ACTIVITY REPORT

2010

SOLETANCHE FREYSSINET

2010

A YEAR OF ACHIEVEMENTS

"Soletanche Freyssinet achieved success around the world in all three of its business segments"

Soletanche Freyssinet recorded an impressive performance in the second year of its existence. After slipping back in 2009, the Group's turnover increased by 5.1% to 2 billion Euros. This growth bears witness to the Group's established position in the international market, producing 53% of its turnover outside the European Union. Our successes are spread around the world and across all three areas of our expertise. In the ground works sector, Soletanche Bachy has registered modest growth on the back of substantial new projects, especially in Asia and Latin America. Menard has seen a significant increase in its turnover (+ 34%) in the Gulf States, Australia and Canada. Terre Armee also recorded a very good increase, especially in Canada, the USA and India.
In the field of structures, Freyssinet maintained its position well, including in France and in Central and Eastern Europe.
In the nuclear field, Nuvia increased its turnover by 12% and consolidated its positions in its two main markets: France and the United Kingdom.
Our continuing development is, on the one hand, through a strategy of external growth within our various areas of expertise. This approach was pursued throughout 2010, highlighted in the ground works division by the acquisition of Agra in Canada and of GFWA in Australia and in the nuclear division, by that of Vraco who will be joining Nuvia France.
But our development, as embodied in our Resonance initiative, also involves all the synergy that we find and develop between our establishments, both geographically and in terms of expertise. Throughout 2010 significant progress has been made: technical collaboration, development of skills and expertise within our teams, the launching of action plans focusing on safety and the environment etc.
This momentum, combined with a healthy level of orders received, amounting to 2.5 billion Euros, and a forward work load that had increased by 25% to almost 2 billion Euros by the end of the year, augurs well for the Group.
In 2011 we will therefore move forward with confidence, focusing on innovation, worldwide development and the success of our different actions and progress plans. All this will be undertaken with our usual discipline and determination.

BRUNO DUPETY
Chief Executive Officer of Soletanche Freyssinet

Across the Atlantic, Group synergies were particularly in evidence on the Penn Park university sports complex project in Philadelphia.

PROFILE

PROFILE

Synergies, innovation, solutions

As the world leader in specialised civil engineering, the Soletanche Freyssinet Group brings together an unparalleled array of geotechnical, structural and nuclear engineering capabilities and brands. Operating throughout the world, our 17,000 employees meet the needs of clients by devising and implementing solutions tailored to the specific features of each project, whatever its complexity and scale, and help boost the performance and durability of each structure.

POSITION AND STRATEGY

ACTIVITIES

ORGANISATION
Coordination Committee

Bruno Dupety

Chief Executive Officer of Soletanche Freyssinet, Chairman of Soletanche Bachy

Jérôme Stubler

Chief Executive Officer of Freyssinet and Terre Armee, Chairman of Nuvia

Didier Verrouil

Director, Eurofrance Division, Soletanche Bachy

Jean-Philippe Renard

Area Director, Asia, Latin America, Eastern and Central Europe and Director, Grands Projets Division, Soletanche Bachy

Martin Pratt

Area Director, United Kingdom, Middle East and Southern Africa Division and Technical Division, Soletanche Bachy

Pierre-Yves Bigot

Human Resources Director, Soletanche Freyssinet

Yann Grolimund

Chief Administrative and Financial Officer, Soletanche Freyssinet

KEY FIGURES

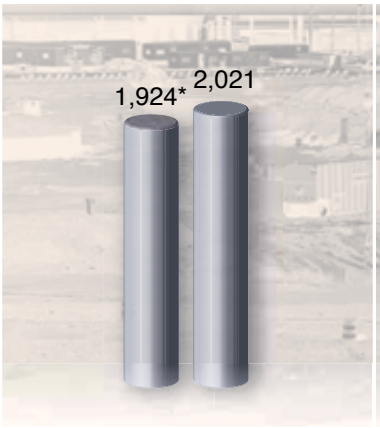
2 billion euros
revenue

17,000
employees**

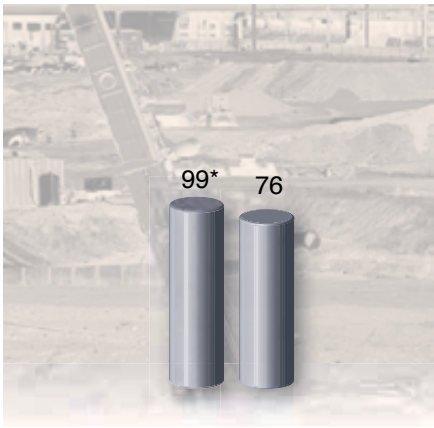
80
locations in nearly **countries**
and operations in 100 countries

2 billion euros
order backlog

REVENUE
IN € MILLIONS



OPERATING PROFIT FROM ORDINARY ACTIVITIES IN € MILLIONS



**Pro forma. **Managed workforce.*

SOILS

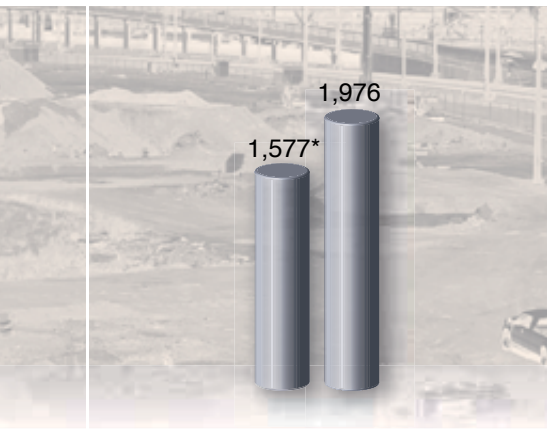
SOLETANCHE BACHY

Recovering from a decline in 2009, consolidated revenue increased slightly (+ 1.3%) to €1,078 million (managed revenue*: €1,167 million) in 2010. The civil engineering infrastructure, an activity operated throughout the world, performed well overall, with geographical variations: a clear downturn in Europe and the Middle East; very strong growth in Asia (+ 65%), Latin America (+ 53%) and North America (+ 27%). The year's sales included outstanding successes in the United Kingdom (Lee Tunnel, London Gateway and Crossrail) and Hong Kong. The Group recorded exceptional order intake of €1.3 billion, up (+ 34%) from the previous year, and a (+ 34%) increase in order backlog.

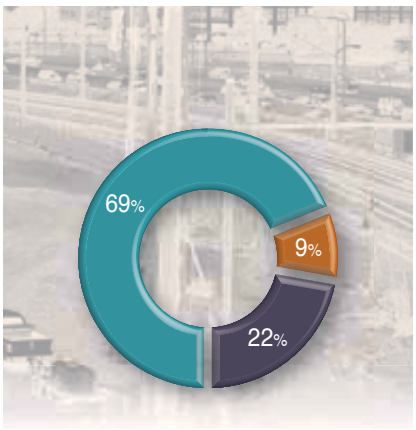
MENARD

Coming in at €150 million, revenue again rose sharply (+ 34%) as did order intake (+ 46%) and order backlog (+ 25%). These results are primarily due to the large development projects in the Gulf States (new cities in Kuwait), major projects in Germany, Poland (motorway construction) and Australia (Port Botany extension in Sydney) and substantial expansion of business activity in Canada. Menard also consolidated its operations in these countries, acquiring Agra in Canada and GFWA in Australia.

