

2025 ESSENTIALS

# Building **the future,** innovating **together**

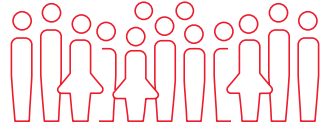


SOLETANCHE FREYSSINET



# 24,000

employees



# 200

business  
units



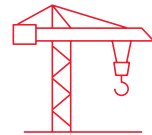
Revenue



# €4.8 billion

# 25,000

projects



Editorial > **02**  
Our operation worldwide > **04**

## OUR BRANDS

Soletanche Bachy > **08**  
Menard > **12**  
Terre Armée/Geoquest > **16**  
Freyssinet > **20**  
Nuvia > **24**  
Sixense > **28**

## THE PRINCIPLES GUIDING OUR ACTION

Health and safety > **32**  
Environment > **34**  
Human rights > **36**  
Business ethics > **37**



Watch: our projects in 2024.

## A force for good in a changing world

The women and men at Soletanche Freyssinet put passion into their work every day to improve the daily lives of thousands of people around the world. Because each city and region is different, each project has unique challenges. The plethora of expertise available across Soletanche Bachy, Menard, Terre Armée, Freyssinet, Nuvia and Sixense ranks Soletanche Freyssinet among the prominent and trusted players building the world we live in and the world to come.

*#makingyourdayeasier #fostergrowth #accesspower #careforall #greenisgreat*

## Terre Armée is now Geoquest!

Terre Armée changed its name to Geoquest on 1 January 2025. Its new global name points to its unparalleled geotechnical expertise and its teams' relentless quest to develop pioneering, eco-efficient soil stabilisation solutions.

It is also a statement about the company's know-how, which has grown far beyond the technique where it all started, Terre Armée®. Its array of solutions, ranging from geosynthetic-reinforced structures to geohazard protection and beyond, have given Geoquest the expertise and international experience to tackle a wide variety of challenges.

[www.geoquest-group.com](http://www.geoquest-group.com)



# Manuel Peltier

## Chief Executive Officer of Soletanche Freyssinet



Our overall business grew and our six brands performed well in 2024. Our revenue climbed to €4.8 billion and order intake is at an all-time high. These figures mirror the positive trends in our markets. They show that demand for our specialist expertise is as strong as ever.

**Soletanche Bachy** (46% of revenue) maintained high business volumes after several years of strong growth, as well as a healthy order book.

//

**The 2024 figures  
show that demand  
for our specialist  
expertise is as strong  
as ever.**

//

**Menard** (17% of revenue) enjoyed a particularly brisk year, posting 20% growth in its legacy trades as well as soil remediation.

**Terre Armée\*** (7% of revenue) continued to grow, driven by strong business activity in the United States and Asia, and opened a drainage product plant in India to expand its industrial capacity.

**Freyssinet** (19% of revenue) reported stable sales and sustained business activity, particularly in the United Kingdom, Europe and Mexico.

**Business at Nuvia** (9% of revenue) was buoyant throughout the year, reflecting renewed interest in the nuclear sector.

**Sixense** (2% of revenue) enjoyed continued growth, driven in particular by instrumentation and monitoring contracts associated with major infrastructure projects in Europe, North America and Oceania.

We acquired several companies in 2024, which have strengthened our operations in specific geographies

or rounded out our portfolio of technologies. In the United States, we brought HUB Foundation into Soletanche Bachy. In Canada, Geotech joined forces with Menard in the soil investigation business. And we invested in France, where Nuvia acquired MBO, a specialist in thermal insulation and scaffolding.

Safety and the environment remain at the top of our mind in all our companies.

Our safety culture continued to gain ground in 2024. We are aware that keeping people safe takes a constant effort and are pressing ahead on this front. We also started rolling out several environmental action plans to continue advancing towards our carbon reduction targets, another central component in our development strategy.

\* Terre Armée changed its name to Geoquest on 1 January 2025. As it carried out the projects below in 2024, we have kept the company's name at the time, Terre Armée.

---

## **MANAGEMENT TEAM**

### **At 1 March 2025**

**Manuel PELTIER**  
*Chief Executive Officer,  
Soletanche Freyssinet*

**Lorenzo ALESSI**  
*Quality, Safety and  
Environment Director*

**Pascal BERGER**  
*Chief Executive Officer, Sixense*

**Guillaume BILLAROC**  
*Marketing and Communications  
Director*

**Christophe DAUCHY**  
*Chief Executive Officer,  
Soletanche Bachy*

**Mark DEARY**  
*Business Development Director*

**Marc LACAZEDIEU**  
*Chief Executive Officer, Menard*

**Bruno LANCIA**  
*Chief Executive Officer, Nuvia*

**Raphaël MAILHÉ**  
*Administrative and Financial Director*

**Vincent OUDIN**  
*Chief Executive Officer,  
Terre Armée/Geoquest\**

**Xavier PLANCHON**  
*Human Resources Director*

**Jean-Philippe RICARD**  
*Chief Executive Officer, Freyssinet*

**Nuria SANCHEZ RUBIO**  
*General Counsel  
and Compliance Director*

**Édouard SIRET**  
*Information Systems Director*

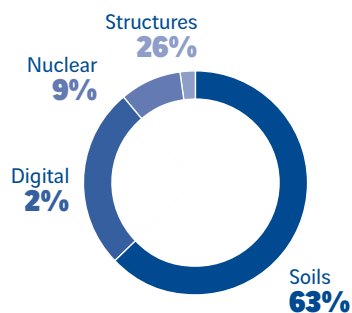
**Bernard THÉRON**  
*Managing Director,  
Soletanche Bachy*

---

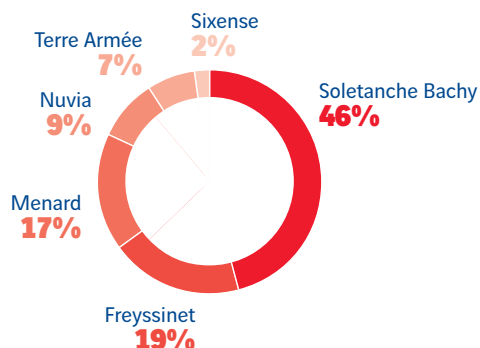
# A solid global reach

Soletanche Freyssinet's network encompassing 150-plus subsidiaries in more than 90 countries provides Soletanche Bachy, Menard, Terre Armée\*, Freyssinet, Nuvia and Sixense with a solid global reach.

