



DEVELOPING



THE WORLD WITH A GLOBAL VIEW



2022 ANNUAL REPORT



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PROFILE

As a leading independent group specialising in buildings, infrastructure and services, Spie batignolles is wholly committed to taking a collaborative approach to construction.

In a world undergoing immense change, we believe that our culture, which is based on listening and dialogue, and our complementary areas of expertise represent our main assets to deliver projects that tackle today's social and environmental challenges.

We constantly adapt, integrating new methods and know-how while retaining what makes our identity and our strength – our partnerships with our clients and our constant focus on enhancing their surroundings.

Our dense regional coverage gives our employees the ability to provide local assistance for each project in line with its specific requirements. Committed to working with its employees, the Group's priority is ensuring their health, safety and career development.



€2,280M

revenue

8,000

EMPLOYEES

€2,609M

ORDER BOOK

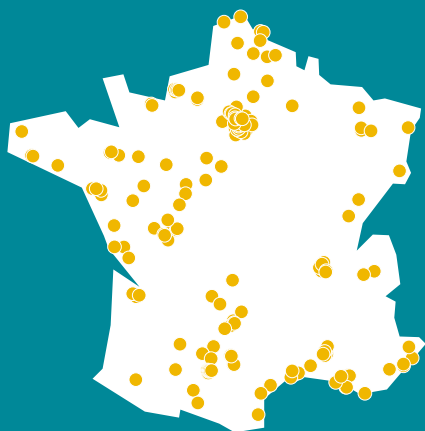
70%

of share capital held

BY MANAGERS AND EMPLOYEE
SHAREHOLDERS (EMPLOYEE SAVINGS PLAN)

175

YEARS' EXPERIENCE



188
locations
ACROSS FRANCE

13

LOCATIONS

OUTSIDE FRANCE

EUROPE

- Infra Tunnel (Switzerland)
- Alpha Digital (Switzerland)
- Mast Grundbau (Germany)
- Spie batignolles fondations UK
- Spie batignolles fondations Belgium
- Spie batignolles international Portugal

MIDDLE EAST

- Spie batignolles international Contracting (Abu Dhabi)
- Mast Piling & Foundation Contracting (Dubai)
- Spie batignolles international Qatar

AFRICA

- Spie batignolles Côte d'Ivoire
- Agilink Ingenierie (Tunisia)
- Spie batignolles fondations Benin

NORTH AMERICA

- Spie batignolles Canada





JEAN-CHARLES ROBIN - CHAIRMAN

A **GROUP** in STEP with a **CHANGING WORLD**



The world is changing, practices are evolving, and society's needs and expectations are becoming more complex. It is our duty to respond to these increasingly all-encompassing demands.

The focus is no longer solely on a company's skills and expertise, but is gradually shifting to its ability to transform and embrace these new imperatives. We need to adapt, anticipate, innovate, and incorporate all these parameters so we can carry our technical excellence forward into novel environments.

Matters such as prefabrication, industrialisation, artificial intelligence, the circular economy, and low-carbon materials all constitute both challenges to be met, as well as opportunities to be seized.

The change made to the Group's governance structure in 2022 enhances its agility in responding to such issues. As part of this process, we set up a streamlined decision-making body, the Management Committee, where operational division heads work alongside directors of key transformational functions for Spie batignolles, such as innovation and social responsibility.

Our strength lies in our ability to apply our expertise across our businesses. New design, engineering and production tools will radically transform the way we do things in the future. With our Management Committee, we can spread new developments and multiply their benefits more quickly and efficiently, while also enabling new talent to shine and steer these changes.

3D printing offers a prime example of the transformations that are moving us to rethink our business. We pioneered this technology and were the first construction and engineering company to set up its own additive manufacturing centre, the success of which has already spurred us to put a second facility on the agenda. Our expansion into landscaping, a fast-growing area of expertise at Spie batignolles, also marks a significant shift that reflects a new role performed by our industry – one that is extremely important to the younger generations.

As we implement strategic policies and decisions, we draw strength from one of the core pillars of our identity – our independence. In 2023, we will celebrate the 20th anniversary of the Group's management buyout and the success of our employee share ownership plan, through which employees and the management team now own around one-third of the share capital of Spie batignolles. As a result, our company can independently set its own strategy based solely on its own priorities. This is a fundamental aspect of our collective endeavour, in which we want to involve future generations of employees and managers.



A NEW **GOVERNANCE** FRAMEWORK



JEAN-CHARLES ROBIN
CHAIRMAN



PATRICK ZULIAN
VICE-CHAIRMAN



AUDE MAURY
VP, PURCHASING PERFORMANCE, CSR,
CARBON ACTION PLAN



BERTRAND PORTE
CHIEF ADMINISTRATIVE
AND FINANCIAL OFFICER



ALEXIS HERMET
VP, CONSTRUCTION QUALITY
AND TECHNICAL INNOVATION



VIRGINIE FLORE
HEAD OF HUMAN RESOURCES



ÉRIC DE BALINCOURT
VP, INFRASTRUCTURE DIVISION



PASCAL CHAPOUIL
VP, ENERGY DIVISION



FRANÇOIS JULLEMIER
VP, CONSTRUCTION DIVISION

SIX COMPLEMENTARY AREAS of EXPERTISE



ENERGY

ELECTRICAL AND CLIMATE ENGINEERING/
ENERGY NETWORKS/RAIL INFRASTRUCTURE/INDUSTRIAL FLUIDS/
MULTI-TECHNICAL MAINTENANCE

ENTITIES

Spie batignolles énergie

- ACSI
- Borja
- Farasse fluides
- Infrannonce
- Laignel
- Mercier
- Patricola

- Sogintel
- Sopac
- Souchon
- Spie batignolles kleau
- Spie batignolles solutions industrielles

CONSTRUCTION

DESIGN/NEW BUILD/REFURBISHMENT/
FIXTURES AND FITTINGS/LOCAL WORKS/
REPAIR AND MAINTENANCE WORK

ENTITIES IN THE GREATER PARIS REGION

Spie batignolles île-de-france

- Spie batignolles outarex
- Spie batignolles boyer

Spie batignolles Présance® île-de-france

Spie batignolles SPR

- Créatis
- DBS
- FLP services
- France sols
- Sedib
- Spie partesia
- SPR bâtiment et industrie

ENTITIES THROUGHOUT FRANCE

Spie batignolles nord

- Abscis Bertin
- Spie batignolles est

Spie batignolles grand ouest

- Bâtir France ingénierie
- Defontaine construction
- HPB
- Spie batignolles sud-ouest

Spie batignolles sud-est

- Médiante
- Spie batignolles curot



CIVIL ENGINEERING AND FOUNDATIONS

UNDERGROUND WORKS/ENGINEERED STRUCTURES/INDUSTRIAL FACILITIES/
LOCAL WORKS/STRUCTURAL REINFORCEMENT AND SPECIAL WORKS/
SPECIAL FOUNDATIONS

ENTITIES

Spie batignolles génie civil

- Spie batignolles technologies

Spie batignolles fondations

- Pieux Ouest
- Spie batignolles itm+





PROPERTY

FINANCIAL STRUCTURING/
PROPERTY DEVELOPMENT

ENTITIES

**Spie batignolles
immobilier**
• Sbi promotion



PUBLIC WORKS

EARTHWORKS/ROADS/
URBAN UPGRADE PROJECTS/
ROADS AND UTILITIES/ROAD FACILITIES
ASPHALT PRODUCTION/
QUARRIES AND RECYCLING CENTRE FOR
BUILDING MATERIALS/
ROAD LABORATORIES

ENTITIES

Spie batignolles malet

- Bellin TP
- Carceller
- Carrières des minières
- Deguil
- EATP
- Erome
- Gracchus
- Grégory
- Grémair
- Liants de Gascogne
- Nardelli TP
- Ré TP
- Rey Betbeder
- Sablières et Carrières de la Madeleine
- Sogecer
- Soum et Cie

Spie batignolles TP AURA

- Carrières de la Burbanche, Arandon, Courtenay
- Rhône Isère Enrobés

Spie batignolles LE FOLL TP

Spie batignolles valérian



LANDSCAPING AND ENVIRONMENTAL PROJECTS

URBAN LANDSCAPE DEVELOPMENT AND MAINTENANCE/
DESIGN AND PRODUCTION OF WOODEN AND METAL EXTERNAL
STRUCTURES

ENTITIES

Spie batignolles paysage

- BATP 44
- Ets Lallaouret
- Multi-Services Verts and Multi-Services Verts Forestiers
- Paysages de l'Oust

- Pépinières du Languedoc
- Solev
- Vallois
- Valbois

A **GROWTH STRATEGY** shaped by the **MAJOR TRANSFORMATIONS** of our **TIMES**



INTERVIEW WITH PATRICK ZULIAN, Vice-Chairman

What are the major transformations to which the Group must adapt?

Many changes are taking place, but two issues stand out: the digital transition and the environmental emergency. But these disruptions also create exciting opportunities. By harnessing data-sharing platforms to streamline production and industrialise our processes, digital technology allows us to focus our efforts on high value-added activities. As for the environment, we have a responsibility to help combat climate change by adopting proactive practices, thereby opening up new markets that are beneficial to all.

On which strengths can Spie batignolles draw to meet these challenges?

Our three strengths include our wide range of business areas, the loyalty of our customers, and our ability to enhance and tailor our products and services. We can meet demand in many complementary domains – manufacturing, residential and commercial buildings, office properties, urban and rail transport, landscaping, etc. – and this diversity protects us from market fluctuations. Nearly 80% of our order book comes from existing customers, whose loyalty we have earned by reliably delivering on our promises. It is an ongoing challenge, one we need to uphold on every project, working in collaboration with our long-standing partners. We must constantly adapt our products and services to emerging expectations, which means continuously acquiring new skills and bolstering our engineering capacities so we can take action right from the pivotal design phase.

How do you shape your strategy to address this need?

The goal is to get involved in a project at an early stage, offering different options such as private contracts, design-build contracts or comprehensive performance contracts. By actively participating in the development of operations, we can provide the highest quality and the most efficient schedule. Private and commercial project owners alike have a keen interest in schedule optimisation, and the public sector sees the value as well. Clearly, by engaging with all project stakeholders and initiating dialogue early in the value chain, we can better manage the schedule and offer the product that best meets the client's needs. We maintain this dialogue throughout the project life cycle, since our local service networks continue to support users day after day.

SYNERGY BETWEEN BUSINESS LINES FOR A COMPREHENSIVE OFFER

Spie batignolles' comprehensive offer is based on the complementarity and synergy of its different areas of expertise: civil engineering and foundations; construction; energy; property development; public works and landscaping. The Group is therefore able to imagine comprehensive solutions, starting with a project's design and continuing at construction, operation and maintenance. We seek to enrich our range of services regularly, which is why Spie batignolles continues to expand its skill set by constantly integrating new complementary business activities and skills, particularly in response to growing environmental concerns.

GROUP-WIDE ANALYSIS WITH LOCAL APPLICATION

Spie batignolles draws on the skills of all of its business lines throughout France by harnessing its extensive local ties. This geographical network helps the Group stay connected to development trends underway in all the regions in which it operates, such as the consolidation of major regional centres, promotion of inter-community cooperation, reconversion of economic sectors, and the emergence of new urban uses and forms of mobility. Spie batignolles engages in sustained and constructive dialogue on these subjects with all local stakeholders.

FOCUS ON REAL-LIFE USES

Spie batignolles engages in a collaborative and purpose-focused approach every day in order to design the most appropriate solutions to social and environmental challenges. We imagine not only how every one of our projects will be used, but also how they will change and adapt in line with emerging needs in the long term by integrating questions relating to the building or infrastructure's operation as far upstream as possible.

ATTENTIVENESS AND DIALOGUE AT THE HEART OF THE CLIENT EXPERIENCE

Spie batignolles places attentiveness, dialogue and shared goals at the heart of client relations. This approach enables the company to work closely with clients and build projects that are perfectly adapted to their needs. A single point of contact therefore oversees every stage of each project's life cycle. The teams also adjust their processes regularly in line with feedback from client satisfaction surveys carried out by our partner, Qualimétrie, in order to fine-tune the client experience in operations.