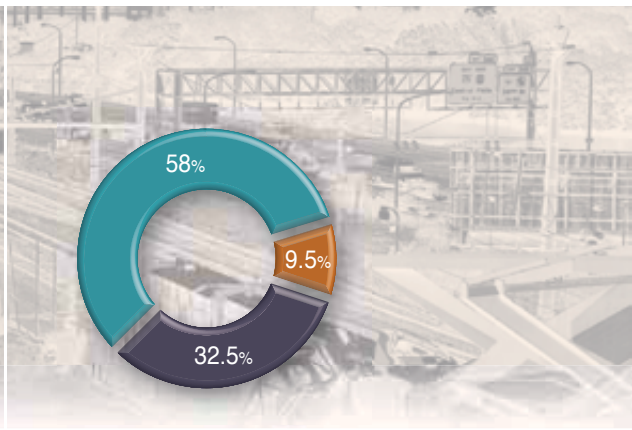
ORDER BACKLOG
IN € MILLIONS



REVENUE
BY ACTIVITY



WORKFORCE
BY ACTIVITY



TERRE ARMEE

Business activity remained buoyant and Terre Armee recorded a good increase in revenue (+ 7%) to €160 million and outstanding growth in its order backlog and order intake, which increased by 30%. In Canada and the United States, Terre Armee consolidated its positions by winning large orders, especially in Texas, Utah and Florida. The company continues its strong growth in India, where business activity remained stong.

STRUCTURES

FREYSSINET

Freyssinet achieved growth of 3% despite a decline in the market in Spain, the United Kingdom (Ireland), Northern Europe (Benelux) and the Middle East. Consolidated revenue stood at €446 million (managed revenue: €535 million). This reflected, among other things, the success of major projects — the BC Place Stadium in Vancouver, Canada; the Olkiluoto EPR for Areva in Finland; and the Golden Horn (Russia), Geoga (Korea), Port Mann (Canada) and Térénez (France) bridges — as well as the year-end upturn in order intake (Russky Island Bridge in Vladivostok, monorail in Saudi Arabia) and growth in Poland and Mexico. The order backlog rose 12% in 2010.

NUCLEAR

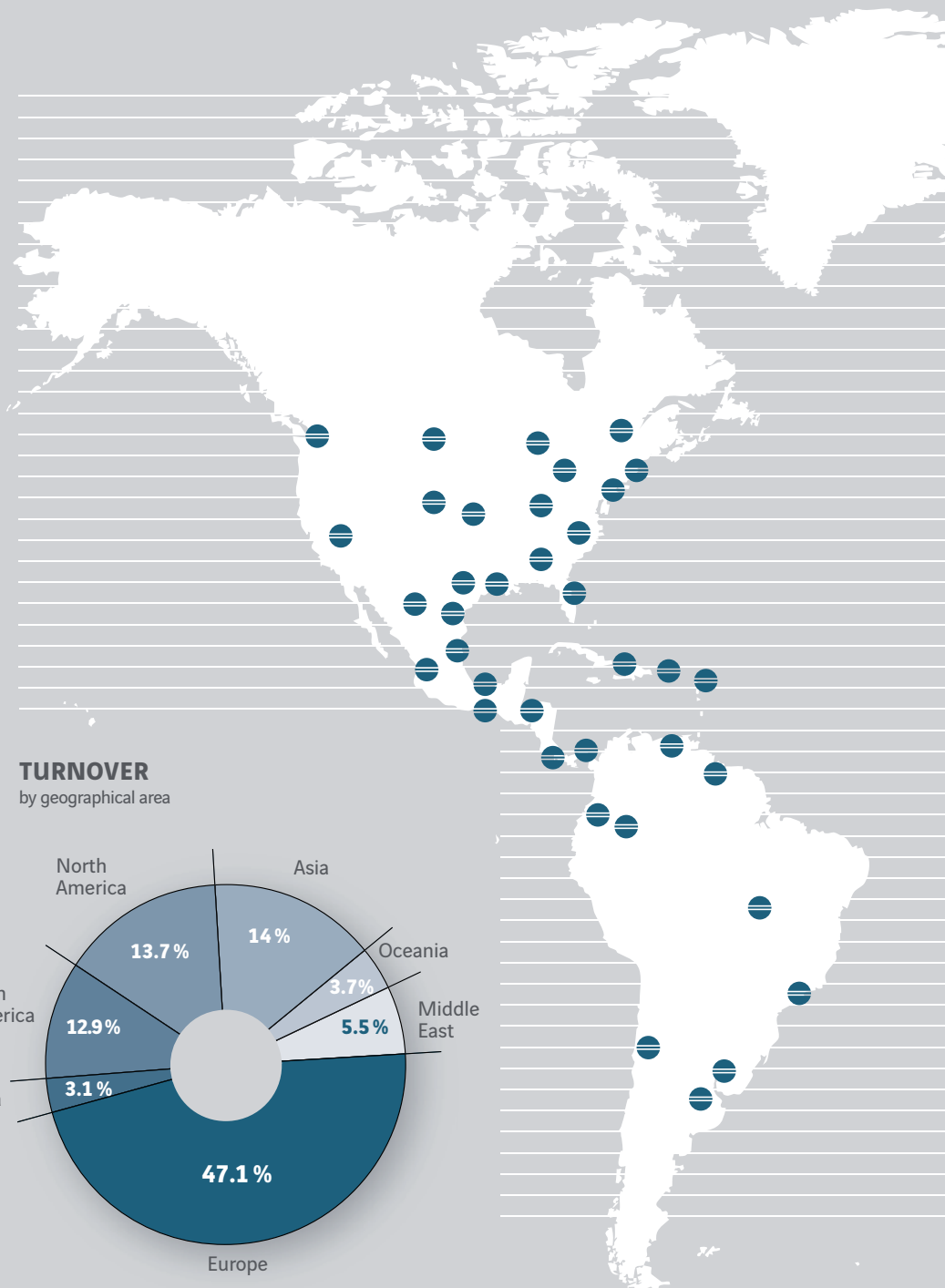
NUVIA

Revenue again increased (+ 12%), to €187 million. The company consolidated its positions in its two main markets: France (+ 19%) and the United Kingdom (+ 7%). Nuvia France carried out a number of decommissioning projects for EDF, the French Atomic Energy Commission and Areva and won the major contract for the anti-seismic bearings at the ITER project in Cadarache. Nuvia Ltd expanded its engineering activity in Sellafield, the main British civilian nuclear site, and reinforced its position in the new construction market with a partnership agreement with Cammell Laird (shipbuilding). Order backlog increased slightly, reflecting good order intake (+ 7%).

