom
- Switzerland





#### A GROWING PORTFOLIO OF BUSINESSES

#### **BELGIUM**

During the year, SPIE profited from favourable market conditions in Belgium, especially in the industrial sector, whose dynamic extended to markets in Germany and Northern Europe. The acquisition of Chauffage Declercq, based in Izegem in Western Flanders, has provided the Group with leading-edge HVAC skills, thereby strengthening its operations in the region. Present in both the services and industrial sectors. the company generated approximately €12 million in revenue in 2011.

The multi-technical business in France expanded sharply, across all the Group's regional subsidiaries. With revenue up 10,5%, the business benefited from buoyant markets in energy, communications and health, as well as in certain segments like industrial automation devices and water treatment. Business in the nuclear sector continued to grow, increasing by 20%, led by projects on existing sites

following safety requirements added after the accident in Fukushima. In communication systems and facilities management, SPIE also enjoyed strong growth in unified communication, data centres, IT security, operated services and cloud computing.

#### **NETHERLANDS**

Growth in the Netherlands was driven by the industry and infrastructure sectors, in particular by a project with operator TenneT to modernise high voltage lines. The Group also made the acquisition of KIN Sprinklertechniek B.V., which deploys building safety systems.



#### SPIE'S LOCATIONS ON YOUR MOBILE PHONE

SPIE maps, the smartphone application for geolocating
SPIE's operations around
the world, is available free
of charge at the Android Market,
the Apple Store and the
BlackBerry App World.

to download SPIE maps.

## Rest of the World

Despite the geopolitical instability in the Middle East and a number of African countries, SPIE consolidated its positions in fast-growing oil and gas-producing regions, particularly in Saudi Arabia, Qatar and Angola.

#### **AFRICA**

- Algeria
- Angola
- Congo Gabon
- Libya
- Morocco
- Nigeria

#### ASIA/PACIFIC

- Thailand

#### MIDDLE EAST

- Iraq

- Brunei
- China Indonesia
- Kazakhstan
- Malaysia
- Myanmar
- Singapore
- Vietnam

- Saudi Arabia United Arab Emirates

- Oman
- Kuwait
- Qatar
- Yemen

#### PARTNERING WITH OIL AND GAS OPERATORS

#### SAUDI ARABIA

Active in Saudi Arabia in recent years through a number of technical assistance and oil and oil-related operational support projects, the Group stepped up its development in 2011 with the signing of a major commissioning support contract with Satorp, a joint company created by Saudi Aramco and Total. The project involves engineering, procurement and construction work for the Jubail refinery, one of the world's largest, which will process more than 400,000 barrels of crude oil a day while complying with the strictest environmental standards.

#### QATAR

In Ras Laffan, a 106-square-kilometre industrial city that has made Qatar the world's leading producer of liquefied natural gas, SPIE has for several years been providing operational and maintenance services for pumping stations and seawater treatment plants.

#### **ANGOLA**

Since the creation in 2002 of Sonaid, an Angolan joint venture that specialises in oil-field tubular goods and related services, SPIE has continued to expand alongside oil industry operators. One example is the Kizomba Satellites contract with ExxonMobil and its prime contractor, Ponticelli, to modify installations on two floating, production, storage and offloading (FPSO) platforms. Other projects during the year included two extensions of the maintenance contract for Total's Dalia FPSO in the Gulf of Guinea.



#### **OVERVIEW OF 2011**

# The green economy in pictures

With expertise in sustainable buildings, renewable energies, urban eco-mobility systems, new data centres and other solutions, SPIE helps customers to protect the environment while improving the performance of their facilities.





#### **HOTELS • PORTUGAL**

#### **SOLAR ENERGY FOR** AN EXCEPTIONAL VENUE

The magnificent Douro Palace tourist complex north of Oporto now benefits from the installed capacity of 400 photovoltaic solar panels for internal use as well as 42 thermal solar sensors to heat hot water and the swimming pool in the spa. Overall, SPIE's solutions generate 215 MWh of electrical power a year.



Infrastructure at the Cap Gemini data centre in London has been renovated to increase its cooling capacity and density to 1,000 watts per square metre while also reducing carbon emissions. SPIE installed new generators and replaced the electrical distribution circuit and air-conditioning units without disrupting the centre's operations.

#### SUSTAINABLE MOBILITY • FRANCE

#### V'LILLE: THE MOST VIABLE ALTERNATIVE TO THE CAR

After Lyon, Rennes and Paris, the Greater Lille Urban Council inaugurated its first self-service bicycle stations as an extension of its public transportation network. From identifying locations to installing terminals, SPIE delivered a range of services that took into account the existing urban environment. For example, special teams were brought in to install paving stones in Lille's historic centre.





#### PUBLIC LIGHTING • FRANCE LIGHTING UP ARCACHON

SPIE renovated and upgraded the lighting network in Arcachon, a major French seaside resort. Among the installations were traffic lights and electric signage, decorative and special events lighting, retractable and movable vehicle barriers and video-protection systems. Moreover, SPIE's solution reduced energy use by 40%.



Optimising maintenance of electro-mechanical equipment at the E40-E25 motorway junction near Liège is crucial for ensuring traffic flows and reducing environmental impact. SPIE deployed a full-fledged road management centre that includes dynamic signage, vehicle counters, remote management services, radio relaying and remote-controlled lighting systems.



#### **COMMERCE AND RETAIL • FRANCE**

#### ATOLL, FRANCE'S FIRST **ENVIRONMENTALLY RESPONSIBLE SHOPPING MALL**

Western France's largest shopping mall, located near Angers, offers a full range of environmentally responsible features in such areas as insulation and soundproofing, energy efficiency and photovoltaic solar panels. SPIE supported this large-scale project, providing its expertise in electrical and HVAC systems, energy efficient lighting and rainwater recovery solutions.



## **Everyone responsible** with our partners

In its pursuit of corporate responsibility, SPIE aligns its approaches to social development, environmental protection and corporate citizenship and pursues them continually. This longstanding commitment calls for close cooperation and synergy with all stakeholders, including employee representatives, industrial partners, trade groups and associations, national and local government authorities, public and private organisations and international institutions.













<sup>\*</sup> See these documents on your mobile phone

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#### SOCIAL RESPONSIBILITY

## Promoting the creation of shared value

After several years of continuous growth, SPIE in 2011 reaffirmed its social policy, which is based on dialogue and shared value. This commitment saw a new employee shareholder dynamic as part of the Group's second leveraged buyout.



Meeting in Toulouse with employees from the subsidiaries of the southwest region to discuss the leveraged buyout.

Following the success of the first leveraged buyout carried out five years ago, the Group's social responsibility commitment this year focused on sharing the benefits of growth. Employees who subscribed to the corporate mutual fund in 2006 recorded capital gains that averaged seven times their initial investment. The confidence they displayed in SPIE's project also led other employees to subscribe to the corporate mutual fund set up with new financial investors for the second LBO. Thanks to highly favourable support measures, all job categories had access to the programme, with the company contributing matching funds of €35 million.

Some 15,000 employees are now company shareholders, representing 62% of the workforce eligible to take part in the programme. In addition, €24 million were paid to employees in 2011 through profit shares and incentive bonuses.

#### A SLIGHT INCREASE IN THE EMPLOYEE BASE

Following a stabilisation in the workforce in 2010, hiring began again in first-half 2011 because of an improved economic environment in continental Europe. However, a return to recession in the second half slowed the recovery, which was also impacted by economic difficulties in the United Kingdom. Overall, the Group had 29,055 employees at 31 December 2011, a year-on-year increase of 3.8% (excluding Spain, from which the Group withdrew in July 2011), with 987 employees from companies acquired during the year.

In this environment, hiring at SPIE continued to be driven by growth in maintenance and energy-related services requiring ever-higher levels of professional skills. Excluding acquisitions, approximately 2,000 new employees joined the Group during the year, most of them managers and technicians. Temporary workers accounted for 15% of the total, a figure in line with the profile of the company's businesses. In addition, apprentices account for 5% of the workforce, a good level that is backed by an assertive tutoring policy.

#### **CREATING SKILLS ENHANCEMENT PROGRAMMES**

SPIE allocated €30 million for training in 2011, an investment that reflects the need to constantly adapt the Group's capabilities to its operations and to its outlook for change.

The Skills Development Centre offers training through two units - the Management School and the Technology Institute - overseen by a steering committee. In all, more than 70 customised training modules in 16 fields are offered, with the backing of specialised organisations and inhouse facilitators. The Technology Institute offers extended technical skills enhancement programmes in SPIE's key professions, supported by practical on-site training in such areas as multi-technical maintenance, optic fibre-tothe-home networks and energy efficiency. In 2011, the Institute welcomed its 500th intern, who took part in a low-voltage network installation programme.

Improvements to the human resources planning and development process were continued during the year, thanks to the BNDC, a highly efficient database that helped to establish gateways between different businesses.

Company resource assessment and development committees meet once a year to identify high-potential employees at all levels and prepare their career paths. To showcase talented individuals, SPIE also created the Junior Innovation Trophy contest, which is open to all interns and apprentices in secondary level or

higher programmes. Last year, four Trophies were awarded for innovations in the areas of safety, the green economy and human resources

#### **ENSURING** RESPONSIBLE MANAGEMENT

In the "Discover SPIE" orientation seminar, newly hired managers meet with senior executives who present the company's corporate values of performance, local management and responsibility. Special attention is paid to safety in the workplace.

In a decentralised organisation with small teams spread across the entire territory, a local management style is the cornerstone of the company's success and a topic covered in many training programmes. In the United

Kingdom, a pilot module based on enhancing the professional skills of worksite managers was organised in 2011 for deployment in 2012. In the Netherlands, business managers shared best practices to develop a reference document for their profession, which is of critical importance for SPIE. In Île-de-France/ Nord-Ouest, a customised programme was developed for the region's more than 500 managers.

The Group's international expansion increasingly calls for managers with the training to meet these special challenges. The new SPIE Talents programme provided high potential young people with an introduction to international management, in partnership with the ESSEC business school, whose teachers come from around the world.



The Technology Institute welcomes its 500th intern.

#### **GLOBAL COMPACT:** AN INTERNATIONAL COMMITMENT



More about the Global Compact



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. The principles in each of these categories are as follows:

#### **PRINCIPLES**

#### **HUMAN RIGHTS**

- Businesses should support and respect the protection of internationally proclaimed human rights, within their sphere of influence
- Make sure they are not complicit in human rights abuses.

#### **EXAMPLES AT SPIE**

- Deployment of the OHSAS 18001 (or equivalent) workplace health and safety management system.
- International business travel safety quide.
- National agreements in Africa and the Middle East to employ locals.

- Stress management agreements.
- Supplier assessment studies with EcoVadis.

#### **LABOUR**

- Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
- The elimination of discrimination in respect of employment
- The elimination of all forms of forced and compulsory labour.
- \_ The effective abolition of child labour.
- A social dialogue organisation within the European Works Council.
- Diversity committee that coordinates initiatives to prevent discrimination:
- to improve employment opportunities for the disabled;
- to increase gender parity;
- to provide work opportunities for the young as well as for older employees;
- to promote diversity.

#### **ENVIRONMENT**

- Business should support a precautionary approach to environmental challenges.
- Undertake initiatives to promote greater environmental responsibility.
- Encourage the development and diffusion of environmentally friendly technologies.
- □ Deployment of the ISO 14001 environmental standard.
- Training and awareness-building programmes on energy and climate issues.
- Extension of the carbon footprint analysis programme.
- Environmentally friendly management of the corporate vehicle fleet and eco-driving courses for employees.
- Commitment to purchasing 730 electric vehicles between 2011 and 2015.
- Environmentally responsible digitisation of corporate publications for on-demand printing.
- \_ Environmental criteria used to assess suppliers.
- Special training programmes at the SPIE Technology Institute.