Quality of client relations

94%



Quality of works

96%



Worksite safety

93%



Compliance with schedules and deadlines

82%

Source: Qualimétrie - surveys carried out in 2022





REGIONS DRIVING GROWTH AND THE ECOLOGICAL TRANSITION

Helping regions grow in a more sustainable manner represents a core part of what we do at Spie batignolles, which involves leveraging our dense local networks and complementary expertise. For projects ranging from building low-carbon infrastructure to enhancing living environments, we design solutions addressing all aspects of the ecological transition, integrating in particular our expanding expertise in landscaping.

CREATING LOW-CARBON infrastructure

It is essential to reduce greenhouse gas emissions in order to combat global warming. By building infrastructure that facilitates greener transport or produces renewable energy, Spie batignolles is contributing to this goal.

At every worksite, our teams find ways to reduce the project's carbon impact – for example, by implementing circular economy solutions.

RAIL AND URBAN TRANSPORT



Metro stations in the Yvelines department

In line with its goals to decongest travel and promote green transport, the Grand Paris Express project will bring the Yvelines department, west of Paris, its first-ever metro stations. Spie batignolles won the civil engineering contract for the western branch of **Line 18**, between the Saint-Quentin Est and Versailles-Chantiers stations. Requiring two tunnel borers, the work involves creating an 11.8 km-long underground section, three stations and 14 related structures, as well as circular shafts up to 62 metres deep. Our teams have had to tackle various significant technical challenges, including differences in elevation and a complex geology (Fontainebleau sands). Over the past seven years, the Group has participated in several other Grand Paris Express sites (Lines 14, 15 and 18) and is a major contributor to this iconic project. The work began in 2022 and is scheduled for completion in 2024. ■



A second line for the Rennes metro

Greater Rennes now has a second **metro line**, running between the northeast (Cesson-Sévigné) and southwest (Saint-Jacques-de-la-Lande) via the city centre. For this infrastructure designed to facilitate travel in the metropolitan area, Spie batignolles helped to dig an 8-km tunnel, using an earth pressure balance tunnel boring machine, and create nine stations and four emergency shafts. Eight years in the making, the B line, with its 15 stations and 14 km of track, was inaugurated on 20 September 2022. ■



A new-generation maintenance facility in Greater Paris

With the **RER Line E** extension to Mantes-la-Jolie, additional facilities are needed to store and maintain the rolling stock. For the maintenance workshop and rail yard that will serve the future Nanterre-La Folie RER station, Spie batignolles installed power and data, fire protection and signalling systems. Located just behind the La Défense business district, the facility was designed to keep industrial heritage alive by preserving historic depot architecture. Our teams had to take this constraint into consideration when installing the electrical equipment. ■

ALSO IN 2022

DELIVERED Garenne-Colombes SNCF train station: construction of a ramp and platform for road transport, creation of green spaces

IN PROGRESS Charles-de-Gaulle Express: end of the earthworks and drainage phrase; start of rail work

Expansion of the Montpellier tramway

As part of the extension of its tramway network, the Montpellier metropolitan area will build a **fifth tram line** on a north-to-southeast diagonal. After participating in the construction of the first four lines, Spie batignolles was awarded the contract for three work packages, including both infrastructure work and track laying. This new project is due to be completed in 2025. ■



OPERATIONS CENTRE IN CHAMPIGNY-SUR-MARNE

A NERVE CENTRE FOR LIGNE 15

Metro Line 15 forms the main artery of Grand Paris Express: 75 km-long, it will make 36 stops around the capital, multiplying travellers' options to connect to the existing network. Its automatic trains will be operated from the central command post located at the heart of the operations centre in Champigny-sur-Marne, which will also house the maintenance facility and storage depot.

Spie batignolles' teams carried out the earthworks, special foundations and construction of this beating heart of rail travel. For the building envelope, the Group chose factory-made prefabricated concrete structures – an excellent way to shorten lead times – and one of France's largest green roofs will top off the structure. Equipment commissioning is scheduled for end-2025.

22,000 m²
train transfer
and passage hall

17,000 m²
maintenance workshops
and technical facilities

10,000 m²
office space

ROADWORKS



Reducing emissions in every way possible

The carbon footprint of road worksites can be reduced in many different ways, and the teams from Spie batignolles take advantage of every single opportunity. While **resurfacing the RD821 road** connecting Lourdes to popular ski resorts in the Hautes-Pyrénées, we optimised the materials recycling process. Waste generated by the worksite was reused to produce the new asphalt layer, resulting in 50% of recycled materials for the binder course and 30% for the surface course. Our teams further diminished the project's carbon footprint by using a mobile asphalt plant to minimise the transport of materials.

A similar recycling approach was taken in **renovating the A20 motorway**. In addition, the trucks delivering the asphalt ran on a biodiesel made from waste cooking oils and fats, which emits 90% less CO₂ than conventional diesel. This easy-to-implement solution requires no engine modifications or special maintenance, and it resulted in an overall savings of 80 tCO₂ for the project site. ■

“ A family business founded in 1922, **Le Foll TP** is a leading builder of motorway infrastructure, as well as urban development and civil engineering, operating in Normandy and west of Paris. This acquisition enables Spie batignolles to round out its services and reinforce its local presence, as well as create synergy between Le Foll TP's teams and the Group's other entities in these regions.

INLAND WATERWAY TRANSPORT

An environmentally friendly bridge

Spie batignolles installed the 52 bored piles needed to build the **Jargeau bridge** in the Loiret region of France. This was a complex operation in many aspects, primarily due to the site's sensitive geology, containing fractured limestone, which increases the risk of structure breakage. It was also necessary to ensure that the piles did not disturb groundwater flow. All this was carried out in an environment carefully protected for its high ecological value, fauna and flora. ■

A quay saved from flooding

At the **Grand Port Maritime in Bordeaux**, a quay in danger of collapsing required urgent renovation work, especially since the subsidence also posed a threat to the nearby foundations of a grain conveyer. Spie batignolles' teams quickly acted to assess the structural damage and underpin the foundations with reinforced concrete micropiles and ground beams. ■

ALSO IN 2022

IN PROGRESS La Mescla and Reveston road tunnels: safety improvement work

DELIVERED A71 between Bizeneuille and Saint-Priest-en-Murat: road surface renovation

RENEWABLE ENERGIES



Mission accomplished for the Gaïa tunnel boring machine

In southeast France, the **high-head hydropower project on the Sarenne river** spans the towns of Huez, which is the intake point, La Garde-en-Oisans for the water conduit, and Bourg-d'Oisans, where the power station will be built. Driving the energy transition, this project involved Spie batignolles digging a 3.5-km underground tunnel and a 350-metre shaft and also installing a pressure pipe – a major operation that will enable water to be carried from the mountainside target shaft, at an elevation of 1,455 metres, down to the plant at 721 metres. In less than a year, the Gaïa TBM bored through 2.5 km of hard rock at an incline of 22%. Due to the presence of asbestos, rigorous worker safety procedures were implemented, meaning the machine was equipped with ventilation systems and an airlock to isolate the digging area from the rest of the tunnel. Upon its completion in 2023, the plant will generate enough electricity to supply renewable energy to 16,000 people. ■



A large-scale waste recycling project in southern France

Effective waste management has the ability to improve people's living conditions as well as preserve the environment, and as such it has become a focal issue. Spie batignolles was involved in building a **waste sorting and recycling centre in Labessière-Candeil**. After extensive earthworks (60,000 cu. metres of excavated material and 35,000 cu. metres of fill material), our teams carried out backfilling and sealing work for the buildings and tanks required to operate the facility. From 2023, it will produce biogas and recovered fuel, as well as compost, in an effort to shrink the share of non-recycled residual waste to 20%. ■

Maintenance facilities for the Calvados wind turbines

The **Calvados offshore wind farm** is the second to be built in Normandy and one of the first four in France. Land installations are necessary to operate and maintain the 64 turbines, located more than 10 km from the Bessin coast. Spie batignolles built warehouses to store the operation and maintenance equipment, as well as offices for staff. In all, three such blocks were completed in nine months. By 2025, the vast offshore project will be able to generate enough electricity to power the homes of more than 630,000 people. ■



Working in a circular economy

Spie batignolles is about to help build **three wind farms** in the Vienne region. The project, which involves creating 8 km of paths, installing crane pads, and excavating and backfilling foundations for the turbines, takes strong consideration of environmental factors. All of the excavated material will be recycled and reused at the worksite, reducing its carbon footprint and resource consumption. The project's environmental impact will be reduced even further by sourcing sterile material (mining waste) from a nearby quarry. ■

ALSO IN 2022

DELIVERED Solar farm in Bours: earthworks, utilities networks and foundations

IN PROGRESS Hydropower plant in Vallabrègues: main plant enclosure

IN PROGRESS Methanisation unit in Châtillon-sur-Seine: construction

SUPPORTING ECONOMIC growth

The Group boasts a dense local network that provides a presence in every economic hub, thereby enabling us to remain close to our customers and play an active part in developing industrial projects in every region. Our teams apply their expertise to any operation, no matter how complex, even highly technical multifaceted projects with strict scheduling constraints.

TECHNICAL SOLUTIONS

A cradle for megayachts at La Ciotat

La Ciotat Shipyards, a world leading provider of luxury yacht repair services, sought to build a new **platform for megayachts over 80 metres long**. In addition to installing underground water lines, transformer substations and low-voltage systems, Spie batignolles was in charge of roads and service connections, taking into account special constraints related to the unique nature of the business. Given the size of the megayachts to be serviced, the roads had to be able to bear a weight of 20 tonnes per square metre. The topmost road surface layer is made of a percolated asphalt called Recima®, which was developed by the Group and is designed to resist heavy static and dynamic loads, as well as mechanical and chemical risks. ■



GRDF'S REGIONAL HEADQUARTERS

AN EXEMPLARY BUILDING



Built to high environmental quality standards, GRDF's regional headquarters in Isneauville are eligible for the French government's Low-Carbon Building label. Spie batignolles built the walls, beams, floors and slabs with Vertua® Classic low-carbon concrete.

Switching to such an innovative material is not simple. Our teams had to adapt to new constraints, such as the concrete's fast setting time and sensitivity to variations in temperature. They worked closely with the manufacturer's engineers on this project to adjust formulas as needed and ensure optimal setting. All this was done while maintaining the traceability required to obtain the label.

171 to 200 CO₂/m³

Average emissions of Vertua® Classic (-20 to -35% compared to an equivalent traditional concrete)

1,500 m²

of flooring per level
(ground floor + 2 upper levels)

NEW PRODUCTION UNITS



A strategic R&D unit

For a global industrial group, investing in top-notch R&D facilities is an absolute necessity. For its future **Cryogenic Technology Centre** in Vitry-sur-Seine, near Paris, Air Liquide called on the know-how of Spie batignolles to carry out earthworks, lay the deep foundation, and construct the building. ■

Hydrogen to remove sulphur from fuel

The latest European directives on pollution have created a demand for hydrogen production to desulphurise fuel. In response, Total and Air Liquide have come together to create a **Steam Methane Reforming (SMR) unit** at the Donges refinery in western France. Spie batignolles carried out the major structural work for the plant, once again demonstrating its ability to operate in complex industrial environments. ■

MANUFACTURING PROCESSES

A new animal feed mixer

Operating directly in the production environment, in a highly regulated area such as animal feed, allows no room for error. The teams at Spie batignolles specialised in industrial fluids overcame several challenges while **replacing the feed mixer for the Nutréa plant** in Landemont, in western France. The project involved complex phasing with the other trades, from building the framework to installing electrical and utility systems, as well as managing component shortages, working on an occupied site, and minimising shutdown periods. Today, the installation is fully up and running. ■

Clays for low-carbon cement in Lorraine

In concrete production, it is the process of manufacturing the clinker, a base component of cement, that emits the most CO₂. The Vicat group is building a **calcined clay production unit** to serve as a partial substitute for clinker and significantly improve its carbon footprint. Spie batignolles's teams carried out the civil engineering work for this plant, laying the foundations and building the various industrial structures. The new plant will enable a 16% reduction in CO₂ emissions. ■



ALSO IN 2022

IN PROGRESS Ninkasi eco-friendly brewery in Tarare: all trades

IN PROGRESS Château de Pommard: complete renovation

EXPANDING INTERNATIONALLY

The Group now operates on four continents: Europe, Africa, Asia and North America. The development of Spie batignolles Canada Inc., established in 2020, has rounded out our international presence in major projects to which our teams bring their advanced technical expertise.