** Revenue including the share held in jointly controlled companies.*

LOCATIONS

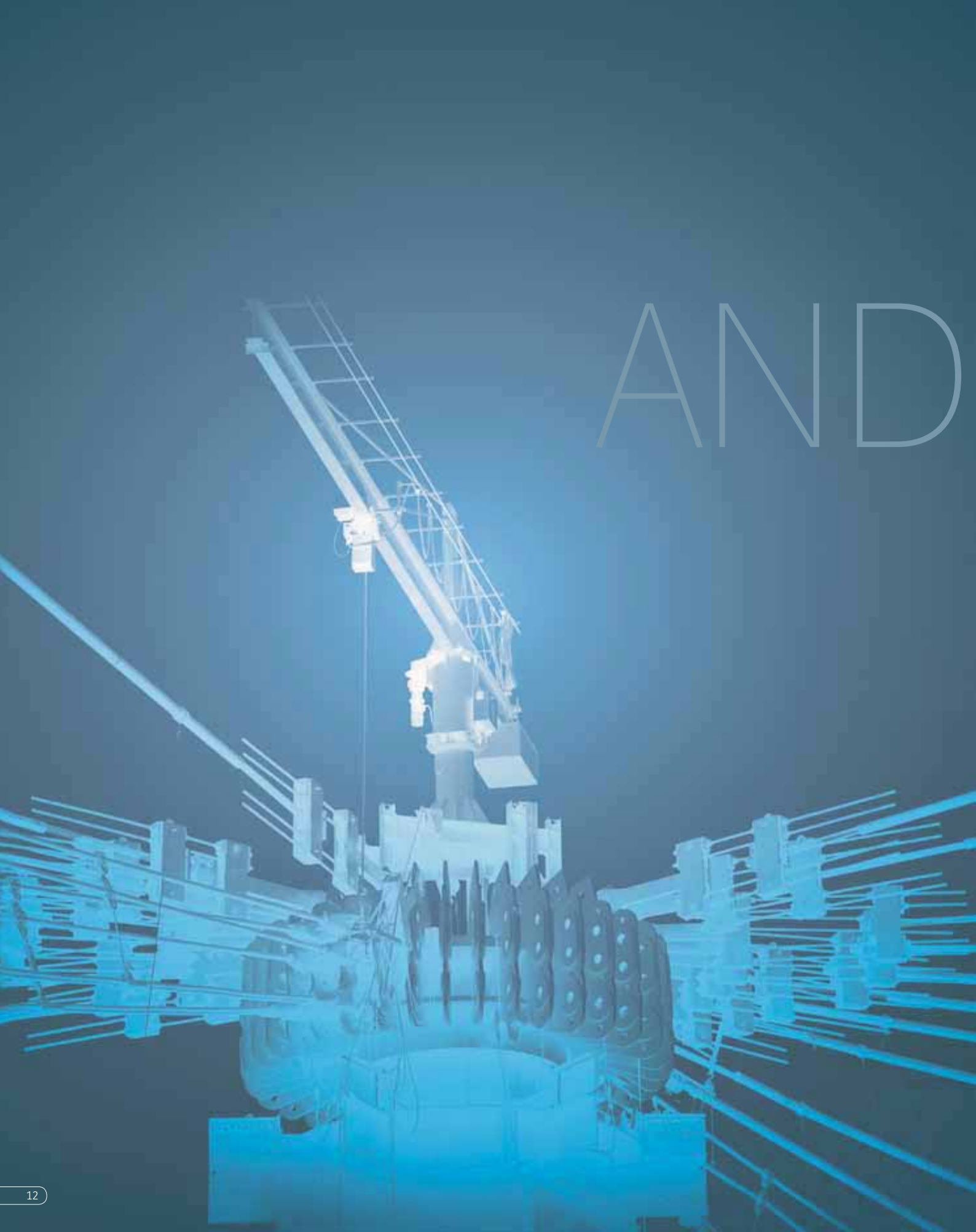
- Abu Dhabi
- Algeria
- Argentina
- Australia
- Belgium
- Botswana
- Brazil
- Bulgaria
- Canada
- Chile
- China
- Colombia
- Costa Rica
- Czech Republic
- Denmark
- Dubai
- Egypt
- El Salvador
- Estonia
- France
- Germany
- Guadeloupe
- Guatemala
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Ireland
- Italy
- Japan
- Jordan
- Kuwait
- Lithuania
- Luxembourg
- Macao
- Macedonia
- Madagascar
- Malaysia
- Martinique
- Mexico
- Monaco
- Morocco
- Mozambique
- Netherlands
- Nicaragua
- New Zealand
- Norway
- Oman
- Pakistan
- Panama
- Philippines
- Poland
- Portugal
- Puerto Rico
- Qatar
- Reunion Island
- Romania
- Russia
- Saudi Arabia
- Serbia
- Sharjah
- Singapore
- Slovakia
- Slovenia
- South Africa
- South Korea
- Spain
- Sweden
- Switzerland
- Taiwan
- Thailand
- Tunisia
- Turkey
- Ukraine
- United Arab Emirates
- United Kingdom
- United States
- Uruguay
- Venezuela
- Vietnam



TURNOVER
by geographical area

The Soletanche Freyssinet Group is a global network with 17,000 employees and some 150 companies in about 80 countries.

In 2010, its teams carried out projects on the five continents.


AND

POSITION STRATEGY

2 0 1 0

RESONANCE

INNOVATION

SUSTAINABLE DEVELOPMENT

«RESONANCE»

Expanding our synergies to create value

Two years after Soletanche Freyssinet was founded, its synergy expansion strategy is taking shape and gathering momentum, for the long-term benefit of clients and the Group itself.

Geographical and technical progresses...

The Resonance plan, which is focused on developing synergies among the various Soletanche Freyssinet business activities, is up and running. We have made substantial headway in all areas–geographical and technical synergies as well as sustainable development, human resources, information and communication systems.

This significant progress and its practical results confirm the vast store of knowledge, experience and excellence harboured by the network that Soletanche Freyssinet and its clients can tap into. Moreover, it increases the Group's appeal, lends weight to its international expansion strategy and holds out growing opportunities for working together. The Group's "resonance capacity" was much in evidence throughout the year, with a large number of our companies working shoulder to shoulder on projects. For example, Freyssinet, which supplied cable stays (among other things) worked with Terre Armee, which supplied

PORT BOTANY (AUSTRALIA).
The extension of the Sydney container terminal included the construction of a new 1,850 metre long quay and a 60-hectare storage area reclaimed from the sea. The project got under way in 2008 and was completed in 2010. Menard Bachy (dynamic compaction, vibrocompaction) and Freyssinet (PT Slabs) joined forces to work on it.

PORT BOTANY, *an emblematic Menard Bachy project in Australia.*

In Mexico, Soletanche Bachy and Freyssinet repaired a key section on the Puerto Vallarta-Guadalajara motorway in 90 days.

abutments and retaining structures, on the technically complex Térénez Bridge project in Brittany, France, and on the very large Port Mann Highway 1 project in Vancouver, Canada, which involved the upgrade of a 40 km motorway section and the construction of a 10-lane motorway bridge. In other examples, Freyssinet, providing floor design, construction and post-tensioning as general contractor, worked with Menard Bachy, which provided dynamic compaction and vibrocompaction, to complete the Port Botany container terminal extension project in Sydney, Australia; Soletanche Bachy and Freyssinet (who had previously worked together on several structures in Mexico City) joined forces to repair a key engineering structure on the Puerto Vallarta-Guadalajara motorway in western Mexico at the end of the year, completing the project in a record 90 days. Beyond these examples, the complementary expertise available holds out opportunities for devising common products and services and opens up prospects that are the very substance of the Resonance plan. One illustration was a move in the United States that was reminiscent of the creation of Menard Bachy in Australia at the end of 2009. After being asked by Nicholson in 2009 to propose a more competitive alternative solution for foundations, DGI Menard called on Nicholson and the Reinforced Earth Company to design and propose an alternative solution for the Penn Park sports complex in Philadelphia. The bid combining the techniques of all three entities–micropiles, controlled modulus columns and Reinforced Earth® walls–proved far more competitive than conventional solutions and was

ON THE PENN PARK PROJECT, *the alternative solutions designed and implemented by Menard, Nicholson and Reinforced Earth Company saved the customer several million dollars.*

readily adopted. Here, as in Australia, the momentum extended beyond the operation itself, prompting the companies to make changes in their organisational structure so as to heighten the Group's visibility and better position it in the very large American market. Under a partnership agreement signed by Menard and Nicholson on 1 January 2011, all ground improvement activity (including vibrocompaction, a technique also developed by Soletanche Bachy) is now provided under the brand name Menard in the seven locations of the Nicholson network. The acquisition in June of Agra, which specialises in piles and ground improvement and operates at seven sites in Canada, also boosts geographical coverage in North America, where all these locations will serve as bridgeheads for further expansion. At another level, the Group's ambition is not just to join forces, but to combine or merge their technical capabilities where feasible in order to develop new products and services. Capping the work carried out in the agencies and subsidiaries, a meeting of Group design offices was held on 10 June in Paris.