Revenue by business line



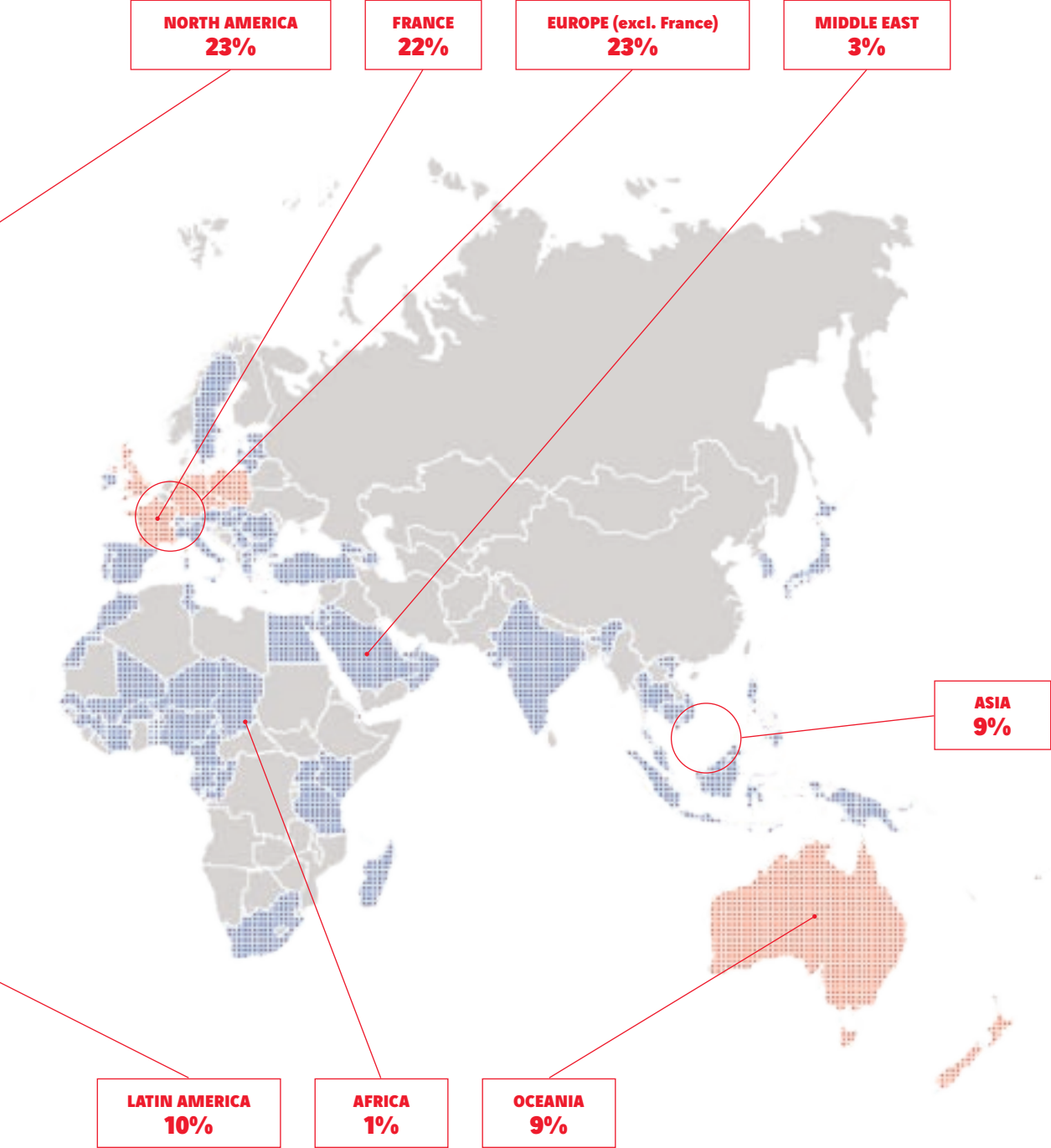
Revenue by brand



\* Terre Armée changed its name to Geoquest on 1 January 2025.

As it carried out the projects below in 2024, we have kept the company's name at the time, Terre Armée.

Revenue by geographical area





SOLITAICHE SARL

SOLITAICHE SARL

Un Bel Air de  
réussite



2023 - 2024



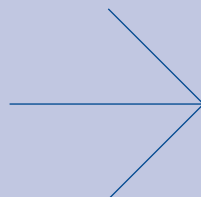
# Our brands

Soletanche Freyssinet brings together an unrivalled array of construction and engineering expertise.

Our six brands – Soletanche Bachy, Menard, Terre Armée\*, Freyssinet, Nuvia and Sixense – are active in four main business lines: Soils, Structures, Nuclear and Digital.

This unique combination of wide-ranging expertise places Soletanche Freyssinet among the world leaders in its markets.

\* Terre Armée changed its name to Geoquest on 1 January 2025. As it carried out the projects below in 2024, we have kept the company's name at the time, Terre Armée.



# SOLETANCHE BACHY

Soletanche Bachy is a world leader in foundations and soil technologies. It has around 80 subsidiaries and branches operating in 60 countries, which provide public and private sector customers with high-performance, innovative geotechnical solutions. It acts both as a general contractor and as a specialist subcontractor for the design, build, upgrade and maintenance of a variety of structures including ports, dams, car parks, metros, tunnels, energy and buildings. Soletanche Bachy also contributes to protecting the environment by building positive-impact structures and implementing optimised techniques.



**SOLETANCHE BACHY**

**€2,251m**  
REVENUE

**9,600**  
EMPLOYEES



## CELEBRATION KEY, BAHAMAS

### MARITIME INFRASTRUCTURE FOR CARNIVAL

Carnival Cruise Line entrusted a consortium encompassing Soletanche Bachy Colombia, Soletanche Bachy International Grands Projets and a local partner with building infrastructure on the island of Grand Bahama. The consortium will be constructing a jetty and two quays, partly on shoals, meaning that it cannot use waterborne construction equipment. Instead, it is using SolJetty®, a high-efficiency, fuel-saving process.

This project is drawing on Soletanche Bachy's full range of maritime works expertise, available through the ForSHORE® brand.

*#fostergrowth*

## KOWLOON BAY, HONG KONG

### FOUNDATIONS FOR THE YIP ON PUBLIC HOUSING DEVELOPMENT

Bachy Soletanche Group Limited built the foundations for a residential complex by Kowloon Bay in Hong Kong. Our teams set up 109 large-diameter bored piles with 2.8, 3.0 and 3.3 metre wide bellouts, lateral supports and pile caps. They completed the works in only 17 months, in a tight 180 by 90 metre space, and removed part of the previous building's foundations. They also applied a pioneering technique, which enabled them to avoid using 122 metal piles, the equivalent of 732 tonnes of recycled steel, making this project an all-round success story!

*#makingyourdayeasier*



## BRISBANE, AUSTRALIA

### A NOVEL AND SUSTAINABLE FOOTBRIDGE

Brady Marine & Civil, a Soletanche Bachy subsidiary, recently completed construction of an elegant pedestrian bridge in Brisbane, which now provides a quicker and safer travel option while easing congestion in the Newstead area. To minimise impacts on the adjacent park (which is home to protected heritage trees and vegetation) without closing marine access to Breakfast Creek, the team came up with a novel system:

they built the main span off-site, barged the arch to the site on SPMT modules, rotated it and lowered it into position – which also reduced Scope 1 and 2 CO<sub>2</sub> emissions by 10%. Brady Marine & Civil also used driven steel tubes instead of concrete steel-lined bored piles, which reduced Scope 3 emissions by approximately 30%.