Supporting the development of the Port of Cotonou in Benin

Port facilities demand significant, essential investments, especially when they serve the country's only deepwater port. Spie batignolles is involved in expanding the Port of Cotonou by **designing and building the North and South quay extensions**, as well as a goods loading and unloading ramp. The aim is to prepare the infrastructure to accommodate larger loading capacity ships by 2026. ■



Continuing to improve the Lisbon metro in Portugal

Spie batignolles has been involved in developing transport infrastructure in Portugal for more than 20 years, in particular contributing to the Lisbon metro's Red, Blue and Yellow Lines. This time, it will carry out work on a section of the Green Line, involving **building the Santos station and a 670-metre underground connection**. Launched in 2022, the project will be delivered in 2024. ■

ALSO IN 2022

IN PROGRESS Café-Cacao Tower in Abidjan (Côte d'Ivoire):
digging, earthworks and foundations

DELIVERED Renaturing of the Ems river basin in Dortmund (Germany):
construction of a 42-metre diameter well

PRESERVING QUALITY LIVING environments

Quality of life has become a pivotal issue for every development project. Spie batignolles' teams incorporate the environmental dimension into their projects in both urban and rural contexts. For example, we can protect the environment through land preservation, sustainable landscaping, and alternative mobility infrastructure, and the share of such activities in the Group's operations is steadily growing.

ENVIRONMENTAL PROTECTION AND RESTORATION



A pilot storage facility to manage river fluctuations

To protect the Greater Paris region from flooding from the Seine, the public authorities plan to build a set of eight storage facilities to collect water pumped from the river. Spie batignolles has been tasked with building the first pumping station in this ambitious project for the **Seine Bassée pilot storage facility** in Seine-et-Marne, east of Paris. The facility's size aptly reflects the extensive work involved: a diameter of 52 metres and a water retention capacity of 2,500 cubic metres per minute, or the equivalent of an Olympic-size swimming pool. Specific measures will be taken to preserve local fauna, including several bat species, which is why night work has been prohibited. A concrete plant will be installed on site to keep lorry traffic to a minimum. ■



A new lease of life for the Durance river

In Charleval, in the south of France, the Group's teams are injecting a new lease of life into the Durance river by carrying out the complete **hydromorphological restoration** of the river bed, including the reinjection of 100,000 cubic metres of sediment extracted from that same site. All this work was completed in the month of August to avoid the river level rising towards the end of the year and disturbing reproductive patterns of local aquatic species. ■

Strengthened seawalls on the Gironde estuary

In a tidal environment, protecting coastal land is a priority. With this aim, Spie batignolles is working on two **seawall reinforcements in Jau-Dignac-et-Loirac**, in southwest France. For one, it is replacing the riprap, and for the other, it is widening the seawall. Both improvements are crucial to protect inland areas from water. Eco-friendly materials were used to build the protection, including piles made of pinewood from the Landes forest and a 100% biodegradable coconut-fibre mat to prevent erosion without obstructing the growth of new vegetation. ■



Reinforced banks for the Escaut canal

A canal demands constant maintenance, especially to stabilise its banks. Spie batignolles' teams performed this work along the **Escaut canal**, in the Trith-Saint-Léger sector, where they installed interlocking sheet piles and sections, driven into the bank. The piling was anchored to prevent it from warping. The project required the use of a pontoon-barge to transport the material along this heavily navigated, wide-gauge canal, as well as rotating teams working around the clock, five days a week. ■

eqiliance

THE REGIONAL PARTNER BRAND

Since its launch in 2020, the **Eqiliance** range has bolstered the Group's efforts supporting regions to bring about their environmental transition.

In 2022, more than 20 Eqiliance projects were carried out by Spie batignolles malet, Spie batignolles valérian and Spie batignolles vallaia, the three Group entities that promote the brand.

They included regreening rivers, restoring biodiversity, building dykes, and reinforcing canal banks, all in an effort to preserve and protect land and prioritise circular economy solutions.

LE HAVRE CITY ENTRANCE

RECLAIMING URBAN SPACE



As the main access route into the port city of Le Havre, the D6015 illustrated the precedence given to road traffic, at the expense of other types of travel. This prompted the city to fully redesign the area, a project which has entered its third and final phase of implementation. Spie batignolles completed the roads and utilities (water, electricity, telecoms) for the site, including the civil engineering works for stormwater management.

The Group is also in charge of landscaping the area, featuring filtering vegetation and greenery, fountains, rain-fed waterways, terraced water basins, and wooden plazas. This phase will complete the transformation of the thoroughfare into a truly inviting, safe and lush urban space that promotes active mobility and better integrates the road into the neighbourhoods it intersects.

2 km
of bike and pedestrian paths

580
trees planted

2 ha
of green space

LANDSCAPING



Birth of the Belvédère neighbourhood in Bordeaux

As part of the Euratlantique project to rehabilitate the Garonne river quays and create twelve new neighbourhoods, Spie batignolles has been tasked with **fully landscaping the Belvédère neighbourhood**, a vast worksite covering 5.5 hectares of a former industrial area. Our teams will carry out drainage, preparatory

works for the roads, and the laying of kerbs and asphalt. Ahead of this work, excavated soils will be stored, analysed, decontaminated as needed, and reused wherever possible. The tree wells for future planting will be dug during the road construction phase, after utilities are installed. Overlapping such operations constitutes one of the project's challenges, especially since it includes widening the Boulevard Joliot-Curie to accommodate a bus lane and a cycle path, for which existing utilities networks (gas, fibre-optic, high-voltage) must be preserved. ■

A new role for the former royal stud

Spie batignolles participated in the **outdoor restructuring of the Haras du Pin National Stud** in Normandy, which was selected to host the Eventing European Championship in 2023. Our teams built 600 metres of monobloc concrete stadium seating around the two schools where the competitions will be held and created a 7,500 m² parking area laid with grass-block concrete pavers. ■

“ Spie batignolles has continued its strategic growth in landscaping with the acquisition of a major stake in **Les Pépinières du Languedoc**. This business combination with the Toulouse-based company will extend the Group's geographic coverage and bolster its expertise in the design and maintenance of green spaces.

GREEN MOBILITY

A cycle path and three walkways

South of the RN250 road, near the **Arcachon basin**, Spie batignolles installed a bike path and three metal bike bridges 10, 15 and 30 metres long. The project involved earthworks, pouring concrete foundations and supports, and manufacturing and installing the bridges. Sediment from the basin was reused in the capping and base layers. The structures now make it possible for cyclists to cross over the water. ■



Green metamorphosis for a railroad

Turning abandoned infrastructure into a greenway encouraging active mobility represents a promising strategy for decarbonising transport. In southern France, Spie batignolles is helping to transform a decommissioned railway between the Gard and Hérault regions **into a cycling path**. Having carried out earthworks, laid paving, and installed utilities, urban furniture, various layers, and borders, our teams have now completed the metamorphosis of this stretch of land. Materials recycling and the management of invasive plant species also formed an integral part of the project. ■



ALSO IN 2022

DELIVERED Active mobility lane in Ax-les-Thermes: full construction

DELIVERED Green amphitheatre in Balma: earthworks, structures and planting





LIVING SPACES

GUARANTEERING QUALITY AND ENERGY EFFICIENCY

Attentive to the needs of our changing society, Spie batignolles develops new-build projects with a lower carbon footprint. We also renovate existing buildings with the same aim to preserve resources and reduce environmental impacts. Our commitment translates into energy efficiency and a constant focus on quality of life.

BUILDING SUSTAINABLY

New construction methods and especially the growing use of alternative materials offer opportunities to carry out projects with limited environmental impact. Bio-sourced materials and low-carbon concrete are reducing the greenhouse gas emissions of increasingly ambitious structures. The many environmental labels awarded to these constructions attest to the high-quality work of Spie batignolles' teams.

OFFICES



A low-carbon building in the heart of Paris

To keep the carbon impact of a construction project as low as possible, this objective must be incorporated into every project phase. The project to **remodel and extend the PSN Marcadet mixed-use building** in the 18th district of Paris, led by Icawood and WO2, benefited from the Group's exemplary environmental strategy. The decision to preserve the existing foundation and add a timber superstructure, while prioritising bio-sourced or demolition-sourced materials, reduced the project's impact. Furthermore, this complex composed of offices, student housing, four businesses open to the public, parking and an underground storage facility will feature many planted areas and meet the certification requirements of several green labels (HQE, BREEAM, and BBCA). ■



A mass-timber office campus

To reduce carbon footprints, new building methods must be explored. Wood offers a promising solution, but demands a shift in practices. Spie batignolles' teams are participating in the **Arboretum** project developed by WO2 for Icaewood, set to be Europe's largest low-carbon office complex. In charge of power and data installations, they are striving to find the most effective solutions for wood structures. In particular, wood fixings must have the requisite load-bearing capacity and durability. Fire protection is also a crucial consideration, as fire-resistant solutions must be effective for both wood and concrete. For this project, designed to meet the standards of the highest environmental certifications, strict procedures must be followed for traceability, waste reduction and the selection of materials and suppliers. ■

SCHOOLS

A school with minimal environmental impact

School buildings have a duty to set an example and construction projects in this area often aim for environmental excellence, both in construction and use. With the design-build contract of the **Fosse Rouge school complex** in Sucy-en-Brie, near Paris, Spie batignolles is pursuing this proactive approach. Planted areas have a strong presence in this establishment, which encompasses eight pre-school classes, 12 primary classes, multipurpose rooms, a dining area and outdoor installations. The materials were carefully chosen to minimise the projects environmental footprint. Wood framework, doors and windows will combine with wood fibre suspended ceilings. Low-carbon concrete was selected for the building skin. ■



Only the best for the University of Chicago

Commercial buildings must meet increasingly stringent environmental standards. In the ZAC Rive Gauche commercial zone in Paris, Spie batignolles has begun the construction of **Best of Both**, the Icade-led project chosen by Semapa and the University of Chicago. In addition to the university's Paris campus, the mixed-use building will include residential units, retail space and restaurants. This international project aims to obtain environmental labels for the housing units (HQE) as well as the campus (HQE, LEED, WELL, Bâtiment biosourcé). The 80%-wood structure will also feature Saint Maximin limestone, emblematic of Parisian architecture, and terra cotta, in a reference to Chicago. ■

WOOD UP TOWER

WOOD AND LOW-CARBON CONCRETE, A VIRTUOUS COMBINATION

The large-scale use of bio-sourced materials is still a challenge in the construction of high-rise buildings. And yet, it has strong potential for reducing carbon footprints. Wood Up is Paris's first eco-responsible tower, located in the 13th district. On behalf of the developer REI Habitat, Spie batignolles will use wood extensively for the structural elements (columns, façade beams, double columns for the loggias) as well as cladding.

The selected woods included Douglas fir, spruce, and beech, all sourced from French forests and transported by waterways. For the floors, our teams used slabs made of a combination of low-carbon concrete, wood fibre and recycled steel. The resulting 7,800 m² of floor area will house both private units (apartments with cellars) and shared residential space (terraces, communal areas, activity rooms), as well as businesses, utility areas and a parking garage.

50 metres tall
17 floors
132 apartments
50% reduction in greenhouse gas emissions

HOUSING



An eco-neighbourhood where wood is omnipresent

Urban renovation paves the way for ambitious, wide-ranging projects that put environmental value first. The city of Cachan will see the construction of the future Arcueil-Cachan station, which will connect the metro to the RER system and mark the entrance to the **Cachan Pluriels eco-neighbourhood**. This vast project, encompassing 204 apartments, along with offices, businesses, services, and community spaces, was designed by BNP Paribas Real Estate and co-developed with Spie batignolles immobilier. As the winner of the call for tenders launched by the city of Cachan and the Société du Grand Paris, the team pledged to use bio-sourced and naturally geo-sourced materials. Wood will be omnipresent; the project will feature 6,000 m² of this material with undisputed carbon-capture properties. Throughout the work, opportunities to promote waste reuse and recycling will be prioritised. ■

A building in Nantes nestled in greenery

A building's immediate surroundings are of fundamental importance for the quality of life of its occupants. On the island neighbourhood of Nantes, Spie batignolles' teams were tasked with the **landscaping work for Skyhome-Groupe Arc building**, which includes residential units and offices overlooking the Loire. They carried out general earthworks, built fire lanes and the entrance pavement, renovated nearby sidewalks and created planted areas. A green roof, equipped with walkways and automatic watering system, crowns the building. ■



Green-certified homes in Normandy

Bio-sourced materials are derived from animal or plant biomass (wood, straw, hemp, flax, wool, cellulose, etc.). To promote their use, the French government certifies new constructions using bio-sourced materials with its Bâtiment biosourcé label. In Fleury-sur-Orne in Normandy, the 36-unit **Villas Fleury residential complex** built by Spie batignolles for BG Promotion obtained Level 2 certification, primarily thanks to its internal wall insulation made of wood wool. For its energy and carbon performance, it also earned the Bâtiments à énergie positive et réduction carbone E3C1 label, well exceeding regulatory requirements. ■

Giving a **SECOND** lease of LIFE

One of the best ways to shrink a building's ecological footprint is to reuse existing structures. These restructuring projects, which sometimes entail a full reclassification of the building's use, most often take place in dense environments. Teams must have a firm ability to adapt and flawless technical know-how to tackle the unexpected situations that are bound to arise in such exceptional operations.