Combining technical capabilities to devise new products and services

It was a symbolic milestone in the Resonance plan. For the first time, 150 technicians gathered to present their results, in which the combination of such things as post-tensioning, foundation techniques, prefabrication, etc. foreshadows more competitive and more lasting solutions for the construction of car parks, Danish quays and highly innovative post-tensioning applications (diaphragm walls, etc.). The issues addressed are wide-ranging, the programme is under way and a further meeting has been scheduled in 2011. The Resonance mindset has been taken on board and is continuing to spread, as demonstrated in the first Group induction meeting, held in September, at which 100 young managers from across the entire spectrum of business activities and countries were invited to a get-together to get acquainted, take on board the common goal and stake out new synergies.

NEAR VANCOUVER, CANADA
Freyssinet and Terre Armee were involved in two major projects: the refurbishment of Highway 1 and the construction of the new Port Mann bridge with a dual five-lane carriageway.

A mindset, a common goal...

INNOVATION and R&D

Invention is our business

Every project, be it in the field of soils, structures or nuclear engineering, in new construction, repair or services–provides an opportunity to rethink our approach and our solutions in light of the most recent technological developments and to pave the way for more efficient, more cost-effective and more lasting solutions.

Tools, methods...

With EcoStrap®, Terre Armee takes the GeoMega® system to a new level

Since its inception, Terre Armee has been innovating to provide new Reinforced Earth® technologies and applications and TechSpan® pre-cast arches. In 2010, Terre Armee upgraded GeoMega® to include the EcoStrap® system, a new generation of synthetic reinforcement that is insensitive to alkaline environments and more durable. This system is being rolled out throughout the network, further broadening the applications of Terre Armée® retaining walls.

THE GEOMEGA SOLUTION,
integrated during concreting of the facing slabs, eliminates the need for metal attachments between the reinforcement and the Reinforced Earth® facing panels. The combined use of these connections and EcoStrap® synthetic reinforcements further reduces the system's sensitivity to corrosion and can be used with very high pH backfill materials.

FOREVA® GP ZINC
a corrosion barrier .

Foreva® GP Zinc Process: controlling corrosion in reinforced concrete

Whatever the cause - water, carbonation or chloride contamination – concrete corrosion involves the same electrochemical phenomena: a reduction in concrete pH, appearance of galvanic corrosion in the steel reinforcement leading to oxidation in the anode (+pole) and a protective effect of the electrons flowing to the cathode (-pole). The phenomenon underlies the cathodic protection processes developed by Freyssinet under the Foreva® brand, which consists of creating anodes near steel reinforcements to artificially induce them to act as a cathode.
One such system is the Foreva® GP Zinc process, of which a fine layer of zinc is applied to the concrete by means of a plasma torch and connected to the metal reinforcement through a system of stainless steel plates and rods to enable it to act as the anode. At the end of the application operation, the pores are sealed so that a coloured finishing layer can be applied. This process, for use in structures near the sea, is designed to offer protection for more than 30 years.

INNOVATION and R&D

Springsol: *soil mixing* with limited impact on existing structures

Over the past ten years, Soletanche Bachy has made a major contribution to *soil mixing* techniques by developing processes such as Geomix® for retaining walls, Trenchmix® for cut-off walls, and Springsol, reinforcement columns installed with an expanding tool. Initially designed to reinforce railway roadbeds while keeping tracks and sleepers in place, the Springsol process has undergone major improvements and can now be used to reinforce ground under existing foundations by means of tools that operate from small-diameter boreholes and cause very little disruption of structures. The process thus constitutes a technical and cost-effective alternative to conventional solutions such as jet grouting, and it has the further advantage to generating very little spoil. New developments are under way to further broaden the range of Springsol applications while meeting low impact worksite and easy installation requirements.

VRACO DAMPERS,
like other fire protection products (Mecatiss) developed by Nuvia, are carefully designed to meet the enhanced safety needs of new generations of nuclear reactors.

Exclusive processes, extended fields of applications...

OVER 2,300 SPRINGSOL COLUMNS
were installed by Grupo Rodio Kronsa, a Spanish subsidiary of Soletanche Bachy, under the slabs of an industrial building.

Vraco: a unique motorised fire damper offer

Vraco, which joined Nuvia France in early 2010, specialises in the design, production and installation of motorised fire dampers. Incorporated in ventilation ducts, the dampers are a key part of the fire protection system (prevention, sectorisation) used in nuclear facilities. Unlike standard products that remain closed once activated, Vraco fire dampers can be reopened, even during a fire, to enable smoke to be vented, for example when firemen are present. Duly certified, these devices have now been added to the equipment provided by Mecatiss to meet the passive protection needs of sensitive areas in nuclear facilities.

Experimental treatment of polluted soils through *soil mixing*

Soils contaminated by industrial activities can be treated with chemical reagents in one-off or continuous injections. The use of so-called *in situ* stabilisation techniques, in which the reagent is added to the soil itself, has proved promising in laboratory tests but remains to be investigated in full-scale trials.
In situ soil mixing combined with chemical treatment is a new approach to treating soils and groundwater. At the request of one of its clients, Menard performed a trial in 2010 in which it remediated an industrial brownfield in the southeastern French city of Voiron, where the soil and groundwater posed a health hazard due to the presence of recalcitrant solvents. The treatment involved thoroughly mixing the soil with a strong liquid reagent to reduce the initial concentrations to the target level.

MENARD *used its expertise and tools to carry out a novel soil remediation operation in Voiron in southeastern France.*

e.2Log, *loaded on a tablet PC, records information on nuclear work carried out by Essor (Nuvia) teams and makes it available in real time.*

e.2Log: a works tracking tool

By definition, nuclear logistics, a speciality of Essor (Nuvia), generate a vast amount of information to be collected, checked and analysed. With e.2Log, Advitam* has developed, for Essor, a revolutionary software package to track works in real time. The tool is quite simple. For each task to be performed, the employee starts by scanning the bar code attached to the equipment to gain immediate access to the record of previous works carried out and the information needed to perform the task under optimum conditions (Lessons learnt Database). Once the job has been completed, the system automatically and immediately records the tracking data centrally and adds it to the database. The software was tested at the Dampierre en Burly power station in central France at the end of 2010 and immediately taken on board by customers and employees alike. It will be rolled out at all Essor-managed sites in 2011.

** Soletanche Freyssinet subsidiary Advitam is the company specialised in structure monitoring and management of structures.*

INNOVATION and R&D

Hydrofraise XS & Cit'Easy: a "sustainable development" tool and system for urban projects

Soletanche Bachy has been developing new models of the Hydrofraise since the 1970s, enabling it to build ever-deeper, ever-thicker diaphragm walls in hard ground. In contrast, the latest in the series, called the XS, is a small but powerful and effective model specially designed for urban works. While the conventional Hydrofraise is mounted on a tracked crane weighing 130 tonnes or more, the XS model is attached to a pile driver weighing some 60 tonnes by means of a "kelly" (mast); this reduces the cost of transporting equipment and accelerates the start of works.

With the Hydrofraise XS, Cit'Easy projects are carried out more rapidly, at lower cost and with less environmental impact.