*#greenisgreat*

*#makingyourdayeasier*



## VERACRUZ, MEXICO

### NEW QUAY FOR THE PORT OF VERACRUZ

Our Mexican subsidiary Cimesa is designing and building a quay at a flexible-use terminal at Veracruz. This project involves construction of a 550-metre-long berthing structure and dredging to a depth of 15 metres, and the quay is made of steel piles and a precast structure. The works include driving steel piles with diameters ranging from 900 to 1,000 mm to depths of 32 to 39 metres, prefabricating the heads, longitudinal beams, transverse beams and prestressed slabs that make up the structure, the civil engineering works package, and the quay equipment, and will be completed in June 2025. This project is an example of Soletanche Bachy's maritime works expertise, available through the ForSHORE® brand.

*#fostergrowth*

## CANADA

## NAIRN FALLS GENERATING STATION

Soletanche Bachy Canada was entrusted with building an upstream cofferdam and a trestle bridge on the project to overhaul the Nairn Falls station and enhance its efficiency. To build the deep foundations, they installed 60 cm pipe piles with 3-metre rock sockets. They are also fitting tie-down anchors to reinforce the cofferdam surrounded by a retaining wall, and purpose-engineered independent mechanical sluices to regulate the river's flow. Working next to an active spillway presented significant challenges, including constant changes in water levels and flows sometimes exceeding 140 cu. metres per second. The site crews also have a tight window of time to carry out the works on account of Fisheries and Oceans Department and Coast Guard restrictions.

#accesspower



**25,000 m<sup>3</sup>**  
**OF DRINKING WATER**



## DUBAI, UNITED ARAB EMIRATES

## A 25,000 CU. METRE UNDERGROUND DRINKING WATER RESERVOIR

Zetas, a Soletanche Bachy subsidiary, is building an artificial underground water reservoir, which will be filled with desalinated water, for the Dubai Electricity & Water Authority (DEWA). After successfully completing the first phase at the end of 2021, Zetas is now working on the second one, which involves drilling more than 500 recovery and recharge wells at average depths of 65 metres, developing them, running hydrogeological tests, and sampling the water in the reservoir. When the works are completed in 2025, the reservoir will hold over 25,000 cu. metres of high-quality drinking water – covering the city of Dubai's requirements for 90 days.

#careforall



## ŁÓDŹ, POLAND

### A CROSS-CITY RAIL TUNNEL

Soletanche Polska completed its first compensation grouting project in the country, to ensure a tunnel boring machine could operate safely beneath a century-old residential neighbourhood, on the underground rail line construction programme in Łódź. This technology involves injecting cement slurry into the ground to fill voids and thus prevent subsidence. The crews used a digital system to continuously supervise displacement parameters and apply injections precisely as and when required. Sixense (see pages 28 to 31) monitored surface movements in real time.

#careforall



## MONACO

### BEL AIR, AN ECO-FRIENDLY RESIDENCE

The teams from Soletanche Bachy France and Soletanche SAM have completed the deconstruction, excavation and retaining works on the Bel Air project overlooking Monaco. They applied a variety of eco-friendly techniques on this mountainside project, including eco-design, phasing optimisation, using electrical instead of internal-combustion drilling machinery, and fine-tuning concrete formulas. As they were working near Princess Grace hospital, they also made every effort to limit noise and vibration.

#makingyourdayeasier #greenisgreat

**25,000**  
TONNES OF DEBRIS  
EVACUATED FROM JULY  
TO DECEMBER 2023

# MENARD

Menard is active in three fields of expertise: soil investigation, improvement and remediation. True to its founder Louis Ménard's vision, it engineers and applies solutions that save resources, providing soils with a more sustainable future, the world over.



**€808m**  
REVENUE

**2,630**  
EMPLOYEES



## NEW JERSEY, UNITED STATES

### CONTROLLED MODULUS COLUMNS TO FEND OFF FLOODING

In the wake of Hurricane Sandy in 2012, the United States government started rolling out an extensive programme called Rebuild by Design (RBD). On this programme, Menard USA's teams have been tasked with setting up Controlled Modulus Columns (CMCs) in conjunction with a retaining wall along the Hudson River, to protect residents from possible flooding in the future.

*#careforall*

## CALIFORNIA, UNITED STATES

### CONTROLLED MODULUS COLUMNS TO SHRINK ENVIRONMENTAL FOOTPRINTS

Farrell Design-Build's teams were entrusted with building the foundations for a new research and development centre in California. They used Controlled Modulus Columns (CMCs) and vertical drains, which cut concrete requirements by about 70% and CO<sub>2</sub> emissions by 86% compared with the original plan involving bored piles.

*#greenisgreat*

**86%**  
LOWER CO<sub>2</sub> EMISSIONS  
WITH MENARD'S  
METHODS





## BRITISH COLUMBIA, CANADA

### SOLID FOUNDATIONS FOR THE WOODFIBRE LNG PROJECT

Menard's teams spent eight months carrying out dynamic compaction work south-west of Squamish. Their goal was to provide optimal soil conditions for Woodfibre LNG's future liquefaction plant, and they have reduced the risk of subsidence and settlement while minimising the need for additional foundations to support industrial modules weighing up to 11,000 tonnes. The facility will produce 2.1 million tonnes of LNG a year for international markets, on a reliable foundation built by Menard to ensure the safety of its equipment and long-term performance.

**#greenisgreat**

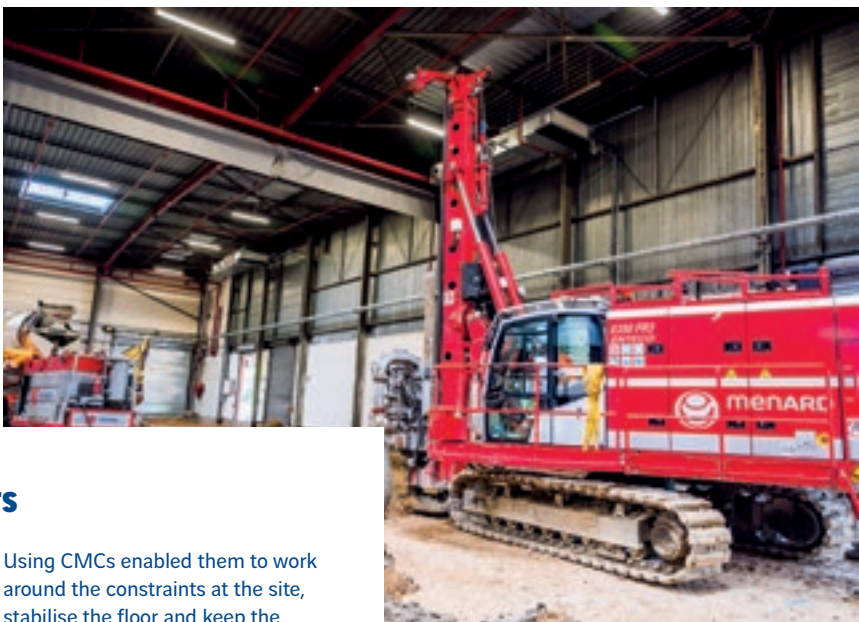
## VAL-DE-REUIL, FRANCE

### SOLUTIONS TAILORED TO CUSTOMER REQUIREMENTS

Menard France came up with an innovative system using Controlled Modulus Columns (CMCs) to support the concrete slab under a logistics warehouse spanning some 10,000 sq. metres. As the warehouse was already standing, they carried out all the work underground, which involved height restrictions as well as other obstacles including walls and utilities.