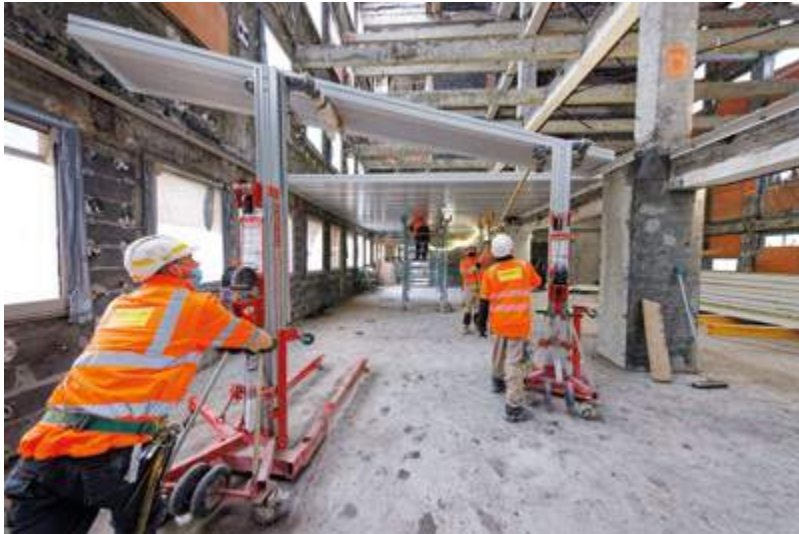
OVERCOMING TECHNICAL CHALLENGES



Surgical precision for a demanding operation

Carrying out a demolition-and-rebuild operation in an extremely dense urban environment – the heart of Paris – is synonymous with integrating a multitude of constraints on a daily basis. For the structural renovation of the **Amundi Lafayette building complex**, the Group worked close to homes, businesses, and even a school. The heavy city traffic was another factor needing to be taken into consideration with respect to evacuating rubble, for example. In such situations, it is essential to maintain excellent relations with public authorities and local residents. Constant adjustments must be made to minimise noise and other disturbances. Adding to these difficulties are the unexpected challenges that inherently arise in any project of this type. During the works, teams had to rapidly adapt to unforeseen developments such as discovering asbestos or low-lying beams. Once the partial demolition phase for the four buildings completed, they can continue rebuilding, taking into account this challenging environment. ■

CATERING TO NEW USES



Converting an obsolete building into a higher education institution

In a historic neighbourhood of Lille, Spie batignolles took on a challenging project to transform a former office building into a 12,000 m² urban campus spread over ten levels, including three below the ground floor. For this **rehabilitation and extension project in the Vauban neighbourhood**, our teams had to dewater the site, reinforce the foundations, and remove asbestos from floors, while ensuring the building's temporary stabilisation. They also built lift shafts serving all floors, including those of the two new extensions, one of which has six floors above ground level. The end result will make all these efforts worthwhile – a modern, light-filled building with excellent acoustic and thermal performance, an abundance of landscaped areas, and centralised technical management. ■

Creating holiday apartments next to a high-rise building

The project to **rehabilitate Canon's former headquarters in Courbevoie**, near Paris, pursued two goals – completely renovate the two office buildings, including a 15-storey high-rise building, and add a restaurant, a 216-unit aparthotel, and two levels of parking. Spie batignolles carried out the major structural work and remodelling on this immense project spanning 31,500 m² and also created the outdoor spaces. ■



Transforming offices into a trendy hotel

The Group helped reinvent an **office building in the centre of Dijon**, turning it into a trendy urban hotel. Our teams knocked down structures to shape this new building equipped with underground parking, two lift shafts and three stairwells. The work operations offered the Burgundy city a prestigious new hotel. ■

PLEYEL TOWER

A NEW CONFIGURATION AHEAD OF THE OLYMPICS

Turning a high-rise building into the centrepiece of a mixed-use complex featuring an upscale hotel presents unique challenges, which Spie batignolles overcame for the Pleyel Tower – an iconic landmark in the northern Paris suburb of Seine-Saint-Denis. Our teams were in charge of the architectural trades for the future complex: walls, suspended ceilings, hard and soft flooring, and interior elements and carpentry.

In addition to repurposing the tower itself, the project includes two new constructions: a 117-metre high tower and a 7-storey building around the historic skyscraper. They will house offices, food services, a multipurpose exhibition area, utility rooms and a parking lot. The project cannot afford to experience any delay, indeed it is due to be operational in April 2024... just a few months before the Olympic Games.

700
rooms

36,000 m²
offices and conference
rooms for the extension

35,000 m²
hotel accommodations
in Pleyel Tower

TARGETING ENERGY efficiency

The energy consumption of buildings represents a leading source of greenhouse gas emissions, which is why it is a priority to convert ageing, energy-hungry structures into high-energy-efficiency buildings. Spie batignolles has renowned expertise in this area and participates in projects that meet the highest standards.

PROMOTING ECO-RESPONSIBILITY

Low consumption swimming pools in Greater Lyon

Swimming pools are an essential – but energy-intense – facility in any metropolitan area. As part of the project to **extend the Pierre-Mendès-France aquatics centre** in Saint-Priest, outside Lyon, Spie batignolles is building an energy-efficient structure with a smaller carbon footprint than that required by the project, achieved by installing equipment whose share of renewable energy and heat recovery in final consumption is greater than 86%. The goal to reduce carbon impacts is also reflected in the use of bio-sourced materials to build the two new swimming pools. As a sign of the Group's long-term commitment to this project, its contract includes equipment operation and maintenance for 14 years. ■



INTERCOMMUNAL SWIMMING POOL IN VERNOUILLET

GREEN THROUGH AND THROUGH, FROM DESIGN TO USE

Spie batignolles partnered with the Pays de Dreux Agglomeration to rehabilitate the Vernouillet swimming pool, in a standard-defining environmental project. The energy performance of the renovated complex will be significantly enhanced with the installation of external wall insulation, two gas condensing boilers and a hot water heat pump for dehumidifying and preheating.

Photovoltaic sensors and diatom filters will further improve the facility's electricity and water consumption. Environmental impact was also reduced through construction methods, such as the use of bio-sourced materials. In collaboration with local social and environmental bodies supporting a circular economy, our teams systematically prioritised waste reuse and recycling.

2,000 m²
usable floor area

700 m²
extension (spa area, shallow pool, etc.)

35 tonnes
of waste recycled

RENOVATING TO REDUCE CONSUMPTION



Turning a leaky building into a model of low consumption

Built in 1984, the **administrative centre of the city of Roanne** no longer met current environmental and energy standards. Spie batignolles' teams had a clear goal to diminish the building's energy consumption at least by half and earn the BBC Renovation label. The first step was to remove asbestos from the façades, before upgrading the building's insulation. Our teams then renovated the roofs and added fibreglass insulation. New aluminium-framed windows were installed to reduce heat lost through thermal bridges. The windows also feature better insulating panes and are capped by photovoltaic awnings, which provide shade and also produce electricity offering a certain level of self-sufficiency. The building's technical equipment - heat pump, condensing boiler, and a heat recovery ventilator - is controlled using a centralised system that monitors consumption in real time and can immediately detect an anomaly. ■

Enhanced energy efficiency for a university gymnasium

As part of its global eco-campus project, the University of Poitiers launched the **energy renovation of its B9 sports complex**. It aims to reduce primary energy consumption by 60% and final energy consumption by 64%, thereby exceeding France's national targets. The teams from Spie batignolles installed wood-wool external wall insulation to the building shell. However, they chose to keep costs down and reuse existing components by preserving the recently installed, energy-efficient roof. Low-consumption standards are met through a range of features, including a new heat recovery ventilator, thermostatic faucets, a centralised technical management system, solar panels and new LED lighting. The entire project was designed to be sustainable, preferably using locally supplied bio-sourced or recycled materials. ■



Renovating a piece of university history

Public buildings are a priority target for policies to improve environmental performance. Spie batignolles carried out the **renovation of the Saint-Charles campus**, the oldest section of Aix-Marseille University, which is accelerating its energy transition. Our teams worked in the occupied building to install power and data as well as fire protection systems for three campus buildings. ■

ENHANCING QUALITY of use

In both residential and healthcare settings, the comfort of occupants is a priority consideration.

The Group addresses all aspects – quality of materials and design, green spaces, harmony with the surroundings – to satisfy the needs of future residents.

RETHINKING LIVING ENVIRONMENTS

Collective living, private spaces

When working on the **Kaelys residential complex** in Montreuil, near Paris, Spie batignolles immobilier sought to offer new housing, in a contemporary architectural style, that combines collective living with a respect for privacy. Located close to a future Line 11 station of the Paris metro, the group of nine apartments and one house blend in perfectly with the neighbouring homes. Wooden exterior doors resonate with the wood privacy panels, which offer a contrast with the bare metal balconies. Composed of two low-rise buildings of one and three stories, the complex borders a tree-planted park, ensuring a quality environment for the future residents, who will also benefit from private gardens surrounded by greenery to prevent being overlooked ■



QUAI DES ROSES RESIDENTIAL COMPLEX IN COMPIEGNE

SUSTAINABLE DIVERSITY



The current social and climate challenges have created a need for new housing that promotes social diversity and embodies environmental excellence. On the Quai des Roses residential complex in northern France, Spie batignolles immobilier meets both these criteria. The affordable residential units, nestled in a landscaped expanse of 1,900 m², will be marketed as rental properties and will also be available to purchase through housing schemes for first-time buyers.

Catering to families of all shapes and sizes, they feature private outdoor spaces such as balconies, patios or yards, as well as shared green spaces, all offering cooling potential. Quality of life was central to this project, as well as delivering superior environmental performance. The Group therefore prioritised sustainable, energy-efficient and low-carbon fittings and materials. The construction aims to obtain Prestaterre and BEE+ certifications and meets the requirements for RT2012 -20% – a further guarantee of lower energy consumption and costs.

700 m²
land area

50 kWh/m²
energy consumption
(versus 190/200 kWh/m²
for an average-performing
home)

PROMOTING DIVERSITY

AWARD-WINNING WORK IN GREATER BORDEAUX

Spie batignolles immobilier's success in promoting diversity with the I-TER project in Le Bouscat, near Bordeaux, earned it the **Living Environment/ Diversity prize** at the 34th Classement des Promoteurs Awards. The unique project spanning over 12,000 m² integrates a mix of uses and activities – offices, a co-working space (6,500 m²), a higher education institution (4,400 m²), businesses and public services (1,200 m²), while emphasising green transport and planted areas. Le Bouscat is contributing to the area's urban regeneration by rehabilitating this former railway site and extending the greenway.