The new machine, which can work to a depth of 25 metres, has the further advantage of being able to build walls of 500 mm thickness (compared to 630 mm for the standard equipment)–an advantageous feature in urban excavations, where additional parking spaces will be possible thanks to this tool.
The Hydrofraise XS is also the core element of a new system developed by Soletanche Bachy, Cit'Easy, used to build diaphragm walls in urban areas. Cit'Easy is a comprehensive system comprising very compact mud manufacturing and treatment plants, new machines for recycling, concreting and reinforcement cage handling, and new worksite organisation.
The objectives are to reduce transport and worksite footprint thanks to the use of compact equipment; to reduce the time needed to set up and execute worksites; to reduce the quantities of concrete used and spoil generated; and to reduce fuel consumption. Cit'Easy thus dovetails with the sustainable development approach to which Soletanche Bachy is committed.

THE HYDROFRAISE XS *is more compact than the standard model and can build diaphragm walls of less than 630 mm thickness.*

Sustainable solutions...

SUSTAINABLE DEVELOPMENT

Our constant improvement process

Issues and growth opportunities...

The techniques that we design and implement are "solutions" in the sense that they meet technical needs and are economically and environmentally effective. This crucial aspect of our business is the key to the constant quest for improvement that underpins our approach to sustainable development.

Extending the guidelines adopted in 2009, Soletanche Freyssinet set out and published its sustainable development policy in May 2010. The policy is rooted in our belief that our values and capabilities can help our clients and society at large to meet economic, environmental and social goals, and that these goals are also growth opportunities for the Group. In practice, the policy focuses on three objectives: controlling the quality, health, safety, environmental and social (QHSES) risks and impacts of our activities; creating value for customers and anticipating their needs; and strengthening societal and civic engagement. To implement this policy and track progress in achieving these objectives, the Group has adopted specific indicators and an action plan for the 2011-2013 period.

A variety of initiatives have been taken to implement this policy. To expand our corporate sustainable development culture and share best practices, a dedicated forum has been set up on the Intranet in which those involved in sustainable development can find information, references and examples. A Sustainable Development logo, which will serve as to identify the programme, was introduced at the end of the year. A roving exhibition designed to raise employee awareness was presented in Vélizy (at the French head office) at the evening event held to mark the end of the year at Freyssinet. Meanwhile, various entities have introduced their own action plans to focus their efforts on aspects of the policy directly related to their particular issues: examples are QHSES risk management and administration (Freyssinet, Soletanche Bachy and Nuvia, in particular); in-depth work on transport (Freyssinet Products Company, FPC); operational worksite management; structuring of specific bids; and exploration of sustainable development markets.

HEALTH AND SAFETY
Nicholson Company carried out a campaign in 2009 to encourage all employees to focus on safety.

Health and Safety

In line with the "Zero Accidents" goal, which a number of entities have already achieved, and as part of our unremitting effort to improve our results, Soletanche Freyssinet has appointed three coordinators at Soletanche Bachy, Menard and Freyssinet, Terre Armee and Nuvia respectively. They are tasked with setting up, in the field (and whatever the local regulations), organisational structures, training, rules and checks derived from international best practices. The Group also encourages subsidiaries to take their own initiatives, such as the *Incident and Injury Free* campaign at Nicholson (Soletanche Bachy) in the U.S. in 2009 and the in-depth *The Safe Way is the Only Way* programme at Freyssinet, Nuvia and Terre Armee. A number of subsidiaries have won high-profile awards for their results, such as the President's Award of the Royal Society for the Prevention of Accidents (RoSPA), awarded to Nuvia Ltd for the fourth consecutive year.

SAFETY INDICATORS (SOLETANCHE FREYSSINET)

	2009	2010
Frequency rate*	10.75	10.21
Severity rate**	0.65	0.50

* Number of workplace lost time accidents x 1,000,000 / number of hours worked.

** Number of days of lost time due to workplace accidents x 1,000 / number of hours worked.

Quality, environment

With the constraints specific to their line of business, all Soletanche Freyssinet companies aim for a common integrated QHSE (quality, health, safety, environment) management approach, and all of them continued their certification programmes. A large number of subsidiaries have received ISO 14001 certification, often in the form of triple QSE certification. Outside France, the Soletanche Bachy operational entity working in the United Arab Emirates continued to deploy an integrated QHSE management system without seeking certification. All Nuvia companies have now been quality certified and have set the goal of reducing worksite waste by 20%. Similarly, all the companies are continuing and stepping up their efforts to control or reduce the environmental impact of their operations. Freyssinet set up its PIC (Program for Impact of Construction) programme in 2007 to compare the environmental impact of an alternative solution with a baseline solution and further improved it this year. Through its repair activities, which make it possible to avoid demolishing and rebuilding structures, Freyssinet contributes to reducing the quantity of materials used, and hence of greenhouse gases produced, by 15 to 30%. CSM Bessac (Soletanche Bachy) carried out a detailed CO_2 assessment of its activities. In Singapore, on the Bugis Station construction site (works package C903 of the Downtown Line 1 project), Soletanche Bachy won a WSH (Workplace Safety and Health) Award recognising its noise abatement results. The companies are also involved in their clients' environment-related projects. For example, Menard carried out an experimental soil remediation project in France (see page 22). In the United States, Reinforced Earth Company (Terre Armee) built facilities for the U.S. Army with a high level of safety at a site that will be used to destroy chemical agents.

ENVIRONMENT. *Menard used the soil mixing technique, carried out with a twin auger, to remediate a chlorine-contaminated brownfield site in southeastern France.*

Prism: measuring and optimising the environmental footprint of a project

Soletanche Bachy developed a commercial software tool called Prism at the end of the year to measure the environmental footprint of a project during the costing phase. Developed to comply with international life-cycle analysis and carbon footprint standards, Prism compares construction solutions and optimises project design. The company has already used it in preparing several bids.

SUSTAINABLE DEVELOPMENT

Training

Training was sustained at a high level throughout the Group. As part of the Freyssinet Academy, which encompasses training activities organised at the Eugène Freyssinet centre in Auffargis, near Paris and the Saint Eusèbe centre in central France, a total of 5,243 hours of training were given to 233 trainees. In addition, for the first time this year, specific Foreva Team training was given to better disseminate knowledge of Foreva® structural repair solutions (products and expertise) throughout the network. Following up the major recruitment drive carried out between 2005 and 2008 and the development of a large number of new products (Geomix®, Trenchmix®, sonic drilling, etc.), Soletanche Bachy stepped up its training programme. The company also emphasised safety training, training in the environmental aspects of projects (in conjunction with the launch of Prism – see insert) and training to help operating business units meet the social clauses contained in calls for tender. Nuvia, which launched many new training programmes in 2010, prepared to open a new training centre in Pierrelatte. Modelled on the Beaumont-La Hague centre, it will be open to employees of Salvarem and Essor, which will be able to set up its own school there.

TRAINING. *In 2011, a special safety segment has been included in the four-month training course given to 123 Freyssinet trainees at the Eugène Freyssinet centre in the Greater Paris area.*

Civic engagement

Many contracts include employment clauses, and Soletanche Freyssinet teams are actively involved in supporting job induction activities. Freyssinet employees volunteered to sponsor 22 projects that received support from the VINCI Foundation for the Community. In the United States, the Reinforced Earth Company (RECo) continues to support the activities of the EWB (Engineers without Borders) Association, which is involved in building and developing basic water, energy, health and transport infrastructure in developing countries.