- **ANTI-CORRUPTION Businesses** are encouraged to combat all forms of corruption, including extortion and bribery.
- Handbook on ethical business practices.
- Services agreement procedure.
- \_ Training in business ethics, with a special module on the Bribery Act in the United Kingdom.
- Supplier assessment studies with EcoVadis.

2011 SERCE Safety Contest: a very strong performance by SPIE, which received seven awards from the National Association of Flectrical and Environmental Engineering Companies (SERCE) and the Public Works Prevention Trade Organisation (OPPBTP).





the press release

Similarly, the Ambition Manager programme brought together high level managers from different countries for approximately ten days, while Business Unit Manager sessions were held for new profit centre managers.

In France, a right-to-work training programme was introduced with the goal of creating contacts in each subsidiary who are certified to train frontline managers.

Lastly, the commitment to corporate ethics was strengthened in a UK legislative environment shaped by the application of the Bribery Act. While continuing to update its business ethics manual, SPIE, with the support of Vigeo, the socially responsible rating agency, introduced a training programme for managers - beginning with subsidiary management committee members - based on real-life examples of management issues encountered in each unit.

#### A PRIORITY **FOCUS ON HEALTH AND SAFETY**

In 2011, the focus was on revitalising safety programmes, following a difficult year in 2010.

To strengthen the company's safety culture, a range of measures and actions were taken, including the deployment of safety standards that exceeded regulatory requirements, systematic prevention inspections of worksites and facilities, and on-going major efforts to provide training in safety management. Several initiatives helped to diffuse the key issue of safety more widely across the organisation. Among them were the workshops and meetings held in all subsidiaries on 28 April 2011 - the ILO's World Day for Safety and Health at Work - on the subject of identifying hazardous situations. Another was the publication of a special safety issue of Rencontres, the Group's in-house newsletter. In addition, a Health and Safety Prevention Director was appointed to more effectively coordinate existing systems and lead the search for new paths to improvement.

SPIE is an industry leader in the area of safety, having broadly deployed safety management systems with 77% of its facilities certified to OHSAS 18001 (or equivalent) standards. What's more, in the main host countries, SPIE's workplace accident frequency rate is better than that of the industry as a whole.

During the year, prevention efforts focused on taking into account stress and arduous working conditions, in an environment shaped by more stringent regulations and consultations with employee representatives.

#### DIVERSITY. AN ASSET FOR THE COMPANY

The Diversity Committee created in 2008 at corporate level, with contacts in the subsidiaries, is now fully operational. In 2011, SPIE deployed a network of contacts in the subsidiaries to share best practices and support local hire-the-handicapped initiatives. These included agreements with specialised organisation, specially adapted training programmes, financial support for Handisport activities, and participation in a week-long jobs-for-the-disabled event.

The practice of interviewing employees in the latter part of their career was extended, and several hundred older team members were involved in tutoring and training initiatives for young people. To increase the number of women in the workforce, SPIE bolstered its partnerships with engineering schools, like EPF in France, while promoting worksite visits and get-togethers with women already employed by the Group.

It also pursued actions to support young people from disadvantaged neighbourhoods. Two examples were the School for a Second Chance in the Greater Lille region and cooperative ventures with FOREM, the public employment and training service in Belgium.

#### **STRENGTHENING SOCIAL DIALOGUE**

In the areas of social dialogue and employee relations, the year saw a variety of developments, in particular:

- The agreement on supplemental health insurance for employees in multi-technical and nuclear services subsidiaries in France was renegotiated and unanimously approved. At present, the agreement covers 33,000 employees and their families. Coverage has been improved since the system's introduction in 2008 and thanks to a rise in employer outlays, employee contributions will not increase in 2012.
- The Board of the European Works Council met three times during the year, including a special meeting to discuss the changes in shareholder structure. In addition, the Council held three plenary sessions, of which two that focused on the same topic.
- Two special meetings of the SPIE SA Works Council were held as part of the information and consultation process related to the change in the shareholder base. At the second meeting, employee representatives gave their unanimous approval to the operation.
- The agreement concerning the French Works Council, which dated back to 1997, was renegotiated to take into account the new scope of operations. The revised agreement was unanimously approved.

#### HIRING

## **Nurturing** the employer brand

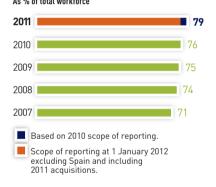
To support the growth of its activities, SPIE decided to redefine its employer brand policies and resources. Initiatives were pursued throughout the year, including new communication materials, media actions, campaigns in the press and on the Web, and revitalised partnerships with schools. Another example was the five-year scientific and technological sponsorship agreement signed with the INSA Foundation in Lyon, whose purpose is to develop the Group's relations with several of the school's departments and two applied research laboratories.



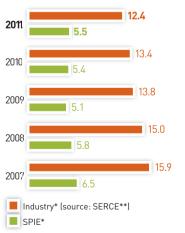
Visuals from the new hiring campaign



#### **HEALTH AND SAFETY MANAGEMENT SYSTEM OHSAS 18001/VCA CERTIFIED UNITS** As % of total workforce



#### WORKPLACE ACCIDENT FREQUENCY RATE



<sup>\*</sup> Number of accidents with lost time per million hours



Talented young people

> Award ceremony for the Junior Innovation Trophy. From left to right: Gauthier Louette (Chairman & CEO, SPIE Group,) Sylvia Decarsin (intern), Quantin Jonis (intern), Laura Angles (intern) and Thierry Smagghe (Human Resources Director, SPIE Group).

#### AWARD

## **Initial success of the Junior Innovation Trophy**

SPIE presented the first Junior Innovation Trophy to four trainees and apprentices in secondary level or higher programmes. The entries submitted covered a wide range of areas and showed a high degree of creativity, among them a board game called Trivial POURSPIE, digital petrol expense vouchers, a method for improving high voltage tube bending measurements between two devices, and a system for securing a microtrench filled with liquid mortar. This same approach can also be found in the Group-wide innovation contest organised each year, to which some 150 projects were submitted.

<sup>\*\*</sup> France's Association of Electrical and Environmental Engineering Companies.

#### **ENVIRONMENTAL RESPONSIBILITY**

## **Transforming** constraints into opportunities

SPIE and the environment

In line with its eco-responsible approach, SPIE has made respect for the environment a key driver of improvement for all of its operations. This vision is increasingly shared by businesses and government authorities in response to the new challenges of the green economy.

Despite the recent economic difficulties, environmental requirements in Europe have become increasingly demanding, shaped by rapidly changing regulations and ever-more ambitious government initiatives. To protect biodiversity in the United Kingdom, for example, the public agency Natural England is planning to test a compensation programme that sets objectives for each pilot region for the period 2012-2014. In France, energy-efficient buildings were more widely deployed during the year because of the government's recently introduced thermal regulations (RT 2012) for new buildings. Overall, a large majority of Europeans (95%) think that environmental protection is important and nearly eight out of ten (77%) feel that it can stimulate economic growth.

Against this backdrop, SPIE has decided to develop structured approaches to such challenges, as environmentally responsible cities, sustainable mobility, intelligent networks, and renewable and low-carbon energies. In the area of social housing, the first energy performance contract was signed in France as part of Europe's FRESH<sup>[1]</sup> project. SPIE is committed to reducing final consumption by 47%, leveraging a new financing model adapted to the needs of its customer ICF Habitat.

(1) Financing energy REfurbishment for Social Housing.

#### MANAGING **ENVIRONMENTAL IMPACT**

At the same time, the Group pursued its inhouse environmental responsibility programmes in the area of purchasing, which accounts for 50% of its business and 70% of its carbon footprint. At year-end 2012, 80% of purchases identified as sensitive had been assessed by EcoVadis, the Group's partner, using corporate social responsibility criteria. More than 70 new suppliers were added to the Group's representative supplier panel. The goal is not only to position them using a common yardstick but also to work with them to develop improvement plans, in particular to reduce the carbon footprint.

According to the most recent carbon analysis, SPIE's operations emit - either directly or indirectly - some 770,000 tonnes of carbon dioxide equivalent, which amounts to an average of 215 grams per euro of revenue. In addition to providing information about the carbon dependence of its operations, the analysis also makes it possible to target areas for improvement in terms of organisation, processes, practices, purchases and energy savings.

In the subsidiaries, actions plans have been prepared to optimise consumption, improve travel and recycle waste from electrical and electronic equipment. Among the measures deployed during the year were the extension of

#### **EVENT**

## **Tango Project:** less energy, more power

Designed to improve the security, reliability and quality of SPIE's information system support services, the Tango project will also help to reduce energy use by 80%. The operation calls for replacing 750 servers by 150 new systems located in a secure data centre. By pooling and outsourcing system infrastructure to a common platform managed by IBM, the project will substantially reduce operating costs, while limiting investment needed for infrastructure overhauls or extension programmes.

> SPIE's secure data centre, managed by IBM.



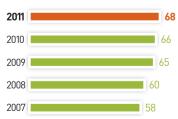
a new waste collection and recycling unit, in line with the European Union's Waste Electrical and Electronic Equipment (WEEE) Directive. Developed in partnership with the Recylum network, the unit collected 35.7 tonnes of this type of waste at 53 collection points. Programmes within the Group were also strengthened in 2011. With nearly 2,000 fleet vehicles to be renewed each year, SPIE pledged to order 730 electric vehicles by 2015, through a purchasing consortium involving 19 public and private companies.

#### A COMMITMENT TO SUSTAINABLE DEVELOPMENT

Nearly 70% of SPIE employees currently work under an environmental management system certified to ISO 14001 or equivalent standards. This practice is evolving, led by improvements made for new certification programmes and the sharing of best practices. In 2011, AFNOR, the French standards association, presented the new ISO 26000 corporate responsibility standard at a forum in France. A number of subsidiaries in France and the Netherlands have decided to implement the standard, which makes the environment a key focus of corporate responsibility programmes.

#### UNITS WITH ENVIRONMENTAL MANAGEMENT SYSTEMS CERTIFIED TO ISO 14001 STANDARDS

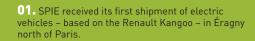
As % of total workforce





SPIE announces the acquisition of more than 700 electric vehicles





 $\begin{tabular}{ll} \bf 02. \ and \ \bf 03. \ Charging \ stations \ installed \ by \ SPIE \\ at the \ Renault facility \ in \ Pless is-Robinson. \end{tabular}$ 

**04.** Rapid charging station installed for Total as part of the SAVE project, the largest electric mobility experiment ever undertaken in France.

 $\pmb{05}.\,\text{SPIE}$  employees getting hands-on experience with the electric vehicles.









#### **UP UNTIL NOW, ELECTRIC VEHICLES** HAVE NOT SEEN VERY MUCH USE. IS THAT GOING TO CHANGE?

Even if sales of EVs remain low, we have seen a sharp rise in interest in this type of transport, which has been supported by most carmakers. It's an irreversible, global trend and charging stations will play a key role. The objective in France is to have 2 million electric vehicles by 2020, with 4.4 million charging stations.

#### WHAT CHALLENGES ARE INVOLVED IN SETTING UP THE CHARGING **INFRASTRUCTURE?**

The first is financial. Without widely available charging solutions, few people will buy EVs. At the same time, funds to widely deploy charging stations will not be available if there aren't a large number of EVs on the road. So it's a paradoxical situation. This type of vehicle also has limited range, which is another issue. Even if EVs will most often be recharged at home and at the workplace, extensive coverage of the territory and interoperable charging infrastructure are also needed. Lastly, system standardisation is very important. Europeans have not yet agreed on the type of plug to be used, which is slowing deployment. It's also important to anticipate the electricity challenges of the future, which means how to integrate the solution into a smart grid. A regulatory system is also necessary to avoid overloading the network. There's an advantage in encouraging users to recharge when network demand and national power output are low. There are also sustainable development issues to consider, since the energy consumed during peaks always has much higher carbon content.