Social housing and first-time home ownership

A successful urban rehabilitation project must combine diversity and building quality. The **new Rivéo residential complex in Marquette-lez-Lille** in northern France, built by the Group and promoted by Spie batignolles immobilier and SEM Ville Renouvelée, has achieved just that. Its 92 apartments are divided equally into social housing and properties for first-time ownership. The four brick-clad buildings, designed in collaboration with the architecture firms MGAU and PLATO, offer a total living area of nearly 5,500 m² and a community centre. The buildings surround a park and connect to the towpath beside the Deûle river as well as 93 underground parking spaces. To meet environmental standards but also keep running costs down, the project opted for an energy-efficient condensing central heating boiler and high-performance thermal and acoustic insulation. ■



An inclusive residential complex in western France

To enable people to live at home as long as possible, buildings must be designed accordingly. Spie batignolles immobilier is committed to this goal and is leading the construction of the **Val de Moine residential complex** in Cholet. The 42 apartments will welcome seniors and people with disabilities who wish to live independently in a safe and well-adapted home. Features include automated entrance doors, sliding windows for balcony access, fitted kitchens, roll-in showers and other equipment especially designed to facilitate the daily life of its residents over the long term. ■

OPTIMISING HEALTHCARE SERVICES

A multi-care unit in Melun-Sénart

Attending to the non-medical needs of hospital patients represents an important part of the care pathway, especially those requiring long-term in-patient treatment. With this in mind, the Groupe Hospitalier Sud Île-de-France (GHSIF) launched the **construction of Santépôle 2**, a single site boasting a nursing home, a long-term care unit, an adult day centre, a day centre for people with Alzheimer's disease, accommodation for medical interns, a child day care centre and an auditorium. Spie batignolles was entrusted with the work on this 14,760-m² complex, as well as the landscaping surrounding the new building, designed to provide safe and pleasant walkways. The building shell will be insulated from the outside to ensure optimal energy performance. Once the new unit goes into operation, the Group will provide multi-technical maintenance, under a three-year performance contract. ■



Express installation for a hospital in Meaux

Complex and demanding projects such as the after care and rehabilitation unit at the **Orgemont health services centre** benefit from the expertise of Spie batignolles. To enable care units to continue operating independently in the event that an air treatment unit breaks down, this contract requires the builder to install and connect 12 such units, an unusually high number for a building of this size. Our teams must also fit 400 radiators, 2,300 bathroom appliances and the 12 km of pipes needed to connect them. Overall, this is a very large project to be carried out in an extremely short timeframe, with delivery expected in just over one year. ■



ALSO IN 2022

IN PROGRESS **Émile-Roux Hospital in Limeil-Brévannes: creation of a long-term care unit**

IN PROGRESS **American Hospital of Paris in Neuilly-sur-Seine: remodelling and extension**

IN PROGRESS **Tourcoing Hospital: extension**

IN PROGRESS **Institut Curie Research Center in Paris: power and data installations and fire protection systems for the extension**





USAGE

TAKING A LONG-TERM VIEW

The Group is closely involved in every component of how the structures it builds operate. Spie batignolles therefore develops comprehensive solutions – such as monitoring energy efficiency, managing transport infrastructure, supervising safety and security equipment, and more. Our local networks demonstrate this commitment day in and day out, helping our clients ensure their facilities operate efficiently over the long term.

GUARANTEEING PERFORMANCE

To achieve optimal performance, buildings and utility infrastructure rely on increasingly sophisticated technical equipment, overseen by powerful management systems. Spie batignolles frequently caters for these growing needs and makes long-term commitments through global performance contracts.

MANAGING BUILDINGS AND INFRASTRUCTURE



Guaranteed performance in Noisy-le-Grand

It is becoming an increasingly central focus to optimise building use and maintenance costs. Spie batignolles carried out the energy renovation of a building occupied by the employment services unit of Noisy-le-Grand, an eastern Paris suburb, but also maintains the building under an energy performance management and monitoring contract. The teams added external wall insulation, replaced all exterior doors and windows as well as the veranda along the east façade, and installed a heat pump. The **comprehensive performance contract for the Galilée building** also helps achieve long-term targets over a five-year operation period. ■

A SPECIALIST BRAND FOR SMART SOLUTIONS

Spie batignolles itm+ is a single brand encompassing all activities involving the design and implementation of smart systems that facilitate better quality of life and a more sustainable environment. It leverages our teams' experience in instrumentation and its dense local network. It also builds on a powerful proprietary software platform that centralises data flows and provides real-time information on network behaviour.

SUPPORTING MOBILITY



Gathering data on RER Line E

Technical standards governing the circulation of trains are multiplying, and their scope of application is expanding. Eventually, every rail system will be equipped with certain devices, such as Eurobalises, which are installed on tracks and transmit essential information to the trains passing over them, such as location, signal positions, switching instructions, and so on. Spie batignolles was tasked with **listing the 400 Eurobalises** laid between the rails of the RER Line E between Noisy-le-Sec and Nanterre. The operation involves using a specially designed cart moving over the tracks to record the location of each device in order to collect the corresponding data. The devices will be used in the new automated train control and supervision system. ■

Developing infrastructure for electric mobility

To tackle the climate emergency, it is crucial society makes greater use of electric vehicles. However, this requires significant structural investments, especially to develop fast-charging infrastructure across the country. A French decree published in 2017 requires providers to obtain **EV charging infrastructure (IRVE) certification** in order to install charging stations with a power rating exceeding 3.7 kW.

IRVE certification attests to the infrastructure's safety and quality and makes it eligible for certain government subsidies. Spie batignolles has obtained Level 1 to Level 3 certification and offers a comprehensive range of services, including sizing studies, supply and installation of AC charging stations ranging from 7.4 to 44 kW and DC chargers from 20 to 360 kW, signalling and protection, earthworks, maintenance and supervision.

Among our many successful projects are the installation of 157 AC stations for **Métal 57**, commissioned by BNP Paribas in Boulogne-Billancourt, and chargers for the new **high school in Corneilles-en-Parisis**, as well as 52 DC chargers for the **Keolis bus depot in Vélizy-Villacoublay**. In addition to these location-specific projects, the Group installs chargers under multi-site framework agreements, on behalf of airport operator **ADP** and electricity operators **EDF** and **ENEDIS**. ■



ALSO IN 2022

DELIVERED Lille metro Line 2: interior and exterior signalling

IN PROGRESS Plan Fibre 506: fibre-optic rollout for the SNCF rail operator

IN PROGRESS Université Polytechnique Hauts-de-France in Valenciennes: installation of a centralised technical management system for 32 buildings

OPERATIONS CONTROL CENTRE AT THE MONTPARNASSE TRAIN STATION

COMPLETE ELECTRICAL RENOVATION

The operations centre is critical to the smooth running of major rail hubs such as the Montparnasse train station in Paris. It supervises all incoming and outgoing traffic and must provide accurate information to passengers. In this ultra-connected environment, electrical systems require the greatest degree of reliability. Spie batignolles carried out all power and data work, including modifying two master low-voltage distribution boards and installing electrical cabinets along with corresponding power supply and distribution equipment.

Our teams also modified the main safety distribution board controlling the fire protection and access control systems. The installation of 750 low-energy consumption light fixtures and the extension of the building's technical management system completed the work on this cutting-edge operations control centre.

PREVENTING all RISKS

For complex facilities of strategic importance, safety must remain the highest priority. Whether this means controlling access, preventing intrusions, ensuring fire safety or protecting digital infrastructure from electromagnetic fields, the Group has the expertise to deliver solutions to suit every situation.

SECURITY MEASURES



Reinforced security at the Paris-Charles de Gaulle airport

Security is a major consideration for a business hub located at an airport of this size. Spie batignolles installed the new [access control system for the Le Dôme complex at Paris-Charles de Gaulle airport](#), in an occupied environment. The improved system enables closer surveillance of the office complex's eight buildings and includes parking entry and exit validation software and overbooking management. ■



Robust surveillance for a nuclear plant

Nuclear facilities are considered critical infrastructure requiring protection from terrorist threats as well as intrusions from activists. Spie batignolles was selected to [help secure four nuclear plants](#) (located in Le Blayais, Paluel, Golfech and Saint-Alban). At each facility, our teams installed barbed wire fences, reinforced security with gates and barriers, and placed concrete anti-trespass bollards. ■

GALILEO SECURITY MONITORING CENTRE

A CUSTOMISED SHIELD

Digital infrastructure requires special protection from electromagnetic waves, which can interfere with their operation. When the French Defence department's infrastructure unit (ESID) launched the construction of the Galileo Security Monitoring Centre, which monitors the European Union's global navigation satellite system, electromagnetic shielding stood out as a special focus.

The teams opted to use GreyShield®, a patented concrete developed by Spie batignolles and EuroMC, which can incorporate electromagnetic shielding directly into the construction. The product combines the shielding properties of conductive particles contained inside the concrete walls and a wire mesh, offering maximum protection in a format that adapts to all kinds of needs. No maintenance is required, which reduces the cost of implementation.

FIRE PROTECTION



A monumental unit for a logistics hub

Logistics facilities require extensive safety systems due to their sprawling size and the wide range of functions they provide, such as transport, manual handling, and storage. The **fire protection system at the Market Maker site** near Roanne is a perfect example. Its 50,000 m² of warehouses are protected by 6,000 roof-mounted sprinkler heads and 128 fire hose reels. Spie batignolles' teams installed the fire water supply for this equipment, including an 800 cu. metre storage tank for the sprinkler system, another 540 cu. metre tank for the fire hose reels, and two motor-driven fire pump sets. The project also required eight alarm valves and nearly 20 km of piping. ■

Complete network for a high-rise building in Issy-les-Moulineaux

High-rise buildings must meet stringent fire protection regulations. The 15-storey, 66-metres high **Keïko Tower**, an iconic project in the Pont-d'Issy urban redevelopment area, falls into this category of closely monitored structures. Spie batignolles is carrying out the construction on behalf of Sefri-Cime and installing the fire safety system required for a building of this height. More than 27,000 m² of office space and 440 m² of commercial space, not to mention parking lots, must be equipped. In sum, more than 1,000 sprinkler heads and 70 fire hose reels will be needed to ensure the building's fire protection. ■



PROVIDING LOCAL services

To best respond to clients' needs for the upkeep, maintenance and upgrading of their facilities, Spie batignolles draws on the complementary skills of its national network. Our local teams take the time to listen to and understand what clients want. They always respond rapidly, including for multisite interventions, and are perfectly familiar with the constraints of working in an occupied environment..

DELIVERING ALL-ROUND SERVICE



A modern sorting centre for Veolia

When a leading group like Veolia decides to **upgrade a waste-sorting centre** as large as the one in Villeneuve-le-Roi, many different tasks are involved. For this facility in charge of sorting commercial waste, Spie batignolles built the outdoor structures, renovated a storage area, doubled the surface area of the water retention basin, and created a new 1,000 cu. metre pond. Our teams applied their expertise to all aspects of the project: preliminary surveys for the fire protection of the final installation, demolition, earthworks, foundations, framework, masonry, and even stormwater management. ■

Worksite acrobatics in Juvisy-sur-Orge

The conditions in which a project is carried out are sometimes just as important as the final outcome. Spie batignolles won the Suez contract for the **replacement of large-diameter water pipes** in Juvisy-sur-Orge, near Paris. The new pipes would pass across the Seine, under a bridge, but this needed to be done without disrupting road traffic or river navigation. The Group resolved the difficulty by installing a 200-metre long gangway, which enabled the pipes to be carried under the arch of the bridge using a suspended cradle. This solution met the project's specifications while complying with the requirements of the French navigation authority and the departmental authority. ■



A historic site in southern France

Offering all-round solutions entails also means being able to work at highly protected sites, with not only environmental but also heritage preservation considerations to take into account. Spie batignolles was chosen to **install the pipework for the new wastewater treatment station at Fontfroide Abbey**, an 11th century architectural gem. Teams adapted their work to existing infrastructure in the sensitive and prestigious environment, installing buried pipework made of clay. ■

A discreet project for the City of Paris

Renovating existing buildings to enhance their performance often entails working in an occupied environment. Spie batignolles **replaced the hot water tanks of 300 housing units** belonging to Régie Immobilière de la Ville de Paris, a social housing operator. For this project, our teams constantly adapted their work methods to keep any disturbances to residents to a minimum. ■

LOCAL NETWORKS

With their complementary areas of expertise, the three local Spie batignolles networks offer all-round coverage of needs.

PRÉSANCE® is the brand for local general contracting work.

The **MAINTENANCE & SERVICE®** network carries out multi-technical upkeep and maintenance.

The **PUBLIC WORKS AND ENVIRONMENTAL PROJECT** division is involved with urban and rural development on a daily basis.

RENOVATION OF POST OFFICES

LOCAL SERVICE ON A NATIONAL SCALE



When it comes to renovating hundreds of office premises across the country, it makes sense to choose a single partner that can carry out many different types of work and also adapt to local conditions. In launching its Refresh programme to update French post offices, La Poste considered both these factors before selecting Spie batignolles, which has been working with the publicly owned group for several years already.