Number of employees hired in 2010: **3,128** *(including contracts for the duration of the project)*

Percentage of women in the Group's workforce: **10%**

ACTIVITIES

2010

SOILS

STRUCTURES

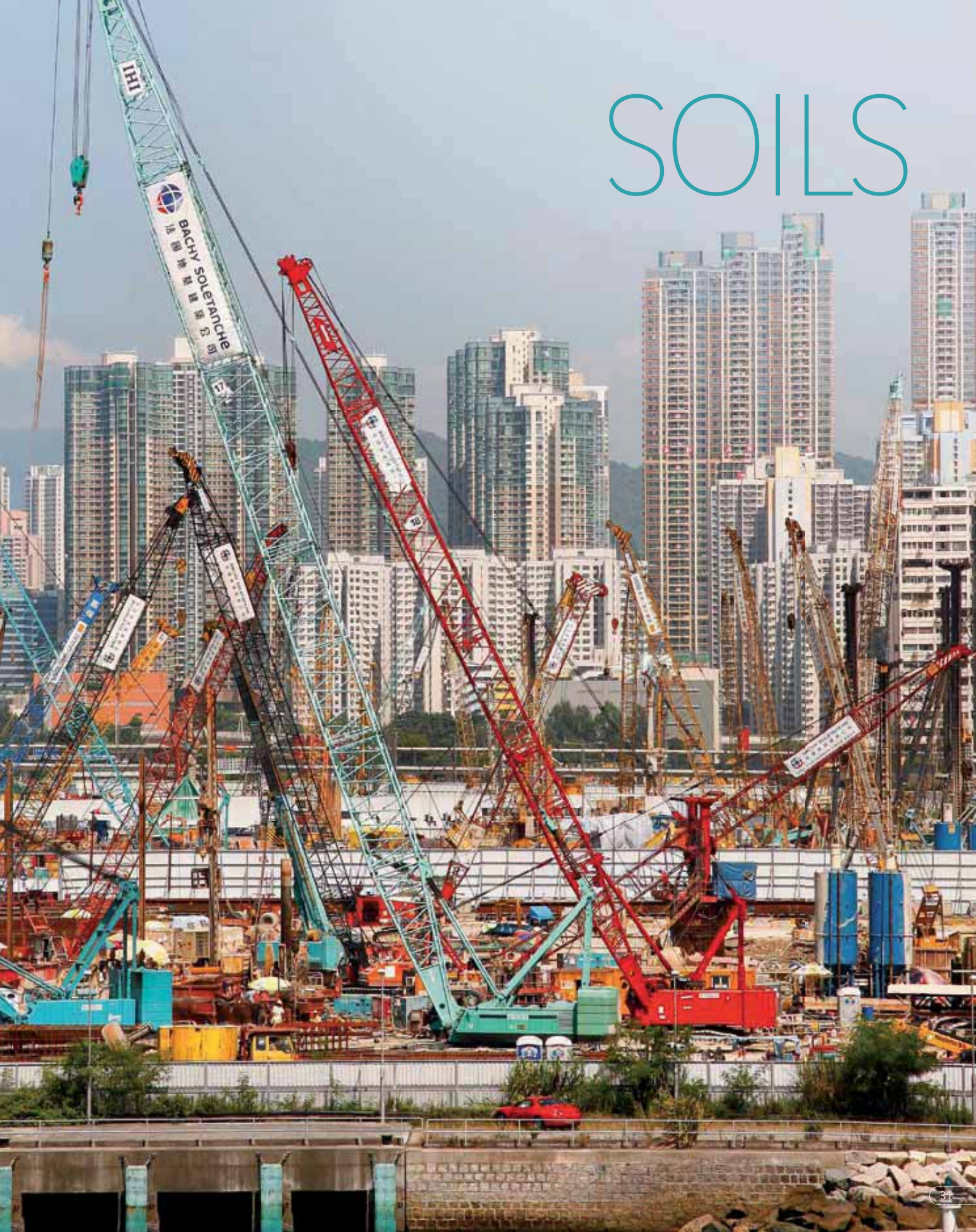
NUCLEAR

EXPRESS RAIL LINK, HONG KONG

THREE WORKS PACKAGES ON THE KOWLOON TERMINUS PROJECT

In Hong Kong, Bachy Soletanche Group Ltd is closely involved in the construction of the West Kowloon Terminus project, which got under way at the beginning of the year. Awarded works projects 803 A and 803 D (100%) as well as 811 (in a joint venture), the company is building thousands of square metres of diaphragm walls, a temporary bridge, a temporary slurry wall and a cut-and-cover tunnel and installing 1,067 piles (177 in situ-cast piles, 890 piles with internal reinforcement).

SOILS



SOLETANCHE BACHY
MENARD
TERRE ARMEE

SOILS

Through its three networks of world-renowned companies, Soletanche Freyssinet has acquired wide expertise in foundations and soil technologies. **Soletanche Bachy** delivers the full range of geotechnical processes, special foundations, underground works, ground improvement and remediation. It delivers integrated services to large infrastructure projects under a wide variety of contractual arrangements. **Menard** is a benchmark in its exclusive ground reinforcement and improvement processes, which make it possible to build on land that could not otherwise be used for construction. **Terre Armee** is the world leader in mecanically stabilized earth (MSE) structures and a specialist in pre-cast arches for tunnels under backfill.

SOLETANCHE BACHY

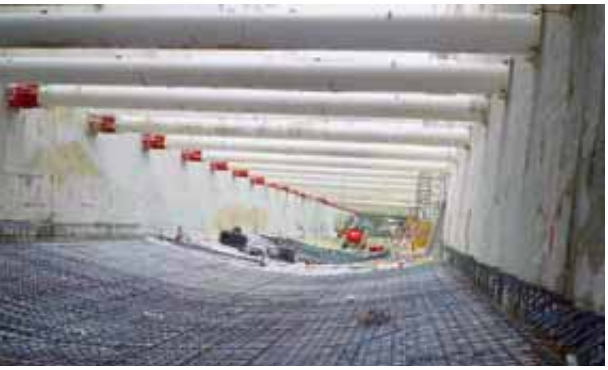
PORT OF COTONOU, BENIN

As part of Benin's market access plan, Soletanche Bachy was awarded the extension of the port of Cotonou, the country's economic capital, at the end of 2009. A 546 metre main quay and a 40 metre return quay were built as diaphragm walls. The two new berths should be handed over on schedule in August 2011. An outstanding feature of the project is its strong social, environmental and–especially– health and safety requirements; weekly meetings of each team are held and a "safety certificate" is awarded each month.

SOLETANCHE BACHY

CARDINET CAR PARK, PARIS, FRANCE

In March, Soletanche Bachy began work on a 609-space, six-level underground car park in Paris. One special feature of the project is the use of "adjustable struts" in two of the three sets of struts, which are designed to improve safety and accelerate execution in the brace removal phase. The work is set for completion at the end of 2011.



TERRE ARMEE

MANDURAH ROAD, AUSTRALIA

South of Perth in western Australia, Reinforced Earth Pty Ltd took part in the construction, for Southern Gateway Alliance, of the access road to the coastal city of Mandurah. The project includes the construction of a 6.5 km four-lane highway and two railway tunnels.
The company is designing and supplying 220 metres of TechSpan® arch segments for one of the two tunnels. Previously the company had provided the Southern Gateway Alliance with 5,000 sq. metres of abutments for five bridges on the New Perth Bunbury motorway.

MENARD

NEW TOWNS, KUWAIT

After convincing the client to approve a solution combining dynamic compaction and dynamic replacement, Menard began ground improvement works in the early part of the year for the new towns of Northern Sulibikhat and Jaber Al Ahmed, over a surface area of 11 million square metres. At the height of activity, 30 workshops and 200 Menard employees were working on the gigantic worksite. The project is scheduled for completion at the end of 2011.