#### **HOW DO YOU SEE SPIE'S COMMITMENT** IN THIS NEW MARKET?

We should first mention the company's own needs. SPIE has committed to ordering 730 electric vehicles by 2015, which represent 10% of its current fleet. That's the first step in developing this emerging market. The Group intends to play a role in all key segments - with large accounts for their own or their customers' vehicle fleets, with local authorities, in car parks and with small and mid-size businesses. SPIE has developed an innovative offer for renting charging infrastructure as well as partnerships with charging station manufacturers.

#### WHAT ARE SPIE'S ADVANTAGES **COMPARED WITH ITS RIVALS?**

Our Group benefits from its understanding of the market, its experience in the segment and its all-important upstream positioning. It also enjoys technical expertise across the entire value chain, from engineering and design to installation and maintenance. It's also important to remember our local network, which provides responsiveness and enables rapid intervention, as well as its ability to manage deployment projects over a very wide area. SPIE is destined to become a major European player in this market.

## **SPIE** powered by electricity



Gabriel Werlen. Department head at SPIE Île-de-France Nord-Ouest and member of the committee in charge of deploying electric vehicles nationwide at SPIE.

electric vehicles in service by 2015





Watch the video Handing over the keys to the first electric vehicle to SPIE



SPIE shares its experience in installing electric vehicle charging stations

01. SPIE took part in France's first nationwide conference on charging infrastructure, which was held in Nice.

02. The SPIE stand at the 2011 Exhibition for Mayors and Local Authorities.







SPIE presents its offering to local authorities

At the local level, teams pursued their initiatives to support environmental protection. Numerous measures were deployed to drive continuous improvement in such areas as awareness-building of everyday, "green" actions, online carpool platforms, training in eco-driving techniques, "clean" vehicle use, bike maps, and energy-efficient buildings. In eastern France, for example, employees can monitor their progress in eco-driving by comparing their fuel consumption with that of same-type vehicles in the subsidiary's fleet. To improve waste processing, an audit of each worksite was carried out to assess the material resources to be made available and to choose appropriate treatment channels. In offices. specially adapted environmental protection systems were introduced, for example, for sorting waste paper and transporting it to certified recycling centres.

#### **NEW GENERATION GREEN SOLUTIONS**

Solutions that take into account environmental considerations are increasingly popular with government authorities and businesses, even in those like transport and industry that may have a very negative impact on the environment. The 2011 report of France's Circle of Industry shows, for example, that more than 60% of French manufacturing companies see the green economy as an opportunity rather than a constraint.

To support this trend, all projects led by SPIE systematically include environmental criteria that focus on sustainable development issues. For long-term contracts, such as publicprivate partnerships, the Group responds to this challenge with a technical, administrative and financial solution that takes into account specific project requirements. For the Val-de-Reuil planned community, for example, the solution deployed aims for a 56% reduction in energy use through a 15-year programme to renovate public lighting and video communication installations

The partnership with Val-de-Reuil has led to the creation of a special company to ensure that quality standards are maintained until the project is completed.

The Group is also involved in major environmental projects, particularly in the area of energy infrastructure. In the Netherlands, SPIE is part of a national consortium that has launched construction of one of the country's largest onshore wind farms, whose 35 turbines are designed to withstand the most severe weather conditions. In France, the Group is working in partnership with EDF to install the enormous Toul-Rosières solar power station, one of the world's largest photovoltaic energy projects. Covering more than 400 hectares, the plant will be capable of meeting the energy needs of a city of 62,000 inhabitants through a network of 150,000 solar panels.

#### **IMPROVING** THE LIVING ENVIRONMENT

Thanks to its strong presence throughout France, SPIE is helping to raise-awareness among public officials and their constituents of the environmental challenges faced by cities today and sustainable regional development programmes, notably through public discussions. At the 2011 Exhibition for Mayors and Local Authorities in Paris, SPIE welcomed nearly 60,000 visitors to its stand, which focused on such issues as energy performance, intelligent buildings and new healthcare models. During the year, environmental stakeholders also came together for other events, like the international public-private partnership meetings and France's first nationwide conference on EV charging infrastructure.

To publicize its environmental approach more widely, SPIE also conducts a range of initiatives targeting young people, from sponsorship programmes to relations with schools. In 2011, a partnership agreement was signed with France's School for Energy, Water and the Environment (ENSE3), whereby the Group will contribute to educational programmes and showcase its own operations. Other initiatives in France's regions included a tour for 16 engineering school students of Bouygues Immobilier's Green Office® in Meudon, which is the first large-scale positive energy office complex.

#### THE ECONOMY

## **Reducing the Group's carbon footprint**

As part of its programme for lowering greenhouse gas emissions. SPIE plans to reduce emissions of  $CO_2$  equivalent by 20,000 tonnes within five years. The objective will be achieved mainly by improving work-related car travel through fleet renewals (in order to reduce emissions from internal combustion engine vehicles and integrate EVs), eco-driving techniques, and organisational solutions such as geolocation, in-house carpooling and telecommuting. Energy consumption in the Group's buildings is another emissions factor, which is expected to decline thanks to the optimisation of existing facilities as well as new energy-efficient buildings, like the new agency in France's Lorrain region. Lastly, suppliers will be made aware of purchase families that have the largest carbon footprint, in particular construction, air-conditioning and heating materials, cables and cable troughs. This critical challenge also requires analyses of materials used and of the environmental impact of end-of-life products.



SPIE's energyefficient agency in Metz (Lorraine),

#### REGION

## V'Lille: preserving the cobblestones of northern France

Following Lyon, Rennes and Paris, Lille has set up a network of self-service bicycles. Contracted to SPIE, the project required people with a range of professional skills, including special teams called in to install cobblestones in Lille's historic centre. In the long run, some 2,000 bicycles will be available in 210 stations, as well as 8,000 others under long-term leases.





#### CORPORATE CITIZENSHIP

# Living in a Supportive, inventive society





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In 2011, the Group pursued its corporate citizenship actions, which are intended both to respond to current social problems (from programmes that reach out to the needy to others that protect the vulnerable) and to promote artistic and cultural heritage in all its forms. One example during the year was SPIE's contribution to the acquisition of Environs de Southampton, a masterpiece by French painter Jules Dupré (1811-1889), which was purchased for the Musée d'Art et d'Histoire Louis-Senlecq in L'Isle-Adam.

#### SUPPORT FOR HUMANITARIAN PROJECTS

For years, SPIE has encouraged communityminded projects by providing human, technical and financial resources to initiatives launched by subsidiaries. These initiatives cover such areas as aid for local development, the creation of sustainable projects and support for people in disadvantaged countries.

Through its local network, SPIE supports a broad range of initiatives that promote the development of a more responsible world. These initiatives involve all aspects of life. including sports, culture, history, work, technology and human interaction.

In Europe, many local actions involve health and social insertion programmes. This was the case in the United Kingdom, where financial support was provided to the British Heart Foundation, and in France, where the partnership with Stade Toulousain Rugby Handisport has helped people to see physical disabilities in a different light.

Outside France, following its involvement in major operations with the non-governmental organisation Electricians Without Borders in Haiti and with the Borneo Orangutan Survival Foundation to support members of the Dayak tribe, in 2011 SPIE took part in a rural electrification project in Madagascar. With fewer than 5% of the country's rural population having access to electric power, the challenge is not only to bring electricity to a village of fishermen but also to support the emergence of economic initiatives that provide local inhabitants, especially young people, with work opportunities for the future.

#### A LONG-STANDING COMMITMENT TO CULTURE

Cultural patronage is aligned with the Group's expertise in developing and lighting cultural spaces as well as with its commitment to supporting projects that showcase a region's artistic heritage.

Through its network of local subsidiaries, SPIE has helped to launch a number of ambitious projects over the years. In France, it supports La Folle Journée de Nantes, which every year organises an outstanding musical event spotlighting a major composer.

Another example is the backing provided to the Musée d'Unterlinden in Colmar to restore and acquire works of art, organise temporary exhibitions and launch cultural and educational activities. In Paris, SPIE is one of a group of companies that support the Musée du Louvre in carrying out its broad-based cultural, educational and social missions.

#### **ALONGSIDE** THE ROYAUMONT FOUNDATION

For more than ten years, SPIE has helped to build the Royaumont Foundation's international reputation in the areas of art and culture. SPIE has provided support for its music programmes, particularly the discovery and promotion of young international vocalists, instrumentalists and composers.

It also renovated the library that houses the Francois-Lang music collection. Assembled just before the Second World War, this important private music collection includes nearly 1,300 handwritten and printed documents extending from the 16th to the 20th century and covering major composers from across Europe. It includes musical manuscripts and letters from Fauré, Debussy, Berlioz, Weber and Liszt, an annotated score of Debussy's Pelléas et Melisande, and original sheet music by major figures of the French Baroque period, like Couperin and Rameau, and the German romantic movement, from Beethoven to Schubert and Schumann.

#### DISABILITIES

## Disabilities: a unique experience

In December 2011, SPIE organised a day-long event in Cergy that was devoted to raising employee awareness of disabilities. The goal was to enable employees to better understand the phenomenon through interactive workshops. Participants were invited to move about in a wheelchair in order to better understand the importance of accessibility to buildings and to follow a path using senses other than eyesight. The event also focused on digital accessibility, with the presentation of appropriate IT resources, and on adjustments in workstations.



A day-long event to raise awareness of disabilities held at SPIE headquarters. Diversity enables everyone to learn more about others.





Watch the video SPIE and the

## Wheelchair basketball: a champion's viewpoint

To raise employee awareness of disabilities, SPIE decided to organise a sports event in partnership with Ryadh Sallem, three-time European Wheelchair Basketball Champion and President of CAPSAAA, an association that promotes sports, art, adventure and friendship. One of the goals is to dispel the idea that disabilities are a problem. Experience has shown that everyone may have problems, values are universal and exchanges between disabled players and company employees help to put an end to preconceived ideas.

#### COMMUNICATING RESPONSIBLY

## **Enabling the convergence** of communication, technology and CSR commitments

Thanks to a commitment that has developed into a corporate project called "SPIE, a player in the green economy," sustainable development is an integral part of the Group's operations, including its communication strategy. The objectives are to reaffirm SPIE's positioning as a leading company capable of providing customers with long-term solutions that meet society's environmental and energy challenges and to deploy a responsible corporate communication strategy that puts the principles of sustainable development into practice.

#### **CORPORATE PUBLISHING: ACCESSIBLE, ENVIRONMENTALLY** FRIENDLY INFORMATION

Enabling the convergence of traditional publications, mobile services and the Web has been a reality at SPIE since 2009, thanks to the Group's unique approach to corporate publishing. The approach combines the demands of corporate communication and sustainable development with the latest editorial and multimedia technological advances. These include an environmentally responsible "printing on demand" service, digital accessibility for the disabled, documents that can be read on all types of digital media, and exchanges on social networks. Both inside and outside the organisation, SPIE is recognised as a pioneer in the deployment of responsible communication tools.



See the 2010 Annual Report on you mobile



#### HIGH-TECH CORPORATE RESPONSIBILITY: THE WEB 2.0 RESPONSIBLE ANNUAL REPORT HYPERDOCUMENT

In line with the 2009 edition, which unveiled the new "Spie, a player in the green economy" corporate project and heralding the 2011 edition entitled All Players in the Green Economy, the 2010 SPIE Annual and Sustainable Development Report - The Green Economy, Our Vision and Solutions - outlines the progress made in the Group's commitment to developing while taking into account the scarcity of resources. Designed and produced as a hyperdocument - meaning a paper document with multimedia content accessible thanks to quick response codes - the report is at the heart of an unrivalled digital, multi-platform, online and offline editorial ecosystem that can be read via PC, Android, iPad and other devices. An exemplary document, its digital versions are handicap-accessible and can be printed "on demand" in just the right quantities, in line with the Group's commitment to environmental responsibility.