The schedule of operations – painting, flooring, suspended ceilings, lighting, façade repairs, etc. – was adapted on a case-by-case basis. Depending on each site’s needs, our teams carried out a preliminary visit to the premises to assess the work to be performed, working with client’s regional technical divisions and local staff. For this project, they benefited from nationally deployed processes and tools that were successfully tested in “pilot” renovations in 2021.

43
renovations in 2021

122
in 2022

154
in 2023

2 weeks
average duration of each post office renovation

MANAGING MULTIPLE SITES

Maintenance on demand

To effectively handle maintenance requests from vast housing estates located all around the country, a comprehensive approach is needed, but it must also be tailored to local needs. To **operate and maintain housing for Ministry of Armed Forces staff**, Spie batignolles rolled out a new management system that enables accurate, detailed monitoring of all operations, whether they affect apartments, outdoor areas, lifts, and so on. The platform shares the maintenance task list and schedule with workers and can also produce reports. Customer requests, follow-up, quotes and invoices are also handled through this special platform. ■

WORKING AT OCCUPIED SITES



Housing rehabilitation in Angers

Carrying out a large-scale operation in an occupied residential building is challenging from an organisational standpoint, but also in terms of relations with the residents. For the **Résidence Gabriel-Baron rehabilitation project**, Spie batignolles' teams used a tool developed specifically for this type of situation, called Kit Solution Réha. It sets out collaborative working methods to facilitate dialogue with all stakeholders: the project owner, project manager, contractors and residents. The 256 units, divided into five 5-storey buildings and one 8-storey tower, will benefit from external wall insulation. Each apartment will be fully renovated inside and out – bathroom appliances, exterior windows and doors, paint, floors, etc. – all in less than two weeks per home, as required by law. ■



Energy optimisation in Saint-Denis

A social housing renovation is not limited to apartment furnishings, but encompasses communal areas and exterior features as well. To **improve the energy performance of the Cour d'Angle apartment complex**, Spie batignolles' teams restored the concrete and façades, repaired waterproofing, renovated the communal areas, and reinforced ground-floor security. They also replaced exterior windows and doors and upgraded kitchens and baths to improve the living standards of the occupants of the 128 apartments. ■

“ Spie batignolles has reinforced its presence in northern France with the acquisition of **Laignel**, a company specialising in the design and installation of HVAC and plumbing systems. It mainly operates in the Nord and Pas-de-Calais departments, but its reach also extends south to the northern Paris suburbs and east to the Grand Est region.

ALSO IN 2022

IN PROGRESS La Vigne-aux-Roses neighbourhood in La Roche-sur-Yon: renovations in an occupied residential complex

DELIVERED Marriott Champs-Élysées hotel in Paris: power and data installations at the occupied site, as part of a complete renovation





TOGETHER HARNESSING EMERGING CHALLENGES TO DRIVE PROGRESS

In a fast-changing world, where needs and practices are constantly evolving, we adapt, positioning innovation as the foundation of this transformation. A culture of innovation is shared by all our teams, who nurture it by constantly removing barriers and sharing expertise. It permeates all our processes and ensures our ability to find solutions to new social and environmental challenges. .

INNOVATION OPENING new channels

Innovation ensures that we can keep pace with fast-changing social and environmental challenges by radically transforming our construction methods. By removing barriers between organisations, as we have been doing for several years, we become more agile in rethinking how we work. We can also rapidly implement emerging solutions for project planning, prefabrication, scale-up, digital worksite solutions, construction materials, and new products and services – in short, at every level of the company.

A COMMUNITY OF EXPERTS

In a large group, a culture of innovation must permeate the entire organisation. This means promoting synergy among different entities and effectively exploiting expertise by sharing it with the community. Spie batignolles believes it to be of strategic importance to create an ecosystem that facilitates such sharing, which is why it has set out the **We Next** road map and its ten key areas for development. The Operational Innovation Committee (COI) implements the road map, with "sponsors" in the Group's Executive Committee supporting with testing and initiative roll-out. Management committee members in the various subsidiaries also act as innovation correspondents. They share recent developments in their entities, while also gathering and passing on their teams' needs and ideas. Lastly, **cross-functional centres of expertise** focus on specific topics such as lean methods, BIM, digital tools and new types of concrete. They capture new solutions for implementation by project teams. The Innovation Book, published every year, highlights some 30 initiatives inspired by the We Next road map. ■



OPTIMISING WORKING METHODS



The keys to successful planning

Effective organisation serves as a constant source of improvement, especially in terms of time management and materials consumption on construction and engineering projects. This is where **lean management** principles come in. Lean management is a process optimisation approach that can take several forms, which are not mutually exclusive. One is the **Last Planner System (LPS)**, which was applied to the project to rehabilitate an 8-storey building on Rue de Courcelles in Paris. The project presented many constraints in terms of space, access, bringing materials in, and taking rubble out. It was crucial to optimise inflows and outflows with all participants. When the project was delayed after asbestos was discovered, even greater pressure was placed on scheduling. The LPS made it possible to optimise the sequencing of tasks using a space schedule, displayed in the meeting room, where it remained available to all employees and subcontractors. ■

501 PEOPLE TRAINED AND CERTIFIED IN LEAN MANAGEMENT



BLACK BELT



GREEN BELT



YELLOW BELT



WHITE BELT EL



WHITE BELT

Data at the heart of the job

Due to the many different activities and professionals involved on worksites – employees, subcontractors, partners, etc. – it is essential that information is shared and remains accessible. Digital tools offer an ideal solution, but they are not always available near work areas due to the harsh environments of certain sites. To resolve this issue, Spie batignolles is testing the **Itekube digital station for worksites**. Resembling a large metal cabinet, it is equipped with an adjustable-angle, waterproof, high-brightness 4K touch screen, a 4G/WiFi antenna and router, multiple outlets, and ample storage. The screen can be used while wearing work gloves, allowing workers to access content without a mouse or keyboard. Secure and crangible, the workstation can be placed near worksites to provide an access point to all the information needed and interact with BIM solutions. Deployed in real-life conditions at the I-TER worksite outside Bordeaux, it will soon be tested at other sites to see if it can be used more widely across the Group. ■



EXPANDING THE USES OF BIM



A real-virtual hybrid

Imagine being able to move around inside a worksite model, carry it to the real-life site and compare it to the work performed, or share reliable data with employees and subcontractors without any loss of integrity, and trace every step in a project from the very beginning. Now all that is possible thanks to rapid progress in digital technology. Spie batignolles is actively contributing to this revolution in worksite monitoring by testing a novel software combination in real conditions, **NEXT-BIM**, which uses a mixed reality headset, and **OpenSpace**, a photogrammetry solution for 3D mapping. Such solutions make capturing accurate data considerably quicker and facilitate decision-making. ■

DISTINCTION FOR A BIM INITIATIVE

Spie batignolles énergie was awarded the **Silver BIM** in the Groundbreaking Initiatives category at the 2022 BIM d'Or Awards for its use of this technology in the field of industrial fluids. The company carries out the design, manufacture, off-site assembly and on-site installation of systems for fluid storage, unloading and transfer. As of the design stage, it uses the BIM digital model to simulate and optimise the systems to be manufactured, according to the project's requirements and constraints. The models of the finished projects are then maintained internally so the company can carry out maintenance at the facilities.

A GPS-guided excavator

Detecting and treating polluted soils is an essential component of earthworks operations, the first phase in construction. To properly dispose of excavated material and ensure its traceability, builders need high-performing tools that can monitor operations in real time. By sorting out potentially recyclable inert material, less waste is sent to landfills, thereby promoting a circular economy and reducing costs. As such, Spie batignolles is increasing its **use of 3D geochemical modelling of soils and GPS guidance for excavators**, which facilitate the task for excavator operators and improve work organisation. The end goal is to automatically process data from reconnaissance surveys to directly generate a digital map of polluted soils. ■

“ Spie batignolles helps to develop digital technologies by working with specialists in the field. The Group has signed a three-year partnership agreement with the start-up **CAD.42**. Under its terms, the partners will work together to develop new worksite services harnessing **AI technology fed with data captured from cranes**. ”

I-TER PROJECT AT LE BOUSCAT

DIGITAL TECHNOLOGY POWERING WORKSITES



The more complex the project, the more essential it is to gather, share and use data. For the I-TER project involving the construction of two curved buildings, for a total floor area of just over 12,000 m², Spie batignolles combined several BIM-related digital solutions. Along with gains in efficiency and productivity, we also sought to familiarise teams with the use of these tools. The photometric data captured by OpenSpace enabled precise assessments of progress made and facilitated decision-making.

Meanwhile, crane movements were analysed using a connected CAD.42 sensor to optimise the equipment's activity time. Digital technology also penetrated the worksite via Itekube digital workstation touch screens, which provided access to data updated in real time from the cloud. Lastly, a digital platform developed by Kairnial facilitated document and task management, quality controls, approvals, and decision traceability.

3D PRINTING IN OLLAINVILLE

A PROCESS FIT FOR ANY SITUATION

With 3D printing, the construction industry has taken a leap forward. Spie batignolles was the first French builder to set up its own 3D printing facility, located in Ollainville. This manufacturing process, where high-performance concrete is layered to create objects according to a digital model, keeps material consumption to a strict minimum, leading to a significantly reduced carbon footprint.

The quality of printed parts is closely monitored and guaranteed. Manufacturing in a workshop eliminates many of the harsh conditions that would be encountered if the work were performed on site. This digital model-based approach is equally suited to producing large quantities of standardised parts or to creating complex, customised pieces. The Group offers its 3D printing services under the EmPrinte brand to other divisions within the Group as well as customers.

emPrinte

INDUSTRIALISING CONSTRUCTION METHODS



Deployment at multiple project sites

With the development of 3D printing at the Ollainville facility, the Group was able to validate this new manufacturing process, and begin scaling it up. Project teams have benefited from this expertise for major projects, such as the **Schuman building** rehabilitation in Poitiers and the construction of a housing complex in Metz. In both cases, concrete **box-outs**, a simple but essential construction element, were produced using this additive manufacturing process. 3D printing not only guarantees quality consistency and controls, it eliminates the need for formwork removal on site, as well as the associated material waste. ■

Freedom of choice for customers

3D printing is also ideally calibrated for fulfilling special requests. One example is the **column formwork** for the Olympic-size **swimming pool in Aubervilliers**. In collaboration with the EmPrinte team, the architects imagined columns with a complex, faceted shape that resonates with the building's overall design. In addition to this aesthetic value, the prefabrication of the formwork saved considerable time for the project. ■

NEW MATERIALS



Road surfaces embracing a circular economy

Solutions must be developed to reduce resource consumption and waste production, two ways in which the construction industry impacts the environment. Spie batignolles is turning to the circular economy to convert waste into resources. For example, the Group uses its materials recycling platform, **Valosphère**, to develop a compacted concrete for roads (BC2R), made up of only recycled, demolition-sourced concrete. This initiative was led in collaboration with the LaSIE, the University of La Rochelle's Laboratory of Engineering Sciences for the Environment. The Group also partnered with a cement maker to obtain a low-carbon hydraulic binder, which further lessens the carbon footprint of this sustainable concrete.