Using CMCs enabled them to work around the constraints at the site, stabilise the floor and keep the building safe – and will optimise the warehouse's logistics going forward.

**#fostergrowth**





# 40,000

**PREFABRICATED VERTICAL  
DRAINS SET UP  
BY MENARD'S CREWS**

## **KAKADU NATIONAL PARK, AUSTRALIA**

### **BRINGING BACK WILDLIFE TO A CLOSED MINE**

The Ranger Mine, which opened in 1980 and closed in 2012 in one of Australia's most stunning national parks, is undergoing extensive rewilding. Menard Oceania, which is restoring Pit 3, teamed up with several industrial partners to install 40,000 prefabricated vertical drains on the mine's tailings. This seven-month project has set a new standard for mine ecological restoration worldwide.

*#greenisgreat*

## **BRITISH COLUMBIA, CANADA**

### **INFORMING STUDIES FOR A HYDROELECTRIC DAM PROJECT**

Geotech Drilling, a ConeTec subsidiary, is playing an active role in the feasibility studies for a hydroelectric dam. The crews carried out sonic drilling, diamond drilling, borehole alignment surveys and downhole video inspections to depths of up to 100 metres, to characterise the site and assess possible improvements to the future dam. ConeTec's teams had already conducted seismic studies in the boreholes and surface geophysical surveys on this project.

*#accesspower #greenisgreat #careforall*





#### **CHASSENEUIL-DU-POITOU, FRANCE**

### **REMEDICATION OF A FORMER INDUSTRIAL BUILDING**

Remea carried out remediation works at a closed-down industrial plant in west-central France, in preparation for its conversion into business premises. They spent a year excavating polluted soil beneath the building while underpinning its underground columns and reinforcing

its structure to ensure its stability. To limit the operation's environmental footprint, Remea set up a cold desorption (mechanical attrition) process on site, then used the treated soil as backfill to refurbish the platforms inside the building. The underlying principle – revamping and repurposing existing buildings instead of constructing new ones – mirrors the goals in France's no net land take law.

**#greenisgreat**



#### **SAUDI ARABIA**

### **MENARD IMPROVES SOIL FOR THE RUA AL-MADINAH DEVELOPMENT PROJECT**

Menard Middle East carried out soil improvement works in the area under the future car and utility tunnels on the Rua al-Madinah Development. It upgraded 52,000 sq. metres of loose silty sand with 20,000 Controlled Modulus Columns (CMCs), using three drilling rigs during 30 months, to control settlement and build a stable foundation for this extensive urban redevelopment programme.

**#makingyourdayeasier**

# TERRE ARMÉE/GEOQUEST\*

Terre Armée creates and develops retaining, crossing, protective and strengthening solutions, leveraging its unparalleled expertise in reinforced backfill and soil-structure interaction. Its techniques have applications in a variety of fields such as roads and motorways, rail, industry, the environment and water engineering.



**€332m**  
REVENUE

**1,100**  
EMPLOYEES

\* Terre Armée changed its name to Geoquest on 1 January 2025. As it carried out the projects below in 2024, we have kept the company's name at the time, Terre Armée.



## **QUINDANNING, WESTERN AUSTRALIA**

### **A BRIDGE WITH A 21-METRE ARCH**

In Western Australia, Terre Armée's teams designed a 36.8-metre-long concrete-arch bridge for the South 32 Quindanning mine. The arch, which spans an impressive 21 metres, was built using the TechSpan® precast concrete arch solution, and is the biggest in the southern hemisphere. It was set up in just two days and will carry trucks to and from the mine over Pinjarra-Williams road without disrupting the busy traffic on this highway.

**#fostergrowth**

## **PHILADELPHIA, DALLAS, FLORIDA, SANTA RITA RANCH, UNITED STATES**

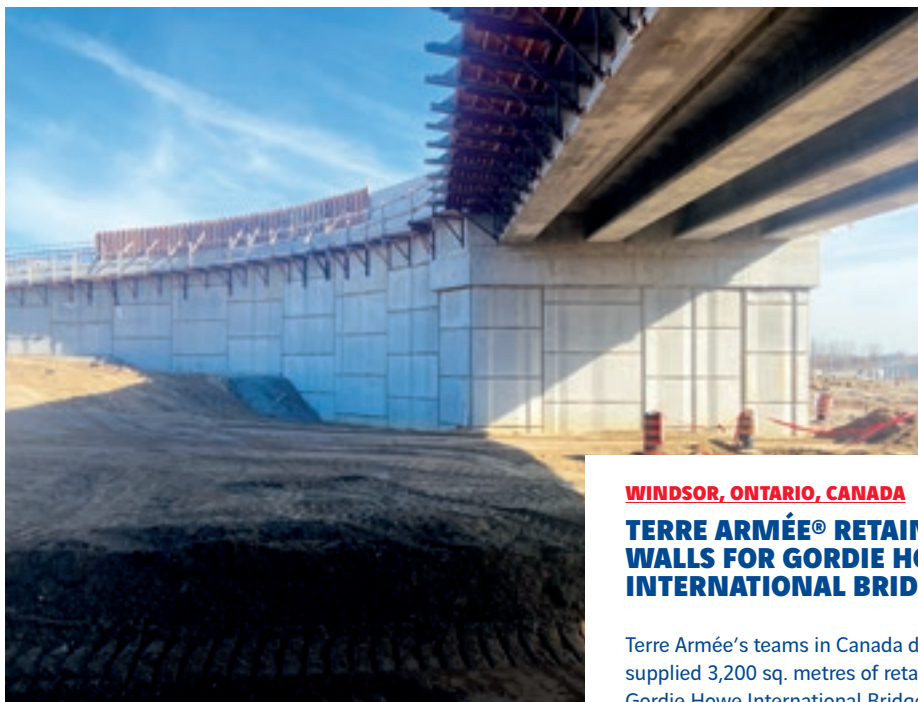
### **TERRE ARMÉE® WALLS FOR SEVERAL LARGE-SCALE INFRASTRUCTURE PROJECTS**

Terre Armée has been active on various large-scale infrastructure projects in the United States. In Philadelphia, for instance, the teams designed and supplied the world's tallest T-Wall® structure at the Betsy Ross Bridge interchange, as part of the Interstate I-95 upgrade. On the Southern Gateway project in Dallas, they set up almost 50,000 sq. metres of retaining walls to redevelop an 18 km section of the I-35E. In Florida, they built 83,000 sq. metres of retaining walls to carry the Brightline West high-speed rail line. In Santa Rita Ranch, near Austin, they used TechSpan® prefabricated concrete arch structures to build a tunnel for a creek to flow freely under a newly developed community.

**#makingyourdayeasier**



Betsy Ross Bridge, Philadelphia.



#### **WINDSOR, ONTARIO, CANADA**

### **TERRE ARMÉE® RETAINING WALLS FOR GORDIE HOWE INTERNATIONAL BRIDGE**

Terre Armée's teams in Canada designed and supplied 3,200 sq. metres of retaining walls for the Gordie Howe International Bridge to the Canadian port of entry, which will be the largest border crossing in the country and one of the largest ports of entry in North America. Once completed, the bridge will be among the top five longest bridges on the continent!