### **SPIE's commitment to communicating** responsibly again recognised in 2011

SPIE's efforts to develop lasting communication tools aligned with its social responsibility commitments have received many awards in Europe over the past few years, such as the Sustainable Development Grand Prize presented for the 2007 Annual Report. After receiving seven nominations in 2011 at the Digital Communication Awards (Berlin) and the European Excellence Awards (Amsterdam), as well as awards from the association Communication et Entreprises and the business journal Stratégies (Paris), SPIE's innovative, responsible approach to communication, illustrated by two of its publications released in 2011, triumphed at the 2012 Top Com Corporate Business 2012 awards.







#### THE FIRST DIGITAL ORIGAMI

If only books could unfold their content - like origami, the traditional Japanese art of paper folding - using new, augmented reality virtual technologies. Welcome to the ethereal world of A History of SPIE: Born and Reborn, a corporate document that for the first time integrates all of the possibilities offered by digital publications, mobile technologies and Web functionalities - including the paper. The free digital online version of this work is entirely handicap-accessible. SPIE has indeed come a long way since 1846.



See the book histoire.spie.com on your mobile phone SPIE cited at the Top Com awards





At the TOM/COM awards ceremony in Paris in February 2012 that was attended by Gauthier Louette (Chairman & CEO of SPIE Group) and Pascal Omnès (Communication Director, SPIE Group), SPIE was presented with four major trophies:

- The TOP/COM Gold Medal for publishing in the unlisted company annual report category.
- The TOP/COM special prize for sustainable development.
- The TOP/COM special prize for best oral presentation in the publishing section.
- The Grand Prize in the publishing section (all categories) for A History of SPIE: Born and Reborn.

#### Find out more...



Watch the video on the *Responsible* Annual Report hyperdocument



Watch the video on the first digital origami

## **Everyone committed** with our customers

Improving the living environment is a profession and sometimes a passion. For many years, in Europe and around the world, SPIE has been pursuing this path alongside tens of thousands of customers who trust in the Group.

Their ambitious goals are enabling the creation of new urban models, more intelligent facilities and buildings, and environmentally responsible industries. Our customers are the real driving force behind a sustainable change process that we at SPIE fully support.

**48 • REGIONAL AND INFRASTRUCTURE DEVELOPMENT** 

**58 • ENERGY** 

**68 • BUILDINGS AND INSTALLATIONS** 

## REGIONAL AND INFRASTRUCTURE DEVELOPMENT

## For an environmentally responsible, mutually supportive lifestyle

Regional development has taken a turn.

Urban and rural areas now communicate in a borderless world, while innovative new solutions for mobility, work and interaction are emerging, driven by the technologies of the future. Positioned at the heart of this change process, SPIE provides open solutions that are helping cities to reinvent themselves and improve community life for their inhabitants, with a focus on sustainable development.

#### SUSTAINABLE CITIES

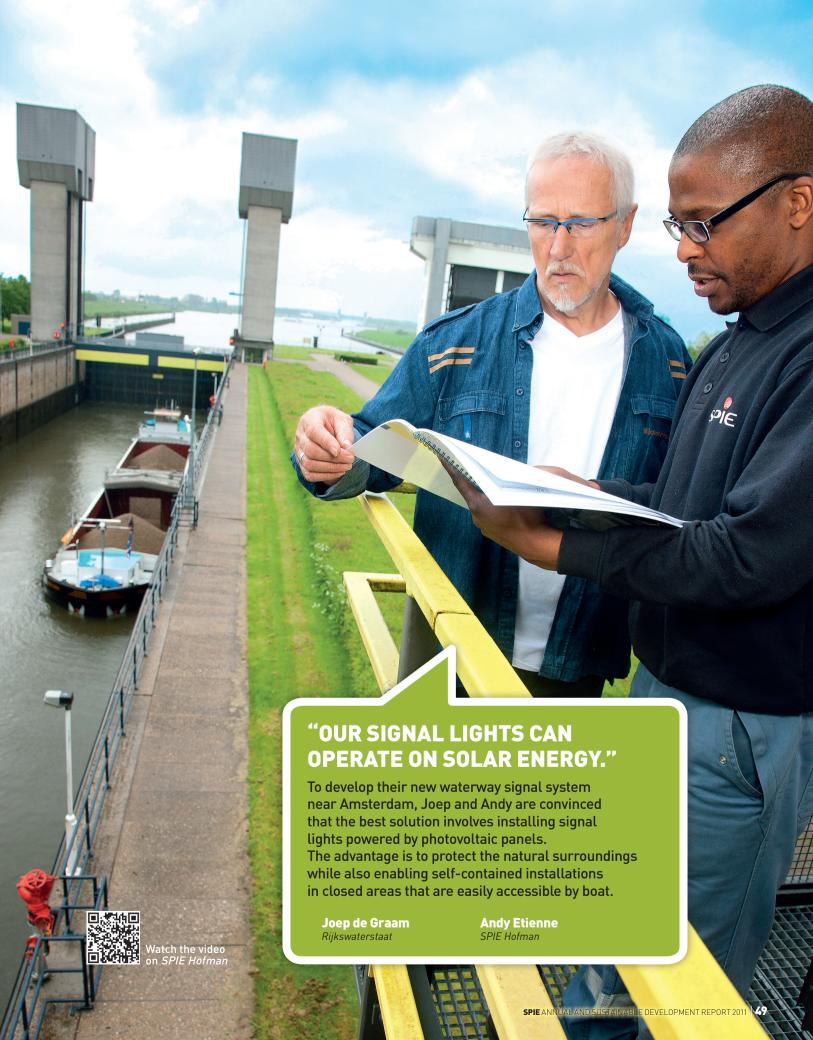
- Exterior networks and public lighting systems
- MAN and high-speed networks
- Public building equipment and management
- Production of renewable energies

#### **URBAN WELL-BEING**

- Urban transportation
- Mass transit
- Urban security and video protection systems
- Healthcare establishments
- Living, leisure and cultural spaces
- Enhancing the value of property assets

#### **REGIONAL DEVELOPMENT**

- Development of regional digital systems
- Management of water and sanitation facilities
- Electrical distribution networks
- Road transport
- Airport facilities
- Inland waterway and maritime transport



#### **SUSTAINABLE CITIES**

## A new vision

### of urban development

**OUR OBJECTIVES** 

- ▼ IMPROVE QUALITY OF LIFE
- **▼** PROTECT THE **ENVIRONMENT**
- **√** CREATE **SUSTAINABLE NETWORKS**



The public-private partnership in Moissy-Cramayel involves the financing, construction, maintenance and operation of public lighting, traffic signal, events lighting and video surveillance systems over a 15-year period.



SPIE and Saint-Étienne Métropole sign the first energy performance service contract

With its knowledge of eco-neighbourhoods, positive energy buildings, intelligent infrastructure and advanced communication systems, SPIE is leading the way to new lifestyles through solutions that promote sustainable urban development.

ncreases in the urban population and environmental problems are speeding the transformation of cities, in particular with the rapid development of "smart cities" that provide optimised management solutions for housing, infrastructure and technologies. In Fort d'Issy-les-Moulineaux just outside Paris, SPIE has been involved since 2011 in an innovative. 12-hectare eco-neighbourhood project that leverages new technologies and environmental protection. Using a touchscreen or smartphone, residents can regulate the heat, turn lights on or off, and open or close rolling shutters in their homes and monitor their energy use. The intelligent home fits perfectly into this friendly, distinctly "green" neighbourhood, which includes a four-hectare orchard.

#### **ENHANCING URBAN AREAS**

Urban renovation efforts are continuing in Europe, with a priority focus on sustainable neighbourhood development programmes as with the PNRU2 urban renovation legislation in France or the localism agenda in the United Kingdom. In line with these developments, the Group signed its first energy performance contract for a social housing programme in Schiltigheim in Alsace. The contract calls for reductions of at least 47% in energy use and of 60% in carbon emissions. Certified to France's HPE and BBC energy-efficiency standards and aligned with both the EU's FRESH<sup>(1)</sup> project and France's law against social exclusion, the project provides a unique home financing solution.

Faced with growing budget restrictions, cities are also looking for new ways to finance their renovation and expansion plans. In Moissy-Cramayel, in the Greater Paris area, SPIE has forged a 15-year public-private partnership contract designed to reduce costs while making the necessary investments immediately. Covering all aspects of the project, from financing to the reconstruction and maintenance of urban infrastructure, the solution will make it possible to renovate a network of 3,200 lamps and 9 intersection traffic lights and to deploy 22 video surveillance cameras.

#### OPTIMISED MANAGEMENT **OF PUBLIC PROPERTY ASSETS**

Whether for town halls, schools, museums or sports complexes, SPIE ensures the sustainable management of public buildings based on solutions that favour energy efficiency and renewable energies. In 2011, the first energy performance contract was signed with the Musée d'Art Moderne in Saint-Étienne, which has enabled a 40% reduction in energy use. This year, the Aquitaine Regional Council in southwestern France signed a contract with SPIE to operate and manage energy installations in 21 secondary schools, with a range of services that includes monitoring of water quality.

The Group also helps to improve public infrastructure through its positioning as an integrated operator capable of managing and supervising different urban networks. In the area of lighting, for example, it delivers innovative solutions like the CityNetworks system that ensures round-the-clock remote management of thousands of public lamps while providing customers with both quality service and energy savings. Another example is a car park lighting system that varies light intensity in various sections of the facility depending on the number of cars parked there. This solution won first prize in the Green Economy category at the 2011 Innovation awards.

(1) Financing energy REfurbishment for Social Housing.



#### **RENOVATING THE LOCAL GOVERNMENT ARCHIVES IN LYON**

In the Part-Dieu district of Lyon, a new type of energy-efficient building certified to France's HQE® environmental standards will soon be operational. Covering some 19,000 square metres, it will set new standards in terms of archive conservation, with a layer of insulation 70 centimetres from the wall to create a technical void that allows air to circulate.

SPIE's installations will maintain temperature at an optimal level (between 5° and 18 °C depending on the type of document) while quaranteeing relative humidity of 35% to 50%.

#### **MOVING TOWARD NEW URBANISATION MODELS**

The intelligent cities of the future are developing their energy networks, encouraged by international events like the prestigious Intelligent City of the Year award given by the Intelligent Community Forum (ICF). SPIE is already involved in meeting this challenge - especially in relation to the Greater Paris development programme - with solutions that focus on the environmentally responsible city, sustainable mobility and intelligent buildings. As part of that programme, the Group is helping to build the D2 Tower in the city's La Défense business district, a bold eco-project that is scheduled for delivery in 2014.

According to the EU, approximately two-thirds of final energy demand is for urban use and cities generate up to

of carbon emissions.







- **01.** SPIE was awarded a contract to operate energy installations for 21 secondary schools in France's Aquitaine region.
- **02.** Dynamic LED lighting at the Palais Lumière in Evian, France.
- **03.** Deployment of a very high-speed network in the city of Laval for France Télécom.



Optimising secondary school energy performance in Aquitaine







- 01. Lighting in a downtown pedestrian area.
- 02. Municipal and SPIE teams in charge of the VAL DE LUM project. From left to right: Gino Teyssandier, SPIE work supervisor; Marie-Claude Marien, Municipal Finance Officer; Fabrice Barbe, General Manager of Municipal Services; Maryse Gefflot, Municipal Public Contract Officer; Claude Godefroy, SPIE business manger; Stéphane Evain, VAL DE LUM Project Manager, SPIE.
- 03. The Town Hall lighting system.
- 04. Installing new public lighting enclosures.
- $\boldsymbol{05.}$  Lighting system in a residential neighbourhood of Val-de-Reuil.





In January 2011, the City of Val-de-Reuil signed its first public-private partnership with SPIE. Today, this community of 15,000 inhabitants in Upper Normandy has entirely renovated its public lighting and video communication installations.