For its BC2R product, which is especially suited for application on bike paths, Spie batignolles won the call for road-innovation projects by the French Institute for Roads and Mobility Infrastructure (IDDRIM). Thanks to this distinction, an experimental site will be built and monitored and assessed for three to five years by Cerema, the French centre for studies on risks, the environment, mobility and urban planning. ■

Sediment with high added value

A circular economy can be implemented within one activity but also expanded to reuse waste produced by other activities. In the area of waterway and port infrastructure maintenance, for example, managing large volumes of sediment is problematic. No less than **50 million cubic metres of sediment** are dredged each year in the Nouvelle-Aquitaine region. Spie batignolles is part of a project to transform this mass into a leading resource for public works, which is in constant demand for new materials. It aims to create a geopolymer cement from silt for use in a concrete emitting 30% less CO₂ than a traditional concrete. ■



NEW PRODUCTS AND SERVICES



Real-life testing in the Loire-Atlantique region

Innovations require trialling in real-life conditions to confirm whether the right choices were made. Since the summer of 2022, a piece of **Coasis urban furniture** has been put to the test in the city centre of Rezé, and its performance diligently measured. Developed by Spie batignolles, this innovative outdoor relaxation and co-working space is connected to the energy grid but is self-sufficient, equipped with its own solar panels. The leaf-shaped canopy provides shade and channels rainfall to nearby planters, while evapotranspiration from the vegetation adds to the cooling effect. The setup's look and functions were inspired by nature, while some user feedback has been incorporated into the trial, which will continue until October 2023. ■

Eco-friendly pavements

UrbaZen® surface materials offer another strategy to mitigate the effects of urban heat islands. By controlling permeability and runoff, harvested in a tank or buffer zone, they help cool roads or water vegetation. In addition, increasing a surface's albedo - its capacity to reflect light - reduces the amount of heat it absorbs from sunlight during the day. Combined with **Lumiroute urban lighting**, these pavements can reduce energy consumption. UrbaZen® surface materials are suited to both urban and rural settings and can be used in village centres, parks, on bike paths and in natural environments. ■



THE INNOVATION CONTEST THAT INSPIRES CREATIVITY

Ideas that can change how people work also emerge on site, in real-life situations. The 2022 **Innovation Contest**, open to all construction teams, attracted 71 innovations submitted by 140 employees vying for the jury's accolades. Sixteen projects won awards across six categories: the environment, worksite best practices, materials, safety and training, digital tools, and the special jury prize.



Research to improve mobility

Developing innovative solutions begins with long-term R&D strategies. In partnership with Cerema, the French public agency for developing, deploying and evaluating public policies in the areas of mobility and urban planning, Spie batignolles is participating in the **Reflectivity project** selected for financing from the ANR, France's national research agency. The project aims to promote new techniques for measuring optical properties of urban surface materials and predict how they will change. The many potential applications include optimising public lighting, reducing urban heat island effects, and enhancing safety as autonomous vehicles prepare to hit the road. The work will be carried out over four years, starting from January 2023. ■

ENVIRONMENT

TACKLING the climate emergency

Spie batignolles is doing all it can to fight disruptions to our ecosystem. Based on an accurate vision of its carbon footprint and its various components, the Group is organising its climate action with the Accel'R plan and spreading a culture of climate awareness among its teams. Its action extends beyond climate change alone to embrace the protection of natural environments and resources.

REDUCING OUR GREENHOUSE GAS EMISSIONS



Spie batignolles is fighting climate change by boosting the environmental performance of each of its projects, tackling both upstream and downstream impacts in its value chain. In 2022, the Group embarked on an **ambitious carbon reduction plan** and set targets to be met on the way to 2030. The action plan, called Accel'R, has three main focuses: preserving resources, decarbonising resources and decarbonising transport.

The first step involved conducting a rigorous carbon assessment across the Group, including not only Scopes 1 and 2, but also Scope 3 (non-energy-related indirect emissions). The resulting data was used to plan a carbon reduction pathway to 2030: -38% for Scopes 1 and 2, and -23% for Scope 3. Nine internal committees implement the **Accel'R plan** and mobilise employees in these areas: low-carbon materials, circular economy, machinery consumption, alternative transport, biodiversity, energy performance, worksite base camps, logistics, and responsible purchasing. Their role is to gather feedback, validate the technical feasibility of proposals, and then prioritise carbon reduction initiatives to be implemented based on their impact. ■

ACCEL'R ACTION PLAN

RAISING INDIVIDUAL AND GROUP AWARENESS



For the launch of the Accel'R action plan, the Group's 300 manager shareholders took part in Climate Fresk workshops to hone their understanding of global warming, its causes, and its challenges. Some were then trained to facilitate sessions in their own entities and spread awareness throughout the entire Group.

Thanks to this approach, some 1,000 employees will have participated in a workshop in 2023 and, over time, all employees will take ownership of this strategic issue.

PROTECTING BIODIVERSITY



Solid expertise in environmental projects

Whether through dedicated contracts or offsetting measures within a larger project, the Group's operations present significant environmental value - in fact, it is a member of the UPGE (Union professionnelle du génie écologique) federation of ecological engineering companies. With its **Eqiliance** range, it delivers renaturing and ecological restoration projects, which help develop regions as well as preserve nature. These operations sometimes take place in highly protected areas, such as the Natura 2000 site near Ax-les-Thermes, where a walking and bike path was created. They also include large-scale projects with a significant environmental component, such as the Gally eco-neighbourhood in Versailles. There, Spie batignolles' teams applied a circular economy approach to handling the site's fertile soils (60,500 cu. metres), enabling them to be reused later for landscaping. Fertilisation, turf laying, and new planting will help rebuild a healthy ecosystem. ■

Prevention based on environmental analysis

Spie batignolles makes it a priority to conserve biodiversity and natural environments. Our teams take this focus into consideration and receive regular training on protecting sensitive environments. These aspects shape all work operations that may impact the environment. Before a project begins, Spie batignolles **analyses each worksite to assess its environmental sensitivity and, if necessary, develops a detailed map** to adapt processes accordingly. Multiple aspects - water, fauna, flora, and resources - are studied. The Group also liaises with ecologists, public authorities, local associations and other specialists to implement specific measures, such as any adaptations required for certain sites. ■





PROMOTING A CIRCULAR ECONOMY

There is enormous potential for transforming waste into new resources, but all stakeholders must buy into the process, and new recycling and transformation activities need to be developed. To reduce inputs and waste, Spie batignolles applies circular economy principles, enabling it to reuse, repurpose, and recycle as many raw materials as possible during the construction phase. But the Group's efforts are not limited to the worksite; they begin earlier, with eco-design and choosing environmentally friendly, recyclable and recycled materials, and they continue afterwards, with the repurposing of waste.

Along with many of its industry peers, the Group is a member of the **Club du Réemploi**, which serves to build partnerships and share experience through a dedicated digital platform. The Club aims to achieve a reuse rate in construction of 15% to 20% by 2024. To contribute to this goal, Spie batignolles also draws on its own internally developed expertise in reuse. Its rubble optimisation platform, **Valosphère**, processed 43,000 tonnes of construction waste in 2022, of which close to 50% was recovered as medium or coarse recycled sand. The platform also supported research on a fully recycled compacted concrete to be used for cycle paths. Similarly, it contributed to the development of **Agreco®**, a fully recycled bituminous concrete made of aggregate reclaimed from demolished roads. ■





PRIORITISING BIO-SOURCED MATERIALS

To effectively lower carbon emissions, the engineering and construction industry must change its practices for materials sourcing, which generates most of its Scope 3 greenhouse gas emissions. Spie batignolles is working towards this goal by actively **developing the use of bio-sourced materials** (wood, cellulose, hemp, wool, etc.) – mainly choosing those of plant origin, since they sustainably sequester carbon in constructions.

Tree maintenance activities can help produce a bio-sourced raw material. Spie batignolles' subsidiary **MSV** has developed a solution to reuse its plant waste as it produces wood chips to be burned as heating fuel. This product meets all quality standards and is PEFC-certified.

Promoting sustainably produced materials helps to preserve natural resources and protect the environment, and by favouring a short supply chain, the Group is further shrinking its carbon footprint. This focus on local, bio-sourced materials also offers a way to address potential difficulties arising from an increasing scarcity of raw materials. ■

A SUSTAINABLE PROCUREMENT POLICY

Optimising equipment and materials procurement, from an environmental standpoint, now forms a central aspect of the buyer's role. To advance this goal, a **réfèrent achats responsables** supports our suppliers' actions to promote low-carbon solutions. Our purchasing teams, technical divisions and CSR department have begun to meet the Group's environmental commitments as well as ever-growing client expectations.



GRENOUILLES D'OR AWARDS

The **Grenouilles d'Or** awards distinguish top environmental performers, brought to light through the Attitudes Environnement programme and evaluated based on its six criteria. Fourteen projects or worksites earned this accolade in 2022: 3F (Lille), B9 gymnasium (Poitiers), Schuman building (Poitiers), SNC (Versailles), Eiffel (Créteil), DSM (Village-Neuf), Vicat (Nancy), GRDF regional headquarters (Isneauville), and the equipment yards at Tilloy-lès-Mofflaines, Saint-Bonnet-de-Mure, Albertville, Saint-Jean d'Illac, and La Bathie. The La Vigne-aux-Roses project (La Roche-sur-Yon) won its second Grenouille d'Or award, attesting to its teams' strong commitment to the environment.



PREVENTING SITE POLLUTION

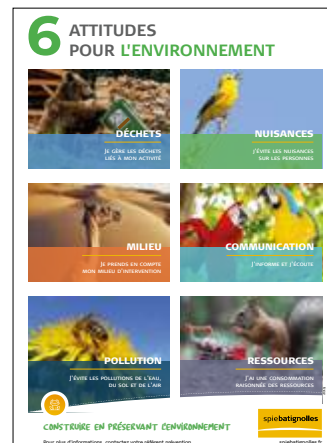


To minimise the risk of accidental harm to the environment, Spie batignolles implements procedures to prevent and manage discharges into the air, water and soil at its worksites. Risks of spillages or leaks of hazardous products are particularly closely monitored. Employees are made aware of and trained to respond to pollution risks, and a network of dedicated prevention officers regularly conduct risk audits.

On each worksite, the main environmental risks and corresponding protection measures are presented to all the workers involved, who also receive training delivered by the Group's environmental experts and attend Spie batignolles "Environment Minute" meetings. An **environmental protection plan** is drawn up to assess risks for each phase of work. Every precaution is taken, such as spill containment for equipment presenting a risk, special procedures for washing concrete buckets, and recovery and treatment of wastewater. In the event of an incident, employees are trained to use the spill kits that are placed close to work areas presenting a potential risk. ■

FOSTERING AN ENVIRONMENTAL CULTURE

To effectively reduce the environmental impact of a project, all those involved must buy into the approach - our own employees as well as those of our subcontractors and partners. Spie batignolles promotes environmentally friendly practices with its **Attitudes Environnement** programme. It sets best-practice standards for the Group in six areas: waste, resources, the surrounding environment, pollution, nuisances, and communication. The programme also integrates the **Attitudes Environnement challenge**, during which the Environment Committee audits worksites, thereby motivating teams to remain vigilant. In addition, "**Environment Minute**" meetings continued to bring together all worksite participants. They focus on diverse issues such as mobility, listening to local residents, managing invasive non-native plant species, recycling batteries, and more. ■



HUMAN RESOURCES

GROWING our talent

Faced with the need to transform the company and gain even more agility in the context of today's many social issues, Spie batignolles is taking steps to attract and retain the skills it needs, as well as combine employee performance and well-being at work. Spie batignolles makes it a priority to onboard new recruits and effectively support every employee throughout their career, especially as the success of the group is built on employee engagement, even with respect to share ownership.



EXPANDING OUR TEAMS

Spie batignolles owes its success to its human capital – its people – and has developed a recruitment strategy that will achieve its growth objectives. Now nearly five years old, the **Recruiters' Club** works across multiple entities to implement the Group's recruitment plan, supported by an extensive employee referral programme. As a result, more than **1,000 employees** joined Spie batignolles in 2022.

Digital tools, such as DigitalRecruiters, Visiotalent and PathMotion, are being used massively to speed up the recruitment process. At the same time, the Group maintains a strong social media presence. For example, its LinkedIn page boasts 100,000 followers, up 18% on last year. Special efforts are made to recruit students and recent graduates through **many school outreach initiatives**, including virtual visits of project sites, company presentations, online forums, and job dating. The School Relations Club holds a total of **more than 100 events every year** with about 60 schools.

The Group's human resources policy has attracted work-study programme participants and trainees, earning Spie batignolles the **HappyTrainees label** for the third year in a row. An overwhelming majority – 85.5% – confirm that they would recommend the Group to their peers. Systematised onboarding procedures contribute to this success as workers benefit from coaching from

experienced employees, management-level employees are mentored through the **Alliance process**, and all complete an induction course. Every step is taken to ensure that each new employee is well integrated into the Group and shares its values, culture and core knowledge. ■



PROMOTING OUR PROFESSIONS

To adapt to constant changes in our professions while addressing social transformations, we must attract talent from all backgrounds and encourage skills development. Spie batignolles is firmly committed to a social innovation policy that extends far beyond the scope of legal requirements. It expresses this commitment through four dimensions: social integration, employment of people with disabilities, gender diversity and digital inclusion.