*#makingyourdayeasier*

#### **CONCEPCIÓN, CHILE**

### **PUENTE INDUSTRIAL PROJECT**

The 2.5 km Puente Industrial bridge, which Terre Armée's teams are working on in Chile, will connect the municipalities of Hualpén and San Pedro de la Paz across the Biobío river. It is designed in accordance with the country's seismic standards, will link to both cities' roads and will include a cycling path and pavements. Terre Armée is handling the engineering, supplying the materials and setting up the Terre Armée® retaining walls. Once it is completed, the bridge will be the second longest in Chile!

*#makingyourdayeasier*



**SAMUELSBERG, NORWAY****AN AVALANCHE BARRIER**

Terre Armée teams from France and the United Kingdom designed and built an avalanche protection wall in northern Norway. The 242 sq. metre barrier (240 metres long and 12 metres tall) stands just above the village of Samuelsberg.

*#careforall*



**240 m**

**THE LENGTH OF THE AVALANCHE  
BARRIER BUILT BY TERRE ARMÉE  
IN SAMUELSBERG**

**LUMUT BALAI, INDONESIA****STEEP SLOPE  
STABILISATION AT  
THE LUMUT BALAI  
GEOTHERMAL  
POWER PLANT**

The Lumut Balai plant in South Sumatra is part of the Indonesian government's plan to source 23% of the country's electricity from renewable sources by the end of 2025. Terre Armée's teams played a part in this major project, stabilising the slopes and embankments along a towpath using a combination of nailed walls and TerraGreen® erosion-control textiles.

*#accesspower #careforall*

**SUMBER, INDIA**

**CUSTOM RETAINING WALLS  
FOR THE UDHAMPUR-SRINAGAR-  
BARAMULLA RAIL LINE**

The Kashmir Valley has only two routes connecting it to the outside world. When the new rail line linking Udhampur, Srinagar and Baramulla is entirely up and running, it will take only 13 hours to travel the 800 km stretch from Srinagar to New Delhi. Building the line and its numerous tunnels and bridges, however, is a technical challenge. The teams from Terre Armée India played an active part on this project, for instance supporting construction of the marshalling yard at Sumber station. Building the yard at the same level as the existing buildings involved constructing a 100-metre-tall retaining wall on a steep slope. As a standard retaining wall was not an option, Terre Armée came up with an alternative combining its GeoTrel® reinforced soil system and its TerraLink® retaining wall system. Its integrated solution considerably reduced the project's overall cost.

Terre Armée designed the wall, supplied the materials and provided technical assistance on site.

*#makingyourdayeasier #fostergrowth*



**100 m**

**THE HEIGHT OF THE RETAINING  
WALL FOR THE MARSHALLING  
YARD AT SUMBER STATION**



**SIMPANG PULAI, MALAYSIA**

**TERRE ARMÉE  
STRENGTHENS AND  
STABILISES THE SIMPANG  
PULAI REGION**

Terre Armée's local teams were involved in an impressive project in Simpang Pulai, a beautiful area in Malaysia. They stabilised a 12,432 sq. metre area across three valleys, tackling a variety

of challenges including soil erosion and active slope failures. The crews applied several solutions combining in-situ nailing (TerraNail®) and reinforced soil structures (TerraLink®) to strengthen a critical slope – without altering the stunning surrounding landscape – alongside the FT185 road to Cameron Highlands, a very popular tourist destination.

*#careforall*

**12,432 sqm**

**STABILISED ACROSS  
THREE VALLEYS**

# FREYSSINET

Freyssinet contributes to the construction and repair of structures on five continents through a network of 60 subsidiaries located close to its customers. From engineering to the implementation of technical solutions on site and the manufacture of products, it supports each project with the same principles of excellence, innovation and sustainability. Its hallmark, Sustainable Technology, encompasses an unequalled range of civil engineering expertise enabling the company to build structures using less materials while protecting and maintaining them. This expertise includes post-tensioning systems, cable systems, equipment and maintenance, construction methods, repair solutions, seismic protection and structural strengthening.



**€932m**  
REVENUE

**6,260**  
EMPLOYEES

## PARIS, FRANCE

### STABILISING A BRIDGE

Paris City Council entrusted Freyssinet France's and Chantiers Modernes Construction's teams with a time-critical job: stabilising the Pont de Sully bridge after a barge on the Seine struck its 10th and 11th arches in January 2024. The works involved fitting two temporary metal beams to hold up the bridge then rebuilding the damaged arches with a shotcrete prosthesis. They had to tackle this technical challenge before the Paris 2024 Olympic and Paralympic Games Opening Ceremony – and successfully completed it in time.

*#makingyourdayeasier #careforall*



## BRITISH COLUMBIA, CANADA

### GEOMEMBRANES TO PROTECT A HYDROELECTRIC DAM

Carpi was involved in construction of a 1,050-metre-long, 60-metre-tall dam, a plant to generate up to 1,100 MW and various ancillary structures on the Peace river in the north-east of British Columbia. The teams on this large-scale project engineered an advanced geomembrane solution to protect critical structures from water infiltration and seismic movements – showcasing Carpi's waterproofing expertise in complex geological environments.

*#accesspower*



## **SYDNEY, AUSTRALIA**

### **EASING TRAFFIC AND IMPROVING ACCESS TO SYDNEY'S MAIN AIRPORT**

Transport for New South Wales decided to build the Sydney Gateway, an extensive motorway complex, to ease traffic and improve access to the city's main airport. As part of the project, VINCI Construction subsidiary Seymour Whyte and John Holland partnered up to build 5 km of new road and 19 new bridges, which will carry 100,000 light vehicles and 10,000 heavy vehicles a day. They enlisted Freyssinet's expertise to launch a twin-arch bridge spanning 160 metres across the Alexandria Canal.

The construction method was one of the project's distinctive features: the first part of the bridge was built alongside the canal then moved into position using heavy-duty lifting equipment and hydraulic jacks – a technical feat. The Sydney Gateway opened to traffic in 2024 and has shortened travel times by up to 17 minutes.

*#makingyourdayeasier*



## **SOMERSET, UNITED KINGDOM**

### **POST-TENSIONING AT HINKLEY POINT**

The United Kingdom's government is rolling out a sweeping programme to upgrade its energy generation capacity, which includes building a new-generation nuclear power plant and supplementing its output with offshore wind farms. The two-unit, 3,200 MWe Hinkley Point plant, currently under construction in Somerset, will take over from the first nuclear plants, which have been powering British homes since the late 1950s. Freyssinet has been entrusted with the design, supply and installation of the post-tensioning system for the two reactor buildings, including access to the space between the containment walls. The teams have been active on this project – one of the largest civil engineering undertakings in Europe – since 2019.