SOLETANCHE BACHY

SEATTLE LIGHT RAIL, UNITED STATES

In Seattle, Washington, Nicholson is working as a subcontractor for general contractor Taylor Bros. / Frontier-Kemper to build the diaphragm walls of a station on the new light-rail line, more than 5 km in length, that will link downtown Seattle with the University of Washington and the U District.

TERRE ARMEE

I-15 INTERSTATE HIGHWAY, UNITED STATES

As part of a project to reconfigure 10 interstate interchanges and rebuild 55 bridges over the I-15 interstate highway south of Salt Lake City, Utah, The Reinforced Earth Company (RECo) has won an order for a set of Reinforced Earth® retaining walls and facing panels representing a surface area of more than 110,000 sq. metres. The contract is the largest ever won by the company.

MENARD

SOUTHERN RING ROAD IN GDANSK, POLAND

Menard Polska is working on the S7 motorway bypass in Gdansk, whose 13 km route runs through terrain made up of compressible clay lying at a depth of 25 metres in places. To stabilise the backfill of the motorway pavement support, the company has so far built 650,000 linear metres of CMC (controlled modulus column) type rigid inclusions and 3,500,000 linear metres of vertical drains. Up to 7 machine trains were used simultaneously on the project.

TERRE ARMEE

BADARPUR, INDIA

At the end of the year, Reinforced Earth India completed the contract covering the design, supply and installation of 50,000 sq. metres of Reinforced Earth® walls in Badarpur, near New Delhi. The worksite was located in a high-density area where frequent traffic jams occur and the teams were forced to adapt their schedule. The structure was handed over on time, earning the company the commendation of the client.

SOLETANCHE BACHY

ITB TUNNEL, BOGOTA, COLOMBIA

In Bogota, Soletanche Bachy Cimas and CSM Bessac finished boring the Interceptor Tunjuelo Bajo in the course of the year. The 10 km long sewer collector main is the third design-build contract awarded to the consortium as part of the TBM construction of the sewer tunnel.

IFT BOGOTA, COLOMBIA

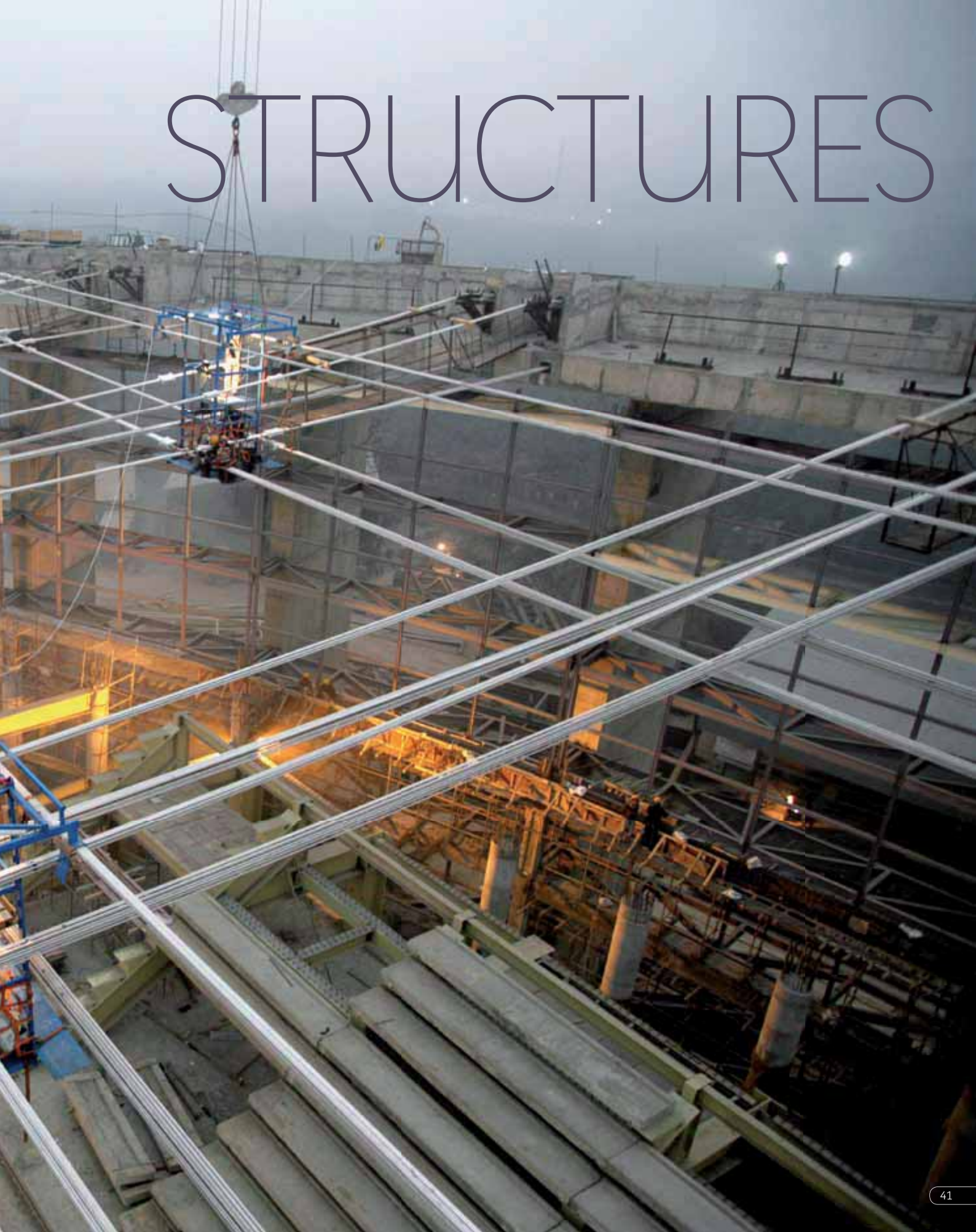
9.4 km sewer collector main.

DR. S.P. MUKHERJEE SWIMMING STADIUM, NEW DELHI, INDIA

COHESTRAND® CABLE ROOF

For the Commonwealth Games, which took place in New Delhi in October 2010, the city renovated the Dr. S.P. Mukherjee swimming stadium, where the swimming competitions were held. The special feature of the structure is the cabled roof, designed by German engineering firm Schlaich Bergermann & Partner, which is made up of a complex metal mast and cable structure covered with a synthetic material. Freyssinet was responsible for designing the stay cables and their connection systems and installed the entire bearing structure, a mesh of 60 Cohestrand® cables and 208 masts.

STRUCTURES



STRUCTURES

FREYSSINET

With a 70-year track record of technological innovations in construction, **Freyssinet** is the world leader in specialised civil engineering, providing new construction, repairs, reinforcement and maintenance of structures. Its services find application accross civil engineering structures, from major bridge and tunnel projects to nuclear power stations, reservoirs, silos and hydraulic structures. Freyssinet's exclusive solutions are implemented around the world by a network of 60 subsidiaries.

FREYSSINET

GEOGA BRIDGE, SOUTH KOREA

At the end of the year, Freyssinet completed construction of a dual-tower, 975 metre long cable-stayed bridge comprising a 475 metre central span on the 8.2 km artery linking the city of Busan on the country's southern coast with the island of Geoje, a major Pacific coast tourist attraction. The Freyssinet teams were in charge of supplying, installing and adjusting the 160 stay cables. Freyssinet also took part in the construction of the towers and the post-tensioning of the deck.