#### **HOW DID SPIE BECOME INVOLVED** IN YOUR URBAN RENOVATION PROJECT?

We should bear in mind that Val-de-Reuil, which dates from the early 1970s, is the most recently created community in France. Thirty years later, our "new city" has aged and its modern equipment has become obsolete. An ambitious urban renewal project was launched in 2001 that enabled us to restore the city, enhance the comfort of its inhabitants and re-launch its urban and demographic development. Overall, 3,100 homes out of a total of 4,600 were renovated and upgraded. We modernised public areas, such as the pedestrian mall that characterises the community, and installed new facilities, a police station, a theatre and a sports stadium. With the completion of the renovation plan, we needed to launch a major urban project that would concern all neighbourhoods and all residents of Val-de-Reuil.

#### WHAT SPECIFIC URBAN DEVELOPMENT PROJECTS ARE COVERED BY THE PROJECT?

We wanted an extensive, end-to-end overhaul of our network infrastructure that would position our city as a pioneer in terms of environmental responsibility and services for residents. The solution involved a renovation of the public lighting network. This meant replacing more than 1,200 street lamps that are managed remotely by the CityNetworks system, deploying 50 kilometres of fibre optic cable for the digital terrestrial television and very high-speed networks, and building a 24-kilometre underground electrical network. This is a structuring project for Val-de-Reuil, which will benefit from cutting-edge services such as electric vehicle charging stations, electronic information panels and video surveillance systems. Looking to the future, we're also studying the deployment of home automation applications, for example, to allow older residents to continue living at home or to manage energy consumption.

#### YOU OPTED FOR A PUBLIC-PRIVATE PARTNERSHIP. WHAT ARE THE KEY POINTS IN THIS TYPE OF AGREEMENT?

This goal was to manage a sustainable €15-million, 15-year project, from initial studies and installation to maintenance and operations management, with a technical and financing package that would enable us to quickly meet our objectives. The project is already operational and will generate significant energy savings of around 56% for the renovated public lighting system and 26% for the city as a whole. A project of this type involves much more than just a contractual agreement. It is underpinned by the mutual trust and close relations we've established with our partners. To that end, we set up a company, Val de Lum, to oversee the contract alongside agents on the frontline. We meet every month to handle on-going issues and teams are positioned to step in very quickly if needed. This is a key success factor for all stakeholders.

# Lighting up Val-de-Reuil



Fabrice Barbe. General Manager of Municipal Services, Val-de-Reuil.

street lamps remotely managed by SPIE



#### **URBAN WELL-BEING**

## Improving residents' quality of life

SPIF delivers innovative solutions in such areas as the environment. education, housing, healthcare, safety, transportation, and leisure, with the goal of improving community life.

ith the OECD's launch of a wellbeing indicator for Europe in 2011, quality of life has become a major focus of urban policies. In the area of healthcare, for example, SPIE supports leading-edge telemedicine projects, as in France's Picardy region where 400 healthcare establishments will be equipped with installations enabling them to treat patients at a distance. Also in France, as part of the government's "Investing in the Future" plan, a major project was launched to develop remote diagnosis and monitoring tools to improve the quality of life for people with chronic diseases.

#### **Approximately**

million people in the European Union live in urban areas with more than 5,000 inhabitants. This represents more than 70% of the total EU population.



and local communities

#### **CREATING LIVEABLE CITIES**

Resident well-being depends on an array of services that SPIE provides in many European cities, ranging from reception areas in public buildings to public housing and leisure infrastructure. In the area of housing, the Group is involved in renovating neighbourhoods through programmes to develop housing estates and planned urban projects. As for sports facilities, in 2011 SPIE helped to renovate the Parc des Princes stadium in Paris, installing a lighting system for the pitch that complies with the specification standards required for the UEFA European Football Championship in 2016.

The Group is also committed to supporting urban prevention and security policies in city centres. Annecy, Strasbourg, Le Havre, Belfort, Mulhouse, Colmar and Argenteuil are among the many French cities that have contracted with SPIE. In Cernay, for example, the video protection project involved deploying 600 cameras throughout the area.

#### LISTENING TO THE CONCERNS OF TRANSPORT USERS

SPIE also supports innovative, environmentally responsible initiatives in the area of transit solutions, such as installing electric vehicle recharging infrastructure and self-service bicycle stations. In the Greater Lille area, the Group will gradually install 210 stations for 2,000 bicycles to be used by inhabitants.

SPIE also plays a major role in improving metro, bus and tramway lines by providing equipment and systems designed to make city travel easier. Following the installation of a system to manage traffic lights in Paris, this year SPIE has introduced a network traffic management and traveller information system

**JUR OBJECTIVES ▼** FACILITATE **URBAN LIVING ▼** SUPPORT THE HEALTHCARE SECTOR **▼** PROTECT RESIDENTS

> in Metz, France. It also provides a host of other services to make mass transit more traveller friendly, such as lighting networks and noise monitoring systems in metro stations.

#### **ACTIVELY SUPPORTING PUBLIC HEALTH**

The aging of the population, improvements in medical research and childcare are among today's public health concerns. Working with major players in the health sector, SPIE is deploying appropriate solutions, helping to build a range of facilities, from retirement homes with medical equipment to research centres like Cancéropôle in Toulouse. In the United Kingdom, the Group leveraged its expert skills in medical installations, from radiology departments to hydrotherapy facilities, in the project to build the Children's Hospital for Wales.

For years, SPIE has also been committed to improving hospital information and communication systems by providing direct access to personal medical records, interoperability between regional healthcare institutions and patient services in such areas as telephone reception and leisure activities. Through the UNIHA procurement cooperative, 34 regional and university hospitals will be equipped with new network infrastructure and WiFi systems to optimise their budgets.

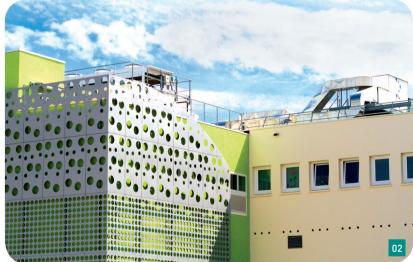


#### **DEVELOPING ONLINE SERVICES FOR INHABITANTS**

Following the migration of its telephone systems to IP standards, the Isere General Council contracted with SPIE in 2011 to enhance user service quality in 58 districts and 533 communities. This solution will also help reduce operating costs while optimising telephone system management by employees, who will be able to connect from their computers and install new telecommuting services from a virtual workspace. This approach is in line with current projects to break down the barriers separating communication channels with the goal of managing cities more effectively and providing residents with local services.



- **01.** As authorised agent of Groupement Ospitel, SPIE was chosen by the e-Santé healthcare cooperative in France's Picardy region to deploy a regional telemedicine platform that handles remote consultations, assistance and expertise services
- **02.** HVAC and plumbing systems for a medicalsurgical technical support centre at the university hospital in Nantes, France.
- **03.** A contract was signed to provide technical infrastructure maintenance services for the main campus and other sites at Imperial College, in the London borough of Kensington.
- **04.** For Line 3 of the tramway in Montpellier, France, SPIE provided technical services, including public lighting, low-voltage networks, traveller information systems, electronic ticketing and operating assistance.







#### REGIONAL DEVELOPMENT

## Supporting sustainable regional development

**JUR OBJECTIVES √** IMPROVE **TRANSPORT SYSTEMS ▼** PROTECT NATURAL **RESOURCES ▼** DEVELOP **INTELLIGENT NETWORKS** 

To help local officials implement their sustainable regional development projects. SPIE is leveraging its expertise in transport systems, energy networks and optimisation of natural resource use.

billion euros were released by the EC in 2011 for pan-European digital infrastructure projects, with at least 7 billion euros allocated for high-speed networks.

ustainable management of France's regions is supported by quantified greenhouse gas reduction targets as well as ambitious infrastructure objectives, such as closing the digital technology gap between urban and rural areas and pursuing balanced development projects. In line with these goals, SPIE is taking part in a range of structuring projects for the future. In the Bordeaux area, for example, a 1,060-kilometre fibre optic network is now up and running to facilitate contact with constituents and make the region more selfsufficient. In other sectors such as water, transportation and energy, the Group is also pursuing ambitious projects like one in the Netherlands to reorganise high-voltage lines, thereby making it possible to pool decentralised electrical power sources that use renewable energies.

#### MANAGING TRANSPORT INFRASTRUCTURE

Road transport accounts for 80% of total transportation energy consumption and 90.6% of emissions. SPIE is helping to reduce this impact with innovative solutions. Two examples are the deployment of no-stop toll plazas and centralised technical management systems. In Belgium, SPIE has been designated to ensure operational maintenance of the Cointe tunnel near Liège, with services that include dynamic signage, vehicle counters, remote management services, radio relaying, remote-controlled public lighting networks, closed-circuit video surveillance systems and the MAN network.In other sectors, such as airports, train stations, and maritime and inland waterway installations, the Group provides made-to-order solutions. For example, the international airport in Strasbourg contracted with SPIE to renovate its access control and video surveillance systems, with an upgradeable solution based on a single software interface. International airports in London, Paris and Amsterdam, among others, have already gained in efficiency thanks to SPIE's expertise in runway lighting, air traffic control consoles, passenger gateways, baggage control and sorting, centralised technical management systems and building management.

#### WATER. A VITAL RESOURCE

The growing interdependence of rural and urban areas requires disciplined management of natural resources. For the Bordeaux Urban Community, SPIE has for years managed treatment of wastewater from the giant Clos de Hilde treatment plant in Bègles. The plant's treatment capacity has tripled in recent years and continued to expand in 2011, when the Group installed electrical systems and automation devices. Water resources are also managed more effectively through the use of other expert skills, for example in risk prevention and flood management. The Brussels Water Management Authority (SBGE) contracted with

SPIE to renovate the Belliard underground storm water runoff basin to ensure that the city is protected in the event of flooding or heavy rainfall. The solution provides lasting protection for this important European city thanks to hydrostatic water level measurements, automatic systems to regulate flows to waterexchange collectors through hydraulic valves, and management of dynamic images.

#### **DEPLOYING** THE NETWORKS OF THE FUTURE

The aim of today's very high-speed network programmes is to provide coverage for all of France. SPIE is committed to helping meet this challenge through a range of expert capabilities extending from site location negotiations to optic networks tests and measurements. In Eastern France and Luxembourg, for example, an array of projects are being pursued, including one in Metz that seeks to integrate its digital development into a network of connected cities. The solution involves the sharing of public data, exchanges between educational institutions, mobility and accessibility services for residents, and citizen forums. In January 2013, Metz will host the national meeting of French cities awarded the Villes Internet label in recognition of their efforts to make digital technologies more widely available.





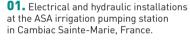


#### **IMPROVING ROAD TRAFFIC** IN GUADELOUPE

SPIE is committed to ensuring road safety and traffic flows in Guadeloupe, in line with the island's economic and social revitalisation programme. Supported by the European Regional Development Fund, the project calls for the deployment of new equipment that will enable a dynamic traffic management system. The goal is to provide real-time traffic monitoring.



acquires Poiret





- 03. Installing cables for traveller information and electronic ticketing equipment for the Nimes bus network.
- **04.** Deploying a fibre-to-the-home network in Metz for telecommunications operator SFR.





#### SUPPORTING FRENCH TELECOM SFR

French telecommunications operator SFR continues to rely on SPIE to help drive its growth, with solutions that extend from managing noise levels on worksites to improving the energy efficiency of its facilities. SPIE has made some 100,000 technical adjustments to the network and deployed 200,000 CPE<sup>(1)</sup> devices, which it currently maintains. Having risen to the challenge for SFR, the Group is reaping the benefits of its outstanding performance in the areas of sustainable development, innovation and customer service.

(1) Customer Premises Equipment.