*#fostergrowth #accesspower*

**NAM GNOM, LAOS****EXEGY® MORTAR  
TO REPAIR A HYDROELECTRIC  
POWER PLANT**

Freyssinet was tasked with rehabilitating and protecting the concrete siphon of a dam, which involved repairing seals, injecting cracks, hydrodemolition and spraying 130 cu. metres of dry-mix shotcrete. For this job, the local teams and Major Projects Division's teams purpose-engineered a new Exegy® very-low-carbon mortar formula to withstand aggressive conditions. The new mortar, which is now produced in the country, is being used extensively on other projects and contributing to Freyssinet's efforts to achieve its environmental objectives.

*#greenisgreat*



**130 m<sup>3</sup>**

**OF EXEGY® ULTRA-LOW-  
CARBON SHOTCRETE**

**POTENZA, ITALY****SEISMIC RETROFITS FOR  
TWO SCHOOLS**

Italy, which is at the intersection between the Eurasian, African, and Adriatic tectonic plates, is one of the countries with the highest number of earthquakes in the world – and recorded some 17,000 seismic events in 2024 alone! The Italian government is therefore rolling out an extensive works programme to bring buildings up to current seismic standards. On this programme, Freyssinet Italia's teams were entrusted with upgrading the Umberto Di Pasca and Salvatore Rosa secondary schools in the region of Potenza. The project involved designing and installing seismic isolators in the foundations of the two buildings (over 5,000 sq. metres of floor space each). This insulation technique minimises stress on the foundations, reducing the need for additional work on the building structure itself.

*#careforall*



## **GRENOBLE, FRANCE**

### **SAVING TOUR PERRET**

This observation tower is a landmark in Grenoble as well as the world's first reinforced concrete building, and became a listed historical monument in 1998.

Due to significant structural issues, however, it was closed to the public in 1960. Grenoble City Council recently entrusted Freyssinet France with renovating its concrete structure, which involves demolishing parts of the exterior pillars, replacing the rebars, corrosion-proofing the new steel structure and shotcreting over it.

The goal on this ambitious project is to reopen the tower to the public by the end of 2025.

**#fostergrowth #careforall**



## **MEXICO CITY, MEXICO**

### **TENDING TO MEXICO'S METRO SYSTEM**

Mexico City's 12-line metro system plays a vital role in the city, carrying over 4.5 million people a year. When an inspection revealed considerable defects, Freyssinet was tasked with designing and implementing a system to strengthen the structure.

Its teams post-tensioned the line using Freyssibar® bars and carbon fibre fabric – strengthening a total of 151 beams – then enlisted Sixense (see pages 28 to 31) for the load tests.

**#careforall**

# NUVIA

Nuvia uses its world-class nuclear expertise to assist industry customers throughout the life cycle of their highly sensitive and regulated facilities. It is active in a variety of sectors including nuclear, defence, healthcare and the environment, providing its customers with full support services, engineering, and the products required to design, construct, operate and dismantle their industrial facilities. It works side by side with them ensuring the highest safety and performance standards to help to build a safer, cleaner and more sustainable world.



**€433m**  
REVENUE

**2,980**  
EMPLOYEES



## VÄRÖ, SWEDEN

### DISMANTLING UNITS 1 AND 2 AT RINGHALS NUCLEAR POWER PLANT

Swedish energy company Vattenfall awarded Nuvia a contract to dismantle two units at its Ringhals plant (following on from a 2022 contract to dismantle the large elements of the primary circuit of one of the plant's two reactors). The teams will now remove, inspect and sort more than 35,000 tonnes of materials currently inside the reactor buildings. The works will run from 2025 to 2031, engage up to 400 people and is proceeding on schedule. A key milestone has been reached with the commencement of diamond cable cutting operations on the primary pumps, utilising a machine specially designed and qualified by Nuvia.

*#careforall #greenisgreat*

## CHUSCLAN, FRANCE

### CUSTOM-ENGINEERED MACHINERY TO DISMANTLE CELL 901 AT MARCOULE

The French Alternative Energies and Atomic Energy Commission selected Nuvia to dismantle the internal processes in Cell 901 at its Marcoule vitrification plant and prepare the cell for full deconstruction.

For this job, Nuvia's teams developed and are operating an entirely teleoperated diamond wire machine to cut large components, which are then sorted, decontaminated and routed to the appropriate waste disposal streams. The five-year contract also includes expert support for handling high-activity waste containers, which entails designing and building a teleoperated orbital cutting and welding machine to open and close the containers.

*#careforall #greenisgreat*



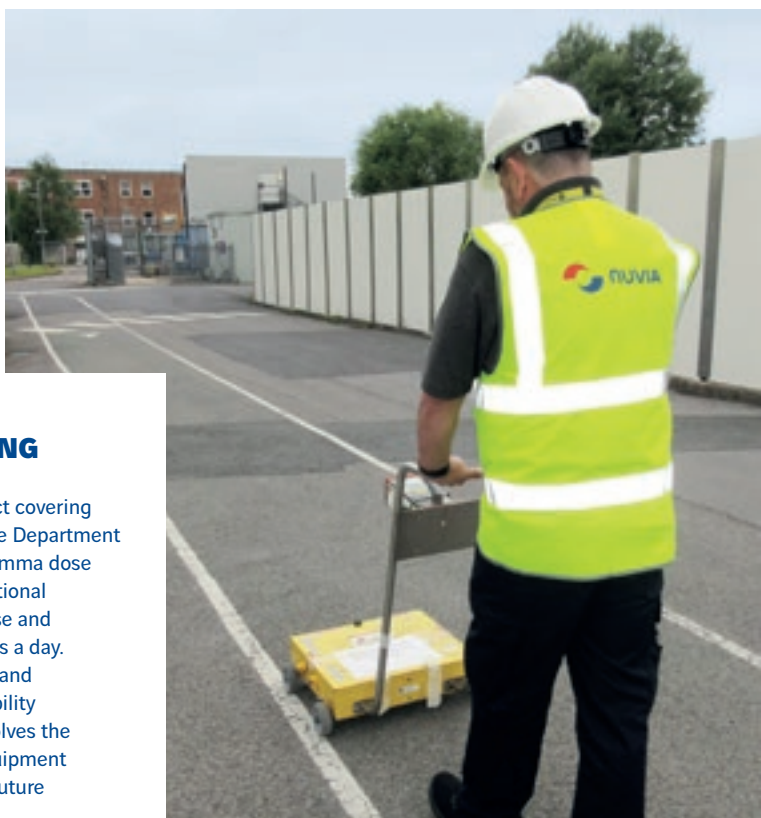


## **GRAVELINES, FRANCE**

### **LARGE-SCALE LOGISTICS AT A NUCLEAR POWER PLANT**

Nuvia, in a consortium with industrial and nuclear cleaning company OMS Energie, won a comprehensive site support contract from French electricity utility EDF for its Gravelines nuclear power plant – the largest in France. Several Nuvia companies will be working on this contract, which encompasses logistics, industrial cleaning, tooling, scaffolding and access facilities. At least two of the six units will be systematically shut down for reactor building maintenance and/or refuelling. Some 400 employees – 200 from Nuvia, 200 from OMS Energie – will be working on this extensive five-year contract.