The **Integration Guide** offers a special toolkit to encourage partnerships with specialised organisations (Pôle Emploi job centres, regional youth employment offices, Geiq and others). The Group also took steps in 2023 to create a **temporary employment agency that promotes integration** (ETTI). It will provide comprehensive employment services, from sourcing to sustainable jobs, including social support and training.

Changing people's attitudes towards disability and improving the working conditions of workers with a disability is another major goal of the Spie batignolles social innovation policy. Based on in-house experiences, the Group published the **Handi'Cap guide**, organised a **communications on disability day**, and each entity appointed a designated disability officer.



To fully benefit from **gender diversity** in its teams, Spie batignolles has included measures to promote gender equality in its Group agreement on quality of life at work. The Group supports women's careers (accounting for 24% of management-level, office, technical and supervisory staff) through its membership in the **Elles Bougent** non-profit and its **Les Bâtisseuses** podcast series on women builders. Lastly, Spie batignolles is also addressing the digital divide, which is a real issue and a serious obstacle at a time when digital is transforming our jobs. The Group's **digital inclusion** project will offer better access to training and tools – once a needs assessment has been conducted – and reach out to workers as a priority, to enhance their job security. ■

BUILDING OUR SKILLS

Supporting employees throughout their career is essential to keep up with the changing shapes of our professions. It is also a powerful way to boost employee loyalty and engagement. Whether through annual performance appraisals or career interviews, the focus remains on translating individual and collective needs into concrete measures.

The Group's **training policy**, aligned with its workforce and skills planning strategy, supports upskilling. An important tool is the **Sb Talents digital platform**, which centralises all HR processes (training, performance management, career development, and skills development). It complements the E-Campus platform to organise and deliver both in-person and remote training to all employees. ■



THE FAS 2022 EMPLOYEE SHARE OWNERSHIP AWARD

THE POWER OF COLLECTIVE ENGAGEMENT

Rien

Engaging all employees in the company's future has long been an integral part of Spie batignolles' strategy and governance. Today, employee share ownership in Spie batignolles has reached 70%. This strong majority share is what has earned the Group a distinction from FAS, the French federation of employee and former employee shareholders.

The federation awards its Grand Prix to companies with leading employee shareholding practices. It named Spie batignolles as the winner in the category for unlisted companies, highlighting its "robust plan and strong engagement over the long term". This recognition means a great deal to a group empowered by a business model that has enabled it to control its share capital and its future since 2003.

MAKING EVERYONE A STAKEHOLDER IN SUCCESS

The best proof that Spie batignolles employees support the Group model is the steadily rising percentage of those who choose to become shareholders through the **Group Savings Plan** (Plan d'Épargne Groupe). The plan strengthens the engagement of employees at all levels of the organisation and gives them a stake in value creation. Making each employee a stakeholder in our collective success forms a core tenet of the Group's employee share ownership philosophy. That is why Spie batignolles decided in 2022 to launch a matching contribution programme that is particularly attractive to small investors in the Group Savings Plan.

The Spie batignolles model is presented to every new employee during their onboarding process. In addition, the **meetings led by Management Committee members** are held every year, in every region, to keep employee shareholders informed of the Group's strategy and outlook.

Maintaining healthy social dialogue is one of the company's top considerations. The Group Works Council represents all Group's entities and meets twice a year, offering a forum for constructive discussions between management and employee representatives. ■

WORKING SAFELY

Guaranteeing a safe work environment is an absolute priority for Spie batignolles. The Group's risk prevention policy is implemented by a Health, Safety and Environment Committee, whose members are the prevention managers in entities. It is supported by a network of 80 employees holding prevention roles on our worksites day-to-day.

Awareness-raising and training are core components of prevention. The HSE action plan is built around a number of core components, including the **"Preventive Attitudes"** programme (which highlights the habits to adopt to prevent accidents), the **Spie batignolles "Minute" meetings**, the **"Zero Accident Objective"** training course, and the inclusion of a safety segment in every site manager or team leader training session. In addition,

use of the **Sb prévention digital app**, rolled out in 2021, has since improved the formal structure of site visits and feedback to be taken into consideration. However, for the Group, protecting its employees goes beyond the boundaries of its workplace safety obligations. The framework agreement it signed with the **Alliance Sociale** social worker network in 2021 continued throughout 2022. It enables employees experiencing difficulties to receive help outside the company. Spie batignolles is also a member of **Hub Santé**, a Pro BTP service, which offers employees quick solutions to common health concerns. ■



GUARANTEEING COMPLIANCE

Ethical values are fundamental at Spie batignolles. Working closely with the Executive Committee, the Group continues to implement the **compliance programme** coordinated by its Legal department, with the support of the Ethics and Compliance Committee representing all entities. Compulsory training is conducted for this set of internal rules, as well as the Ethics Charter and the Code of Conduct. A network of ethics and compliance officers ensures compliance with these rules and the traceability of actions performed.

To mark the UN's International Anti-Corruption Day on 9 December each year, Spie batignolles holds a **day-long forum** where managers and their teams can discuss the compliance programme. The third edition of this annual event focused on the Group's whistleblowing procedures, which were amended to reinforce protection for whistleblowers and comply with new legal requirements. ■

Spie batignolles **FOUNDATION,** spreading our **VALUES**

The Spie batignolles Foundation was set up in 2006 and develops charitable actions that align with the Group's values. It supports education and culture, fights exclusion and inadequate housing, and promotes humanitarian and environmental causes. Many employees participate actively in these solidarity initiatives.

CHOOSING SOLIDARITY

Since 2017, the Spie batignolles Foundation has supported **Habitat et Humanisme** in its efforts to help people in need to reintegrate into society. A variety of projects have been initiated. They include the eco-construction of a boarding house-type of social housing (Clermont-Ferrand), a community facility called "Escale Solidaire" for those in need (Laval) and a project called "Émouvantes images" that encourages refugees to express themselves through art.

The Foundation has also established a partnership with the **Compagnons Bâisseurs** non-profit, which has launched an experimental three-year social and work reintegration programme called "Horizon" that aims to help more than 1,000 people by developing personalised pathways that include jobs at a solidarity worksite and group learning about energy renovation, materials reuse and other emerging activities in the housing industry. ■

fondation spie batignolles



SUPPORTING AMBITION

The Spie batignolles Foundation supports education in varying forms. It grants scholarships to students of the French engineering schools ESTP (École spéciale des travaux publics) and ENEPS (École nationale de l'enseignement professionnel supérieur). The Foundation also provides more individualised support, such as through its partnership with **Un Avenir Ensemble**, of which it is a founding member. Under this partnership, young people from disadvantaged backgrounds are mentored by a Group employee over the long term, from high school until they obtain their first job. ■

GRAND PRIZE FOR 2022



Each year, the Spie batignolles Foundation awards additional financial aid to a supported project in which an employee has also actively participated. In 2022, this special prize went to a Lyon-based non-profit, **Les Cités d'Or**. It offers vulnerable young people an opportunity to engage in a long-term project for their region and receive

remuneration for their involvement. Through concrete experiences such as interviewing an inspiring person in front of an audience or conducting face-to-face research in a neighbourhood to learn about residents' needs, participants learn valuable lessons about self-awareness, how to be persuasive, how to connect with people, and a deeper understanding of their environment, all of which is useful in building a sustainable future.

PERSEVERANCE

A LIFELINE FOR POLAR POD

Jean-Louis Étienne's project to explore the Southern Ocean, supported by Spie batignolles Foundation since its beginnings, has entered a new phase. The floating research station tasked with collecting data about this poorly understood, yet essential, region of the world will require regular inspections.

Launched on 28 November 2022, the Perseverance will carry relief crew and supplies, as well as house scientific equipment for upkeep and maintenance. Designed and built specifically for this role, the schooner will sail the world's most difficult-to-navigate ocean, where wind speeds reach 50 knots and waves hit heights of 6 metres.

42 metres long

11 metres wide

A draft of
4.15 metres

10 knots
cruising speed

NON-FINANCIAL INDICATORS

CONSIDERATION	PERFORMANCE INDICATOR	2022	2021
ENVIRONMENTAL			
Reduction of greenhouse gas emissions	GHG emissions (Scopes 1 and 2)	54,221 tCO ₂ eq	51,321 tCO ₂ eq
Attitudes Environnement challenge	Overall average for the Attitudes Environnement challenge	94%	90%
Biodiversity conservation	Environmental attitude survey: middle position score	97%	94%
Prevention of site pollution	Number of accidental site pollution incidents	0	0
Circular economy and resource conservation	Share of recycled waste	83%	84%
	Tonnes of waste produced at project sites in 2022 and treated by Valosphère	47,224	39,318

WORKFORCE			
Total workforce	Number of Group employees	8,029	7,677
New recruits	Number of new employees hired	1,029	811
	Number of employees in work-study programmes	467	389
	Percentage of new recruits mentored through the Alliance process	60.8%	64.9%
	Percentage of women in the global workforce	14.3%	13.9%
Equal opportunity, diversity and inclusion	Percentage of women in the global workforce	14.3%	13.9%
Competencies, training and career development	Share of total payroll allocated to training	1.81%	1.55%
Strategic independence through employee shareholding	Percentage of unitholders in Spie batignolles	63%	45%
Health, safety and well-being at work	Severity rate	1.36	1.29
	Frequency Rate	19.2	16.14

CONSIDERATION	PERFORMANCE INDICATOR	2022	2021
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SOCIAL

Ethics and compliance	Number of ethics-related alerts received and handled	5	-
	Number of employees having completed anti-corruption training	1,241	-
Duty of care	Sanctions and sanctioning procedures relating to illegal work	0	0
Innovation and service quality	% of satisfaction with the quality of client relations	94%	87%
	% of client satisfaction with safety compliance	93%	90%
	% of client satisfaction with schedule compliance and delivery times	82%	85%
	% of client satisfaction with the quality of construction	96%	84%

Extract from the **CONSOLIDATED FINANCIAL STATEMENTS**

At 31 December 2022

Assets in €M

GOODWILL	254.9
INTANGIBLE ASSETS	265.9
PROPERTY, PLANT AND EQUIPMENT	86.3
FINANCIAL ASSETS	87.4
TOTAL FIXED ASSETS	439.8
Inventories and work in progress	35.3
Trade and other receivables	744.2
Other receivables and accruals*	317.0
Cash and cash equivalents	399.1
TOTAL CURRENT ASSETS	1,495.7
TOTAL ASSETS	1,935.5

Equity and liabilities in €M

EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT	266.7
Non-controlling interests	2.9
EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT AND NON-CONTROLLING INTERESTS	269.6
TOTAL PROVISIONS	175.9
Loans and other financial debt	48.9
Trade payables and related accounts	729.4
Other payables	711.6
TOTAL LIABILITIES	1,489.9
TOTAL LIABILITIES	1,935.5

Income statement in €M

Goods sold (revenue)	2,279.9
Other operating income	73.1
TOTAL REVENUE AND OTHER INCOME	2,353.0
Purchases and external charges	1,695.8
Taxes, levies and equivalent	20.6
Employment costs	506.9
Depreciation, amortisation and provisions	70.1
Other operating expenses	14.3
TOTAL OPERATING EXPENSES	2,307.7
Share of profit/(loss) of joint operations	9.8
OPERATING INCOME	55.1
Operating income including depreciation/goodwill amortization	51.8
NET FINANCIAL INCOME/(EXPENSE)	(2.4)
NET EXCEPTIONAL INCOME/(EXPENSE)	(18.5)
INCOME FROM CONSOLIDATED COMPANIES	30.9
Income tax	(15.8)
Deferred tax	4.7
NET INCOME FROM CONSOLIDATED COMPANIES (excluding goodwill)	19.8
Share of profit/(loss) of companies accounted for under the equity method	0.0
NET INCOME OF ALL CONSOLIDATED COMPANIES	19.8
Minority shares	0.4
NET INCOME - GROUP SHARE	20.1
EARNINGS PER SHARE (IN €)	0.45

* Including deferred tax assets

Publication Manager: Spie batignolles Communications Department

Graphic design and production: Vincent Treppoz / **Editing:** atelierdumot.fr / **Translation:** Alto International

Photo credits: Vincent Bedos / Yannick Brossard / Sylvain Cambon / Vincent Colin / Samuel Dhote / Germain Hazard / Dimitri Lamour / Stefan Meyer / NR Drone / François Poche / Nicolas Vercellino / François Vigouroux / Adobe Stock / iStock / DR / Spie batignolles

Printed on 100% recycled paper

June 2023

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