## **ENERGY**

## Pursuing a balanced, sustainable energy mix

In an environment shaped by limited resources and threatened by global warming and the impact of human activities, no energy source – even one that is renewable – provides a totally satisfactory solution to the challenges of sustainable development. That's why SPIE gives priority to technologies, skills and methods that make a tangible difference in protecting our natural surroundings and easing the world's transition to new energies.

#### **LOW CARBON ENERGIES**

#### Renewable energies

- Solar energy
- Wind energy
- Hydraulic energy
- Biomass
- Biofuels

#### Nuclear

- Consulting and engineering services
- New construction
- Maintenance and dismantling
- Technical support

#### **FOSSIL ENERGIES**

#### Oil and gas

- Well services
- System integration
- Project expertise and assistance
- Skills enhancement
- Operating support



#### RENEWABLE ENERGIES

## <u>Increasing</u>





### the percentage of renewable green energies

**OUR OBJECTIVES** 

- **√** DELIVER END-TO-END **SOLUTIONS**
- **√** SUPPORT INNOVATIVE **PROJECTS**
- **▼** REDUCE THE IMPACT OF CO<sub>2</sub>

With a unique array of resources and expertise in photovoltaic, wind, biomass, geothermal and hydroelectric energy, SPIE is helping to transform many segments of the Europe energy landscape.

ccording to the European Union climate and energy package, €70 billion should be invested in renewable energies every year between now and 2020. This agenda is backed by major projects throughout Europe involving solar photovoltaic plants, new generation wind farms, the production of biodiesel, ethanol and other biofuels, and the development of hydroelectric installations.

The past year saw the emergence of ambitious projects that are speeding the integration of renewable sources into the energy mix. After helping to develop the Les Mées solar photovoltaic plant in Provence, with installed capacity of 90 megawatts, SPIE is involved in the project to build the giant Toul-Rosières power station in eastern France with photovoltaic capacity of 143 megawatts - enough electricity to meet the needs of a city of 62,000 inhabitants.

#### CAPTURING THE VALUE OF THE NATURAL ENVIRONMENT

The local use of natural forces such as water, wind and geothermal power represents a top priority for sustainable development programmes. During the year, SPIE took part in a project in the Netherlands to build one of the largest onshore wind farms, located in southern Flevoland province.

The Group leveraged its wide-ranging skills and capabilities to build the substation, install the cables, manage the electrical hook-ups and connect the farm - whose 36 wind turbines deliver installed capacity of 122 megawatts - to the country's power network.

In the area of hydraulic energy, SPIE has for years been involved in major projects throughout Europe, such as the Pracana and Veiros dams in Portugal, and in developing maritime and inland waterways, particularly in Belgium and the Netherlands. In 2011, a 450-kilowatt micro-power station equipped with control valves was built on the Rhone river to help restore the migration of fish between France and Switzerland. Designed to foster biodiversity, the power station, which is comprised of 66 interconnected basins, provides most of the attraction water at the lower end of the fish ladder so that the fish can move about freely.

#### **SPOTLIGHT ON SOLAR POWER STATIONS**

Despite a decline in solar energy purchase prices, the sector is expanding rapidly in Europe, led by the development of large, groundmounted photovoltaic plants. The trend indicates a changeover from traditional solar installations to full-fledged energy production power stations that are both profitable and reliable. During the year, SPIE installed electrical networks at the Chaillac solar power plant in central France, which is expected to provide power to some 2,500 households. At the same time, the construction of traditional solar energy installations with installed capacity of several hundred kilowatts in urban areas is continuing.

Encouraged by new regulations, such as France's RT 2012 building code for new construction projects, these installations benefit from SPIE's expertise in building-integrated and personalised solutions for such applications as hot water, air conditioning and heating systems

#### **BIOMASS:** A HIGH POTENTIAL MARKET

With the growing use of biofuels, biogas, biowaste and collective wood heating systems, the biomass market in Europe is expected to grow by 44% between now and 2020, in the energy sector as well as for community and industrial usage. SPIE designed and installed a methanisation unit on a hog farm in Brittany that will produce heat and electricity from organic waste, including pig manure and fatty waste from local food companies. The matter is consumed by acetogenic bacteria and the gas produced is then piped to a cogeneration engine. More generally, SPIE is working to improve biomass technologies through its participation in innovation clusters. Axelera, an environmental chemistry cluster in Lyon, brings together a number of companies to pursue projects involving lignocellulosic fibres, oil-bearing plants and other bioresources.

increase in photovoltaic installations worldwide in 2011, representing

a year-on-year increase from 17.7 to 23.8 gigawatts, according to the IHS iSuppli market research firm.

**01.** Design, development and production of shade structures with 250 kilowatt-peak photovoltaic capacity for the car park at the Regional Innovation and Entrepreneurship Centre in Dijon.

**02.** Electrical installations and automation devices for the boilers at the biomass cogeneration plant in Limoges, for Dalkia.

03. SPIE was awarded a contract to design and produce a 2,000 kilowatt wood-burning boiler, a 4,000 kilowatt gas-burning boiler and a heating network for the town of Graulhet.









#### **PROMOTING WOOD HEATING SYSTEMS**

An important source of renewable energy production, wood-burning collective and industrial heating systems could generate 5.2 million tonnes of oil equivalent by 2020 while enabling sustainable forestry operations. In southern France, SPIE was chosen by the town of Graulhet, winner of a regional sustainable development award in 2010, to build a 2,000-kilowatt wood-burning boiler, a 4,000-kilowatt gas-burning boiler and a two-kilometre heating network to supply the town's main buildings.



In the Netherlands, SPIE helps to build one of the largest onshore wind farms

SPIE teams carrying out various installation operations at the Toul solar energy plant.











**EDF Énergies Nouvelles decided** to build an enormous photovoltaic plant in Toul-Rosières in eastern France. Marc Chiron, the project manager, presents the plant, which is one of the world's largest photovoltaic energy projects with 1.4 million solar panels.

#### WHAT ARE THE SPECIAL FEATURES OF A GIANT SOLAR POWER PLANT LIKE THE ONE IN TOUL-ROSIÈRES?

Building a solar energy plant of this size was a challenge for EDF Énergies Nouvelles. The company had 18 months in which to complete a project that should have taken several years. We were able to meet the challenge thanks to our partner companies, which demonstrated a high degree of professionalism and enthusiasm for this exceptional project. We take pride in the fact that the plant will soon be producing enough electrical power to meet the needs of nearly 55,000 people.

#### **HOW DO YOU VIEW SPIE'S CONTRIBUTION** TO THE PROJECT?

We chose SPIE to manage the electrical hook-ups for a part of the plant that produces 60 out of a total of 114 megawatts. SPIE's teams had already demonstrated their experience in this type of work during an earlier project with EDF Énergies Nouvelles in the Landes region of southwestern France. Once again, they leveraged their expertise, team spirit and professionalism throughout the entire project.

#### WHAT WILL BE THE PROJECT'S LONG-TERM **IMPACT FOR THE MEURTHE-ET-MOSELLE DEPARTMENT AND FOR LORRAINE AS A WHOLE?**

In terms of business activity, hundreds of people were involved in the project, of which more than half were from the region. Both the department and the region are now assured of significant tax revenue for all the local communities. More generally, the power plant enhances the region's standing. It clearly shows that it's possible to revitalise sites that have fallen into disuse through innovative, environmental solutions using renewable energies. A reception area for the public will present the base's past as a military installation as well as its transformation and future as a solar photovoltaic energy plant.

## Toul-Rosières soaks up the sun



150

kilometres of cable to connect the photovoltaic panels



#### **NUCLEAR ENERGY**

## **Sharing**



### power plant safety requirements

**OUR OBJECTIVES** 

- **▼** SUPPORT NUCLEAR **PROJECTS**
- **V** OPTIMISE CYCLE **MANAGEMENT**
- **V** PROTECT THE **ENVIRONMENT**

From construction projects to power plant dismantling operations, SPIE has for years helped to effectively harness nuclear energy and improve the fuel life cycle.

een as a long-term solution for reducing carbon emissions, the nuclear industry began 2011 on a high note. However, the Fukushima accident in Japan revived public fears, leading governments to reconsider their policies in this sector. In France - the world's second largest producer of nuclear energy after the United States - the Atomic Energy Commission launched a nationwide audit to verify the condition of its 58 reactors. The audit recommended additional safety requirements to ensure the installations' vital functions in case of a natural disaster or other exceptional event.

These new requirements have provided added demand for SPIE's services, in particular for initial studies as well as for preparatory work prior to shutdowns and services to keep plants operating longer. In 2011, the Group posted organic growth of 10.4% in the sector and made two acquisitions - ATMN and Reyes Industries - which have strengthened its expertise in mechanical maintenance, electrical networks, automation devices and industrial information systems.

#### **MEETING CHALLENGES ALONGSIDE OPERATORS**

While construction projects have been maintained, particularly in the United Kingdom where several EPR reactors are scheduled to be built in the years ahead, the new safety requirements offer an especially favourable outlook for projects to upgrade existing facilities. In particular, the challenge involves fortifying the control rooms and installing self-sustaining generator units to ensure power during electrical shutdowns.

At the same time, operators are continuing to monitor the quality and reliability of their facilities, from electrical distribution to measurement and control instruments. At the La Hague plant, for example, Areva contracted with SPIE to manage all preventive and corrective maintenance operations, including the upkeep and repair of remote handling devices and management of video surveillance systems.

Lastly, efforts to enhance personal protection continue to be a top priority. During the year, the EDF engineering centre in Tours contracted with SPIE to upgrade its systems for evacuating

smoke in the event of fire.

The improvements concern approximately ten machine rooms at facilities in Saint-Laurentdes-Eaux, Chinon and Cruas. More generally, the Group has stepped up its initiatives in this area, from worksite inspections to event organisation. During the year, a daylong event on electrical and fire risk held at the EPR plant in Flamanville was attended by 3,200 people.

#### SITE CLEAN-UP AND DISMANTLING

Europe's nuclear power plants have aged in the thirty years since they were first widely deployed. According to a European Commission study, between 50 and 60 of the 155 reactors currently operating in the EU will be dismantled by 2025. This trend has accentuated following the accident in Fukushima, which has incited a number of countries, such as Switzerland and Germany, to gradually withdraw from the nuclear energy sector

In France, SPIE is already involved in dismantling such installations as Brennilis, Bugey 1, Creys-Malville and Saclay. During the year, the Atomic Energy Commission centre in Fontenayaux-Roses contracted with the Group to build a shielded cell to prepare for the clean-up and dismantling of the Petrus cell, a research installation designed in the late 1960s. Upstream studies to analyse the radiological condition of the premises, characterise the waste and design encapsulation solutions will be crucial to the success of this operation in a potentially hazardous environment.

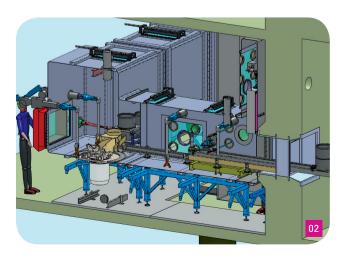
nuclear reactors are currently operating in 31 countries and 61 more are being built, according to the Power Reactor Information System database (April 2012). Four countries - France, Japan, Russia and the United States - account for 244 of the units.



#### **CREATING A TRUE SAFETY CULTURE**

In addition to implementing best practices for servicing, materials efficiency and risk prevention systems, safety in a nuclear power plant requires that all tasks be carried out with the utmost care and that practices and results obtained be systematically challenged. While SPIE is improving its performance year after year, as reflected in a number of safety awards from France's Association of Electrical and Environmental Engineering Companies (SERCE), on-the-job behaviour represents a major challenge. The Group deploys an integrated approach that extends from testing skills and audit procedures to motivating employees and developing their sense of responsibility.

- **01.** Fire installation maintenance operations for AREVA at the facility in La Hague, following an extension of the site's automatic fire detection system.
- **02.** A shielded cell was built in preparation for the clean-up and dismantling of the Petrus cell for the Atomic Energy Commission centre in Fontenay-aux-Roses.
- **03.** As part of a consortium for which SPIE is the authorised agent, the Group's teams were awarded a contract by EDF for all general electrical installations at the EPR plant in Flamanville.