**#careforall #greenisgreat**



## **UNITED KINGDOM**

### **CONTINUOUS RADIATION MONITORING**

Nuvia has secured the maintenance and supply contract covering the UK's Radiation Monitoring Network on behalf of the Department for Energy Security & Net Zero. This network of fixed gamma dose rate monitoring sites across the UK, along with an additional mobile monitor network, automatically measure, analyse and inform on background airborne radiation levels 24 hours a day. The data feeds into the RREMS (Radiological Response and Emergency Management System), which is a key capability within the UK national response plan. The contract involves the routine maintenance and calibration of the existing equipment and any repairs that are required, along with potential future system upgrades.

**#careforall**



#### CADARACHE, FRANCE

### SUPPORTING CONSTRUCTION OF THE JULES HOROWITZ REACTOR

Under a contract they won in 2018, Nuvia's teams handed over the purpose-built overhead travelling cranes for the French Alternative Energies and Atomic Energy Commission's Jules Horowitz nuclear research reactor in 2024. Their installation, now under way, is part of a multi-stage process including design, construction, testing, installation, full system commissioning, operation-equipment and experiment-process handling, and radioactive-material and equipment transport between reactor chambers. This reactor will principally be used to conduct research into materials and fuels for the nuclear power industry and radioisotope production for nuclear medicine.

*#careforall*

#### ABU DHABI, UNITED ARAB EMIRATES

### USED RESIN RECOVERY FOR THE BARAKAH POWER PLANT

Nuvia's teams have designed, built, installed and started up a system to recover spent resin at the Barakah nuclear plant in Abu Dhabi. This involved developing a fully-equipped skid system, including a transfer pump and dewatering system, supplying containers to package the used resins, and engineering a system to process and package radioactive used resins in compliance with Federal Authority for Nuclear Regulation requirements. The new system will replace an existing defective one.

*#careforall*



## GREECE

### LEGACY WASTE CHARACTERISATION AND REPACKAGING

Nuvia has secured a contract to characterise and repack legacy waste for disposal. The goal on this project for the Greek Atomic Energy Commission is to identify, analyse and mitigate the impacts of legacy waste from the Demokritos National Centre of Scientific Research. The project is funded by the European Union under the initiative to upgrade research centre infrastructure, covered by the Recovery and Resilience Fund.

**#careforall**



## PORT HOPE, CANADA

### SOIL REMEDIATION

Nuvia is involved in characterising and cleaning low-level radioactive waste in institutional and residential properties, as part of the broader programme to remediate approximately 1.2 million cu. metres of radioactive waste in the Greater Toronto area. To do so, it enlisted teams specialised in a variety of fields including waste management, radioprotection and radioactivity measurement.

Teams from Soletanche Bachy (see pages 8 to 11) are also working on this project, reinforcing and reconstructing the Centre Pier harbour walls with advanced engineering solutions.

**#careforall**

# SIXENSE

Sixense supports its customers throughout the life cycle of their facilities. It monitors the condition and behaviour of structures and infrastructure, makes construction and operation safer, and optimises maintenance. Its activities are organised around four areas of expertise: engineering, monitoring, software and process digitalisation, and existing asset digitalisation.



**€124m**  
REVENUE

**840**  
EMPLOYEES

## **TORONTO, CANADA**

### **INSTRUMENTATION AND MONITORING ON THE ONTARIO LINE**

Sixense was appointed to provide instrumentation and monitoring services during construction of the Ontario Line South, in Toronto. Construction of the 6.7 km section includes building 6 km of tunnel, six underground stations and one ground-level station. The Ontario Line, which will span 15.6 km in total, will be fully automatic and is set to start up in 2031.

*#makingyourdayeasier #fostergrowth*



## **JORF LASFAR, MOROCCO**

### **GEOPHYSICAL SURVEYS FOR THE JORF LASFAR GYPSUM STACKING PROJECT**

Sixense Maroc and Sixense Engineering's geophysics department have teamed up with Morocco's Public Laboratory for Testing and Studies (LPPE) to conduct a large-scale geophysical survey, as part of the plan to expand the Office Chérifien des Phosphates (OCP)'s phosphate production plant at Jorf Lasfar. They are using ground-penetrating radar, microgravimetry and reflection seismics techniques to characterise the soil and identify potential anomalies such as cracks or cavities. The data they are generating will be essential to design the foundations for the OCP's new industrial plant.

*#fostergrowth #careforall*



#### **OLÉRON, FRANCE**

### **A FULL CHECK-UP FOR ÎLE D'OLÉRON BRIDGE**

Sixense's teams carried out a comprehensive assessment of the 55-year-old Île d'Oléron bridge in 2024, to evaluate its condition and identify any maintenance requirements. The survey included visual and digital inspections, analysis of interior prestressing (video endoscopy and tension measurements) and analysis of external

prestressing (infrared thermography and guided ultrasound waves). To assess the reinforced concrete's durability, they conducted coating thickness measurements, mapped corrosion and ran lab analyses of the concrete.

**#careforall**

#### **NEW CALEDONIA**

### **ASSET MANAGEMENT WITH THE BEYOND ASSET DIGITAL SOLUTION**

The New Caledonian government's Department of Infrastructure, Topography and Land Transport chose Beyond Asset, Sixense's digital solution for asset management, to inventory and monitor its structures. The solution manages and records inspections and repair work on underpasses, overpasses and retaining structures.

**#careforall**



**SAINT-MARTIN-LA-PORTE/MODANE,  
FRANCE**

**TUNNEL GEOTECHNICAL  
AND STRUCTURAL  
MONITORING ON  
THE FUTURE LYON-TURIN  
EURALPIN RAIL LINE**

The 57.5 km long tunnel on the Lyon-Turin Euralpin line will be the world's longest underground rail structure – and the central feature in a new rail line between France and Italy designed to carry 5 million passengers and 40 million tonnes of goods a year. Sixense's job on this large-scale project is to keep crews and equipment safe, ensure supporting structures are suited to site conditions, share insights into the geotechnical behaviour of the ground, and supply information to guide tunnelling operations and support-frame design as work progresses.

*#careforall #makingyourdayeasier*



**57.5 km**  
**THE WORLD'S LONGEST  
RAIL TUNNEL**

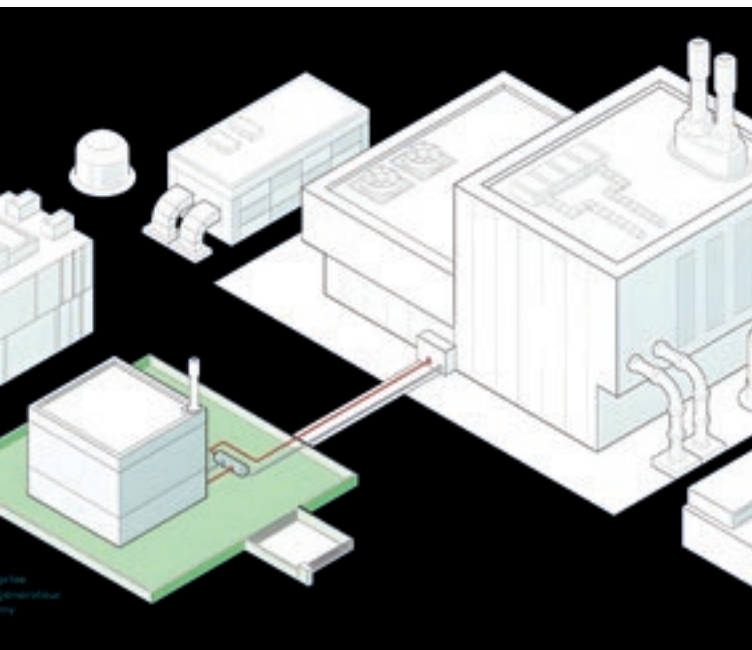


**FRANCE**

**LIDAR SURVEYS FOR THE  
FRENCH RAIL NETWORK**

Sixense Helimap's teams carried out LiDAR and photogrammetric surveys of the French rail network in 2024, to digitise the lines comprehensively, rapidly and non-invasively and then allow their customer to create detailed digital twins. The information will enable the customer to manage its infrastructure more efficiently and plan maintenance and other works in a timely manner while heightening safety.