SPIE acquires ATMN (mechanical maintenance and industrial cleaning)

> SPIE acquires Reyes Industries (electrical systems and automation devices)







#### OIL & GAS

## **Optimising** the use of fossil energies



- ▼ SUPPORT EACH OPERATOR
- **▼** DELIVER CUSTOMISED **SERVICES**
- ▼ PROTECT THE ENVIRONMENT

Present in the Middle East, Africa. the Asia-Pacific region and Europe. SPIE leverages its extensive capabilities and local resources to support oil and gas companies in their exploration projects and operations.

espite a slowdown in the global economy, demand from emerging markets continued to drive industry growth in 2011, which was also fuelled by geopolitical instability in the Middle East and Africa, the drawing down of petroleum inventory in Europe and the accident in Fukushima. As a result, the price of oil soared during the year to \$111 a barrel on

While reorganising its operations in the most unsettled regions, including Iran, Iraq, Yemen, Libya and Nigeria, SPIE benefited from new positions in Saudi Arabia and strong development in Indonesia. Overall, the Group improved its portfolio of operations in anticipation of solid growth in the oil and gas market in 2012.

The average price of a barrel of oil rose from \$80 to \$111 in 2011, a one-year increase of nearly

#### **POOLING EXPERTISE AROUND THE WORLD**

Alongside industry operators, engineering firms and contractors, SPIE continued to leverage its skills and capabilities in a fast-growing market. In electrical equipment and instruments, for example, the Group worked for the third year in a row with Ponticelli offshore Angola to connect two FPSO platforms to underwater installations. In Brunei, Total signed a new fiveyear maintenance contract with SPIE. The two companies have worked together for 12 years on onshore units that process an average of 3.5 million cubic metres of gas a day without recording a single lost-time accident.

#### MORE EFFECTIVE RESOURCE **USE AND MANAGEMENT**

Ensuring gas production in increasingly difficult conditions, such as in deep water or oil sands, requires the use of sophisticated methods and technologies.

On the Jubail site in Saudi Arabia, SPIE is helping to bring on stream one of the world's largest refineries with capacity of 400,000 barrels a day. From instruments to alarm systems, the Group's expertise in commissioning ensures rigorous control during the start-up phase. This is especially challenging since the installations are required to process oil that has high sulphur content and is rich in heavy residues.

In the area of storage, the Group has developed installations that comply fully with operator requirements. In Rotterdam, Rubis contracted with SPIE to install ultramodern storage facilities. The Group leveraged its expert skills to improve oil depot performance, securing electrical equipment, deploying instruments that continuously measure and monitor tanks, and increasing traffic and transport capacity.

#### **LOCAL HIRING** AND TRAINING INITIATIVES

For years the Group has taken part in hiring events around the world. At the 2011 Elite Careers Forum in Luanda, Angola, SPIE's local teams welcomed more than 800 short-listed applicants with professional skills to their stand. Intended to fill both technical and managerial positions, this approach had already proven successful last year in Johannesburg, South Africa

The Group also excels in the area of skills enhancement and has developed specialised units in Africa and the Middle East. With experience in designing tailored training programmes certified to the highest professional standards and in sharing its industry-leading expertise with teams in the field, SPIE is ideally positioned to develop the talent of people in its host communities.



#### MANAGING LIQUEFIED NATURAL GAS PRODUCTION

With petroleum resources becoming increasingly scarce and operating costs on the rise, more and more industry operators are turning to the production and storage of liquefied natural gas (LNG).

In Qatar, SPIE has for years been involved in producing LNG in the industrial city of Ras Laffan, deploying its expertise through an operating agreement that includes maintenance of equipment for pumping and treating seawater used to cool plants. In this country that has become the world's leading producer of LNG, the Group provides qualified workers, with a broad array of training programmes covering technical skills, academic subjects, personnel safety and installation security.

In the area of exploration, SPIE recently set up operations in Australia, a country that is expected to triple its production of LNG by 2035 and to surpass Malaysia and Indonesia, which are currently the largest producers in the Asia-Pacific region.







**01.** SPIE manages operations and maintenance of the water treatment plant in Ras Laffan for Qatar Petroleum.

**02.** A contract for the maintenance of production installations has been signed for the Amenam facility offshore Port Harcourt, Nigeria. Comprised of two production facilities, living guarters, two well platforms and two flares on tripods, the facility produces 80,000 barrels a day and can transport gas to the liquefaction unit on Bonny Island.

**03.** Logging studies are conducted for a range of oil companies.



SPIE partners with the Kazakhstan Ministry of Education and Sciences



Total renews its confidence in SPIE

## **BUILDINGS** AND INSTALLATIONS

## Promoting environmentally responsible performance

Sustained by technological innovation and changes in business practices, environmental performance is a key competitiveness factor in the industry and services sectors. With the wider use of France's HQE® and BBC building standards and the integration of sustainable development concerns within the framework of ISO 15392, SPIE is providing a new vision of buildings and their installations, with the aim of reducing greenhouse gas emissions by 80% between now and 2050.

#### **SERVICES AND HOUSING SECTOR**

- Energy efficiency
- Electrical engineering
- HVAC engineering
- Mechanical engineering
- Multi-technical and multi-service maintenance

#### **INDUSTRY**

- Automation platforms
- Instruments
- Energy distribution
- Information networks
- Production unit transfers

#### **COMMUNICATION SYSTEMS, IT FACILITIES** MANAGEMENT AND DATA CENTRES

- Converging networks
- Unified applications
- · Mobility, safety and video surveillance solutions
- Servers and workstations
- Data centres
- Information system outsourcing



#### SERVICES AND HOUSING SECTOR

## Ensuring overall property performance



**OUR OBJECTIVES** 

**V** COMBINE THE BEST **EXPERTISE** 

**▼** ENSURE SUSTAINABLE CONSTRUCTION

**V** OPTIMISE BUILDING **SERVICES** 

To support property managers, SPIE delivers solutions adapted to the growing complexity of buildings and to sustainable development requirements thanks to a close-to-the-customer network that extends across Europe.

ith the launch of the RT 2012 regulation<sup>[1]</sup>, the wider deployment of HQE® and BBC-compliant buildings and the renovation of homes as part of the PNRU programme<sup>(2)</sup>, the services sector continues to change, driven by increasingly demanding energy efficiency and environmental protection legislation.

During the year, the Group was involved in major property operations such as the construction of Atoll, France's first eco-shopping mall, near Angers. SPIE leveraged its expert skills in electrical distribution, dynamic signage and HVAC engineering for this impressive 91,000-squaremetre building, which features innovative architecture and was designed to comply with France's first HQE® standard for shopping centres.

#### A NEW APPROACH TO OUTFITTING LARGE BUILDINGS

Optimising energy management in service-sector complexes requires new technologies, such as double flow ventilation systems. Installations are becoming more intelligent, thanks to infrastructure improvements and inter-system exchanges for safety, HVAC and other functions. At the new headquarters for France's Intellectual Property Institute (INPI), a 12,000-squaremetre wood and glass building, SPIE applied its leading-edge skills in electrical power and renewable energy. Integrating bioclimatic architecture to reduce the need for heating, cooling and lighting systems, the building, located in Courbevoie near Paris, will produce more energy than it absorbs, its consumption being

offset by the energy produced by 1,100 square metres of photovoltaic panels.

At the same time, operating and maintenance costs are being reduced considerably since buildings can be managed depending on their occupancy or at a distance through real-time data.

AXA, for example, signed a three-year contract with SPIE to provide preventive and corrective maintenance services for its installations in Nanterre, which cover a total surface area of 100,000 square metres. The Group's services also include facilities management and equipment regulation, optimisation of energy and fluids, and the introduction of an HQE® energyefficiency operations process.

#### RENOVATING **HOMES AT A FASTER PACE**

Upgrading city buildings, which account for more than 40% of European energy use and carbon emissions, mainly concerns the housing sector. In Toulouse, SPIE was involved in the construction of 173 social housing units in the Edgar Degas programme. The buildings were designed to comply with France's BBC-Effinergie® standards, which aim to limit annual primary energy consumption to 50 kilowatt hours per square

A housing programme's function can also be tailored to occupants' needs. In Saint-Martind'Hères, near Grenoble, a new building has been designed for disabled residents who want a living environment that takes into account their handicap. Following working groups that involved

the programme's architects, SPIE teams designed a specially adapted HVAC solution that includes smoke-removal systems, floor heating that is also used to cool the units, and solar sensors to produce domestic hot water.

#### **SUPPORTING SERVICE SECTOR OPERATIONS**

Whether healthcare institutions, train stations, logistics facilities, recreational centres or laboratories, professional buildings are also equipped to help improve operators' day-to-day performance. As part of a project to build a new 32,000-square-metre building for a hospital in Louvain, Belgium, SPIE installed specially adapted HVAC systems for the emergency care unit, ten operating rooms and new intensive care sections. In another project, at the Rungis market near Paris, the Group created a service centre designed to improve management of the supply chain, from materials reception to storage and disposal.

<sup>(1)</sup> French thermal regulation to be applied - depending on the sector - between 2011 and 2013.

<sup>(2)</sup> France's national urban neighbourhood renovation programme.





SPIE acquires Porraz (HVAC engineering)













of the energy used in the European Union is consumed by public and private buildings, of which 75% by housing units, according to the Buildings Performance Institute Europe in Brussels.

- **01.** The GL Event facilities management contract was renewed. It covers management and coordination of all technical operations at the Square de Bruxelles centre, as well as management and optimisation of energy use.
- ${f 02}$ . SPIE installed high and low-voltage electrical systems and roof-top photovoltaic panels at the new INPI headquarters in Courbevoie, near Paris.
- **03.** HVAC engineering and electrical solutions were provided for the Morocco Mall in Casablanca. It is the biggest shopping centre in Africa and one of the five biggest in the world, with a total surface area of 250,000 square metres.
- 04. For Bouwfonds Marignan, SPIE installed electrical, high and low-voltage, access control and fire detection systems in 12 HQE-compliant buildings comprising 290 housing units in Lyon's new Confluence district.







Trevor Quintyne, SPIE Matthew Hall.

As the preferred supplier of Broadgate Estates, the well-known London property manager, SPIE provides all basic and auxiliary services for two new prestige buildings, Broadgate Tower and 201 Bishopsgate. The Group delivers specialised solutions in electrical infrastructure and climate control as well as minor preventive and corrective maintenance services. In recognition of SPIE's flawless commitment, Broadgate Estates presented Trevor Quintyne, the supervisor in charge of the two sites, with an award for excellence, a distinction that is rarely attributed.

**Broadgate Estates** is an international property management firm, recognised by customers for its unrivalled portfolio of mixed-use developments and landmark properties throughout the United Kingdom.

#### **WHY DID YOU CHOOSE SPIE MATTHEW HALL RATHER THAN ONE OF ITS COMPETITORS?**

Our cooperation began when our company took over a building for which SPIE Matthew Hall provided services and was included in the list of preferred suppliers. In 2009, SPIE Matthew Hall was awarded a contract over four other competitors. Our final decision was influenced by both the cost and the service the company committed to providing.

#### WHAT WERE THE MOST SIGNIFICANT **ASPECTS OF THE SERVICES TO BE DELIVERED FOR SITES LIKE BROADGATE TOWER?**

Most importantly, we were looking to forge a partnership that would enable us to ensure top quality service for our buildings' occupants. We wanted a provider of mechanical and electrical solutions capable of delivering a basic service with a planned preventive maintenance programme as well as a supplier that could respond quickly to requests submitted to the support office and deploy solutions rapidly.

#### **HOW WOULD YOU DESCRIBE** TREVOR QUINTYNE'S CONTRIBUTION TO THE PROJECT?

Trevor is the site supervisor and his involvement in ensuring that the site functions smoothly is unequalled. He always does more than is expected of him. He is courteous and friendly when we ask him questions and always gets back to us quickly. Above all, Trevor wants to ensure the project's success. The quality of service he provides and his commitment are truly exceptional. He fully deserves the award for excellence that we gave him.

## **Broadgate Estates** cares for its occupants



Jason Collet, Engineering Manager, Broadgate Estates.

Trevor has all the qualities we expect in a service provider and his commitment is much to SPIE's credit.

is the height of Broadgate Tower, the fourth tallest building in London



www.broadgateestates.co.uk

#### **INDUSTRY**

## Working

### together to create industrial value

**ECTIVES** √ IMPROVE INDUSTRIAL **EFFICIENCY** 

**▼** EQUIP PRODUCTION **FACILITIES** 

OUR OBJE

▼ MANAGE ENVIRONMENTAL **IMPACT** 

Through its expertise centres, which are widely recognised across Europe, SPIE helps industrial companies to sustainably develop their facilities. improve their production processes and ensure the efficiency of their manufacturing resources.

Factor o

SPIE is committed to reducing greenhouse gas emissions by a factor of 4 over a 40-year period (by 2050). This means producing the same amount while using four times less raw material and energy.

he Group's services for industrial companies in Europe improved in 2011, led by the energy, pharmacy, food and mining sectors, in an environment that was favourable to the deployment of innovative solutions capable of simultaneously delivering performance, safety, control procedures and cost reductions. Against this backdrop, the Group strengthened its local industrial services network, with acquisitions like Reyes Industries in France's Rhône valley.

The year was also shaped by SPIE's success in the aviation sector. The Group will install a 16-hectare multi-technical maintenance solution for Airbus Industrie's sites in Toulouse, representing a technical surface area of 44,000 square metres. In La Barigoude, a site that hosts one of two Air France-KLM data centres. SPIE was awarded a ten-year contract to ensure the installations' energy performance and the data centre's continuous operations. The Group is also leveraging its advanced expertise in mechanical, automation and electrical systems to outfit an aircraft tire production line for Michelin.

#### **IMPROVING INDUSTRIAL EFFICIENCY**

A specialist in outfitting industrial facilities, SPIE has developed solutions adapted to different types of buildings, with expertise that extends from electrical systems to HVAC installations and process supervision. To double production capacity for Pierre Fabre, the European leader in skincare cosmetics, the Group helped to equip a 17,500-square-metre facility with air processing services, air-conditioning systems and clean rooms. SPIE was also in charge of the production and distribution of technical fluids like steam, cold water, nitrogen and compressed air that are used in the manufacturing units. Lastly, energy and waste management was enhanced with the deployment of a procedure aligned with France's HQE® environmental standard.

The Group is also recognised for its mechanical and electromechanical expertise, covering production unit installation, industrial information systems, automation devices, and maintenance of compressors and steam turbines. In the pharmaceutical sector, for example, SPIE deployed its expertise in life sciences and the production of injectables for Virbac, the world's eighth largest producer of veterinary pharmaceuticals.

#### **OPTIMISING MAINTENANCE AND SERVICES**

Throughout Europe, SPIE provides services to industrial companies to ensure continuous operations of their production facilities, especially through the deployment of remote management tools like Telview®. Combined with a specialised customer service centre, this solution makes it possible to schedule and monitor all maintenance operations on line. Thanks to its local presence, the Group can also deliver responsiveness and security in very special circumstances. For example, Ugitech, the world's leading producer of stainless steel bars and wires, contracted with SPIE to service its electrical installations without any loss of production. The challenge was met thanks to very short machine shutdowns that were staggered

SPIE's services also help customers to more fully integrate industrial regulations, especially in the area of environmental protection. In 2011, at a Sanofi Aventis facility near Montpellier, a smoothing basin was installed to recover and blend effluent from the various buildings on the site. Comprising electromechanical equipment for the pumping station, the installation of cables and automation devices, conditioned waste storage facilities, and operations units, the Group's solution makes it possible to monitor the quality and quantity of effluent before it is released into the Montpellier wastewater system.













#### **CERN: A MODEL INDUSTRIAL PARTNERSHIP**

Alongside the European Centre for Nuclear Research (CERN), one of the world's most prestigious scientific laboratories in the field of basic physics, SPIE has for years been involved in projects that require its leading-edge expertise in electrical installations for industrial applications. With an underground ring measuring 27 kilometres in circumference in Switzerland and France, the site needs regular servicing that requires extreme precaution and especially high safety levels. From logistics to work scheduling, the Group provides a full range of tools and methods to handle the very large difference in workloads between the operational phases and periods of machine downtime.

- 01. In Freeport, Texas (US), Dow Chemical outsourced the construction of a chlorine and nitrogen production plant to Samsung, which in turn contracted with SPIE to install the electrolytic generator.
- 02. A mechanical maintenance contract was signed with Petrogal for the Matosinhos Refinery. The contract covers preventive and corrective maintenance services for all static and dynamic equipment, as well as metal structures and pipes.
- 03. Electrical installations and HVAC engineering systems for Sulky's new 25,000-square-metre production plan in Chateaubourg, which manufactures seed drills and fertiliser spreaders.
- **04.** In line with its development strategy and as part of its project to expand its Soual production site by 17,500 square metres, Pierre Fabre, the skincare cosmetics manufacturer, contracted with SPIE to provide air processing services, air-conditioning systems and clean rooms as well as production and distribution solutions for technical fluids.



#### **Polyol Belgium**

- Dow Chemical's polyurethane division
- Founded in 1989
- 4 production lines
- Annual output of **65,000** tonnes
- 42 employees





#### WHAT WERE THE CHALLENGES OF THE DOWGEP PROJECT FOR POLYOL?

This major project was critically important for Polyol because of its impact on the production lines and safety and because of the budget involved. It was essential for everything to be carefully prepared in terms of preliminary studies and work schedules, then perfectly orchestrated during the deployment phase so that each line came back on stream as planned while complying with safety guidelines.

#### WHY DID YOU CHOOSE SPIE RATHER THAN ONE OF ITS COMPETITORS?

I was very quickly won over by SPIE because they had already carried out similar projects on other sites and it was interesting to have their feedback on such a complex, multidisciplinary project. Their understanding of the site and technical skills in instruments and electrical systems clearly represented an advantage. I also wanted to develop a partnership with a single service provider capable of managing maintenance as well as new programmes and of deploying specialised skills for each new project. That's why I contracted with SPIE to manage all aspects of the DowGEP project.

#### **HOW WAS THE PROJECT DEPLOYED?**

We began by carrying out a preliminary study with SPIE. Then their engineering and design department conducted a more detailed study that included choosing instruments, preparing a budget and scheduling the work. In September 2011, when it was time for the installation stage to begin, each line was shut down one at a time over a two-week period. As the tests were successful and the new equipment was immediately integrated, the production lines were restarted exactly as planned. The fact that SPIE was responsible for all electrical, instrument and piping services certainly helped keep the project on schedule.

#### IN WHAT WAYS WERE YOU SATISFIED WITH SPIE?

The maintenance team's experience proved valuable to the SPIE project team, which was able to adjust to the site quickly and more fully understand the process. Our teams also benefited from SPIE's feedback on this type of project. The team from Emerson, which was in charge of supplying the safety automation system, cooperated very effectively with the Polyol and SPIE teams. Today, I'm very satisfied with everything we've accomplished in all phases. If things continue this way, I clearly would like to forge a long-term partnership with SPIE.



www.dow.com

## **Polyol Belgium** is attentive to its process



Bernard Deloffre. Director of the Polyol Belgium site.

I was very quickly won over by SPIE because they had already carried out similar projects on other sites and it was interesting to have their feedback on such a complex, multidisciplinary project.

That's the ten-year safety integrity level for the DowGEP project

#### **COMMUNICATION SYSTEMS, IT FACILITIES MANAGEMENT AND DATA CENTRES**

## Accelerating the changeover to digital services

In a technological environment that is changing in response to new energy and environmental challenges, SPIE is helping organisations to develop high-performance, flexible information and communication systems adapted to their service and safety needs.

▼ STREAMLINE ORGANISATIONS ▼ SUSTAINABLY REDUCE COSTS ▼ REDUCE ENVIRONMENTAL

onverging offers that combine infrastructure and managed services are very much in demand from government agencies and companies looking to improve their day-to-day performance. This trend calls for integrated management of information and communication systems, with ever-stronger requirements in terms of service levels.

In 2011, for example, UGAP, a French government purchasing agency, awarded SPIE a major contract for information system security, a sector that expanded by more than 10% during the year, according to the Gartner Group. Governments' security needs are increasing at a fast pace, led by demand for solutions that protect data, deliver uninterrupted service, comply with current legislation and standards, and allow the risk-free integration of new communication tools

billion dollars, which the International Data Corporation estimates will be the size of the **European unified communications** market in 2015, a threefold increase over 2010.



and communication systems

#### **ENSURING** THE CONVERGENCE **OF COMMUNICATION SYSTEMS**

In the field of unified communications, new real-time uses are developing, shaped by the unrestricted sharing of data, documents and applications. This change is being sustained by the development of IP networks, which serve as the backbone of today's companies. To carry out its mobility projects in a multi-site environment, Interlek contracted with SPIE for the LAN architecture and Cisco ToIP that will provide the quality and safety required by this multinational company, which must verify a wide range of products, processes and systems.

Easy to manage and enabling substantial cost reductions, these solutions respond to the sometimes complex problems faced by organisations, especially in sectors like banking and industry. For Crédit Agricole, for example, the challenge was above all to improve customer service quality, with a centralised solution allowing 24,000 subscribers to connect to the same server, while enabling advisors in the field to more effectively manage their phone calls.

#### **UPGRADING TODAY'S ORGANISATIONS**

Information systems respond to new requirements for design, infrastructure and related services. In the healthcare sector, SPIE has for the past three years worked closely with the Cannes Hospital, which wanted to thoroughly renovate the information system for all its installations. After defining the communication network's overall organisation (firewalls, network access control, LAN network and fibre optic terminals) for 55,000 square meters of buildings, the Group is today in charge of related services with the deployment of 500 WiFi terminals.

Because of the exponential increase in information, data centres play an increasingly important role in information and communication systems. From technical, financial and energy studies to data centre operational maintenance, SPIE benefits from important references throughout Europe.

The Group also helps companies to optimise the data handling their information systems require. For example, a new generation of switches was deployed to help LaSer Cofinoga improve its data centre architecture. Delivered for the first time in France, this new generation of highly reliable equipment will enable data from backup streams and virtualised servers to be converged on the same network.

#### **FACILITIES MANAGEMENT:** SUSTAINED GROWTH IN DEMAND

From user support to workstation management, SPIE enables organisations to reduce costs, improve their flexibility and more effectively integrate technological developments. The French Ministry of Foreign Affairs, for example, contracted with the Group to manage its environment workstation, as well as its IT, telephone and network systems. Also in 2011, a new contract was signed in partnership with IBM that will enable EDF to optimize the management of 65,000 workstations while reducing costs.





Discover the SPIE Communications

- **01.** Remote management of information systems and telephone networks for AMF, the French securities regulator.
- **02.** Renewal of telephone communication systems for APRR, the French motorway operator, representing 118 sites and 2,700 users.
- 03. Upgrades to the data centre distributed on three CDiscount sites.



#### **CLOUD COMPUTING: A STRATEGIC CHOICE**

SPIE sees cloud computing as a key component in the overall optimisation of information systems. It enables businesses and government agencies to combine the cost savings generated by shared services and opex-based invoices (i.e. involving no capex) with the guarantees of reliability and personalisation provided by the leading public and private cloud models. It also provides a full range of resources and related services, local contact with interfaces, direct relations through private networks, secure and highly reliable information resources, and greater flexibility for configuring and managing virtual servers.





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