*#careforall #makingyourdayeasier*



## FRANCE

### INFRASTRUCTURE DESIGN SUPPORT ON SMR PROJECTS

Sixense necs, an engineering office specialised in complex structures, helped two French rising stars – Jimmy Energy and Stellaria – to design the infrastructure for their Small Modular Reactor (SMR) projects. This initiative is one of the first of its kind in France and one of the most advanced industrial-scale endeavours worldwide. While working closely alongside these pioneering companies, Sixense's teams pooled their full range of expertise to tackle the unique technical challenges associated with integrating leading-edge technologies and ensuring compliance with the strictest environmental standards and nuclear safety requirements. Sixense's contribution has enabled Jimmy Energy to develop safe and innovative infrastructure, positioning it at the forefront of modular nuclear energy.

**#careforall #fostergrowth**

## ITALY - GERMANY - POLAND

### CLIMATE RESILIENCE AUDITS AT LOGISTICS HUBS

Sixense's teams carried out audits in Italy (Castel San Giovanni), Germany (Rhineland and Düsseldorf) and Poland (Wrocław South B2) to assess the vulnerability of industrial sites to climatic hazards.

In Italy and Germany, the audits led to refurbishment plans including adaptation measures. In Poland, measures to enhance resilience were built into the project from the design stage.



The suggested measures, backed up by thermal simulations and cost-benefit analyses, have made the assets more resilient, and will reduce the number of disruptions while increasing safety over the long term.

**#greenisgreat**

# Working together for **health and safety for all**

At Soletanche Freyssinet, health and safety are our priorities, every day, at all our jobsites and all our production sites.

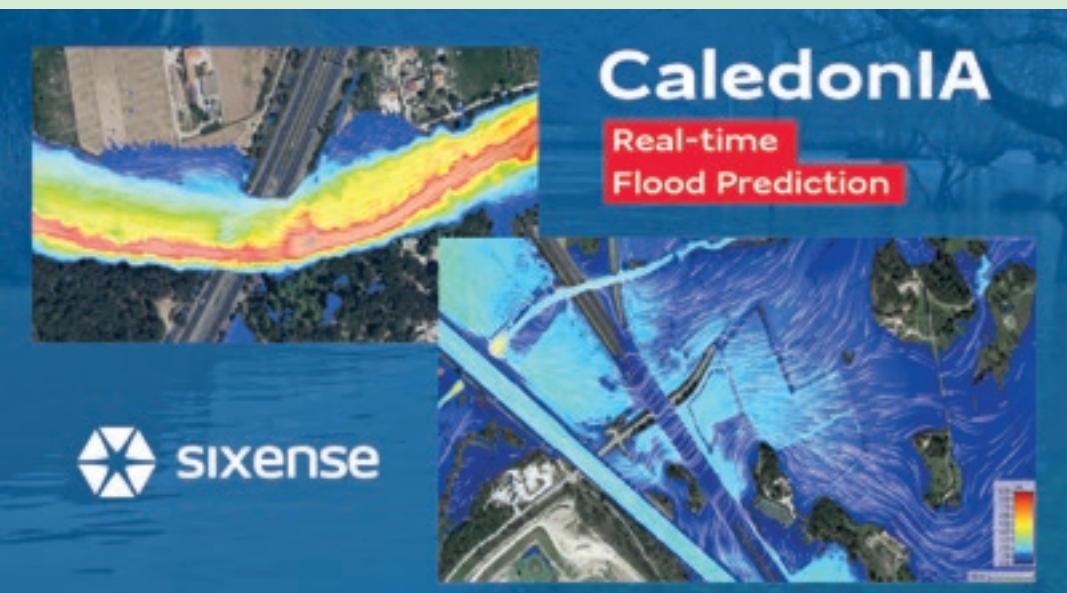
We are striving to reach our zero accident objective by acting with transparency, showing exemplarity and fostering dialogue. These are the foundations of our shared health and safety culture.





# Working together to **protect the environment**

At Soletanche Freyssinet, we act for the climate, optimise resources thanks to the circular economy and preserve natural environments. Through the solutions we develop, we are reinventing the way we build to shrink our own environmental footprint. And we are reinventing what we build so that our customers can reduce their impact for the long term.



#### **ENVIRONMENT AWARDS**

### **SIXENSE WINS THE JURY'S CHOICE AWARD**

Soletanche Freyssinet's teams made a substantial contribution to VINCI's second Environment Awards campaign with 121 submissions from around the world, including 23 that won regional awards and four that made the final short list. And CaledonIA, from Sixense, won the Jury's Choice award! CaledonIA is a software system that combines physical and AI models to predict water flow patterns and thereby enable local areas to anticipate flash flooding and adapt accordingly.

# Working together to **respect** **human rights**

At Soletanche Freyssinet, we support human rights everywhere we operate. Our responsibility extends from our employees to those of our partners and subcontractors as well as the local communities we serve. We encourage employees to get involved in social outreach and support operations that address the needs of local populations.



# Working together to **uphold business ethics**

In keeping with the attitudes that guide us in everything we do, all employees must remain vigilant and ensure they, the people around them and the people they supervise properly apply the code of conduct.





**soletanchefreyssinet.com**



This document was produced by Soletanche Freyssinet's Communications Department, 280, avenue Napoléon-Bonaparte, 92500 Rueil-Malmaison, France.

**Copywriters:** Guillaume Billaroch and Julia Dennis. **Contributors:** Mélanie Cadennes, Sophie Fromion, Richard Loudin, Alexandre Miletitch, Tiphaine Moreau and Carla Varene.

**Photo credits:** All photos are the property of Soletanche Freyssinet, Soletanche Bachy, Menard, Geoquest, Freyssinet, Nuvia and Sixense, unless otherwise indicated. P. 20 - © Troy Van Bostelen, p. 21 - © John Holland - Seymour White, p. 21 - © EDF Energy, p. 22 - © Luca Colle, p. 23 - © Sylvain Frappat - Ville de Grenoble, p. 33 - © Cédric Helsly.

**Design and production:** VAT - agencewat.com - 2412\_05983. **Translation:** Alto International

This product is composed of materials from well-managed, FSC® certified forests and other controlled sources.