GAMZIGRAD BRIDGE, SERBIA

In October, Freyssinet completed its first project in Serbia–the rehabilitation of the 283 metre Gamzigrad Bridge over the Crni Timok River in the eastern part of the country. The design-build project consisted in reinforcing the structure to enable it to support increased traffic and to extend its service life by at least 30 years. Freyssinet employed three techniques: external pre-stressing, reinforcement with TFC® (Carbon Fibre Fabric) composites and passivation of facing panels with Foreva® products.

OLKILUOTO EPR, FINLAND

At the end of October, substantially ahead of schedule, Freyssinet teams completed the post-tensioning work on the future EPR (Evolutionary Power Reactor) at Olkiluoto, Finland. The work used exclusive techniques and solutions (Equitension® process, FreyssiFlow® slurry, etc.) to ensure quality and safety for a period of 65 years.

Developed by Areva, the EPR is a third-generation reactor offering better cost-effectiveness and greater operating safety.

TERENEZ BRIDGE, FRANCE

In September, following three years of work, the central span of the Térénez Bridge in western France, designed by Michel Virlogeux and Charles Lavigne, was keyed. The operation marked the completion of a unique curved structure with one-of-a-kind towers and exceptional technical complexity. Freyssinet made a major contribution to the project by designing, supplying and installing the 144 cable stays that support the deck (as well as their dampers) and the tower post-tensioning, and performed all lifting and dismantling of climbing formwork. Terre Armee was also involved in the project, designing an original solution that used three overlaid facing panel systems on the abutments.

SAN VICENTE BRIDGE, MEXICO

Following the heavy rainfall in the beginning of the year that damaged a large number of structures in Baja California, Mexico, Freyssinet repaired the San Vicente bridge and four other structures in the region (the Santo Domingo I and II and El Rosario I and II bridges). In each case, the repairs primarily consisted in re-working the foundations, replacing the central fill with new spans or reinforcing the existing structures and placing pavement joints. The repairs were combined with widening and expansion work.

SANTO DOMINGO BRIDGE, MEXICO

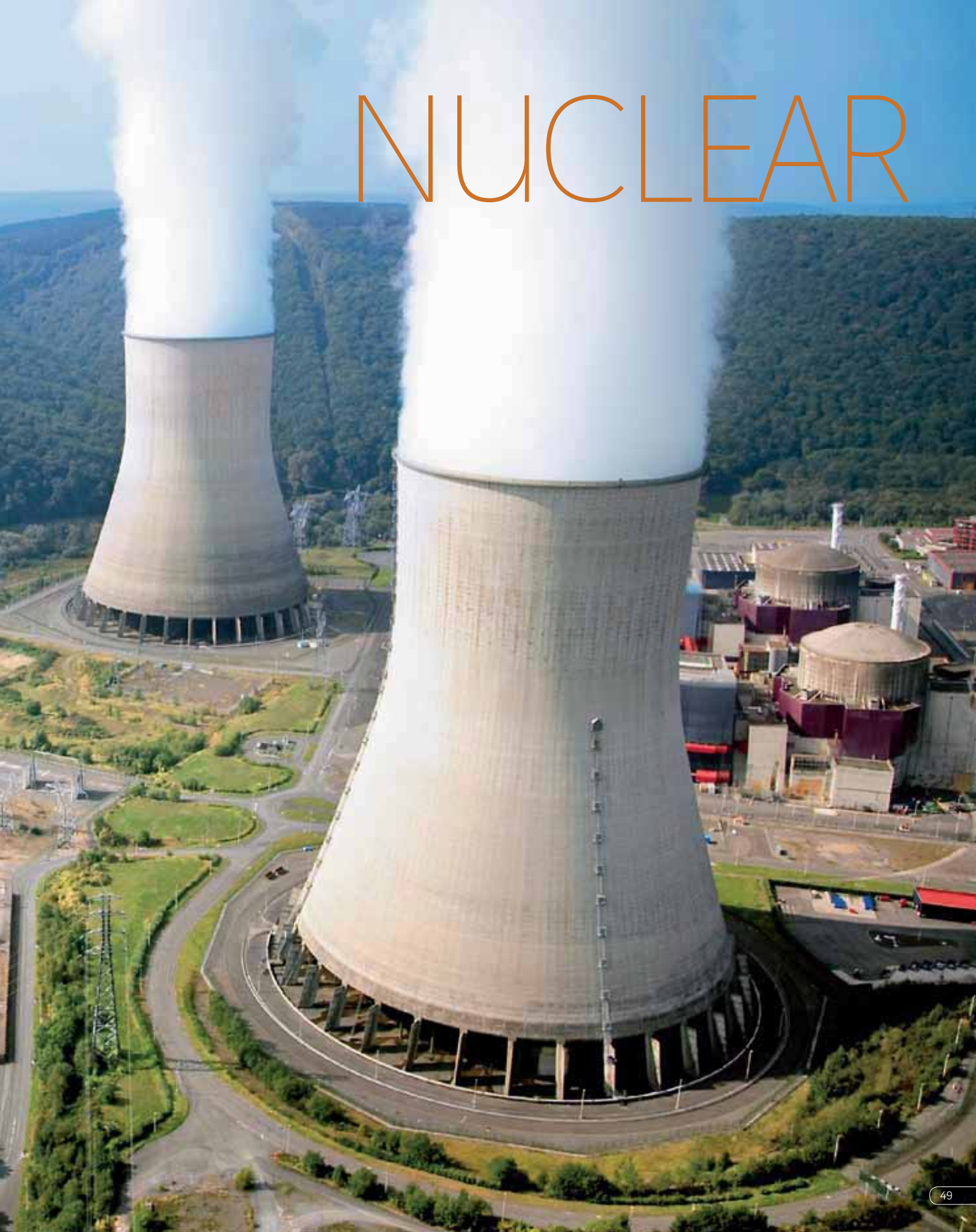
Bridge widening works.

CHOOZ A, FRANCE

FIRST PRESSURIZED WATER REACTOR DECOMMISSIONING IN FRANCE

At the end of 2009, Nuvia won, in a consortium with Westinghouse, the contract to dismantle the reactor vessel of the Chooz A power station, the first pressurised water reactor to be decommissioned in France. Following the design phase, which should last until the end of 2011, and the 24-month qualification phase, work is expected to take place from 2013 to 2016. This is a major project in terms of its duration, the volume of waste that will be generated and the way in which the work will be carried out (underwater cutting, infrastructure located in a cave), which will require the design of a large number of robot tools and the installation of a special filtration system.

NUCLEAR



NUCLEAR

Through its companies Essor, Mecatiss, Millennium, NTS, Salvarem and Vraco in France and Nuvia Ltd in the United Kingdom, **Nuvia** covers a broad range of capabilities in civilian nuclear works; decommissioning, decontamination, radio-protection (in which the company is one of the largest private-sector operators in Europe), engineering, construction, waste management, civil engineering, fire protection, waterproofing, radiation protection, etc. Nuvia's expansion was confirmed in 2010 with the award of new contracts in Canada and Italy and the creation of Nuvia India.

NUVIA FRANCE

AREVA SICN BUILDING, ANNECY, FRANCE

Between September 2007 and July 2010, NTS and Salvarem (Nuvia France) completed work for Areva to decommission and dismantle the main SICN (Société Industrielle de Combustible Nucléaire) building in Annecy. Many innovations were used on the project, one example being a ModuconSlide® mobile airlock that confined and sealed the building and made it possible to control the costs and schedule of the operation.

NUVIA FRANCE

CEA SITE IN CADARACHE, FRANCE

Nuvia has been working at the CEA site in the southern French town of Cadarache since 2008 and is taking part in the dismantling of the glovebox* lines in two of the nuclear installations: the ATPu plutonium technology workshop and the LPC chemical purification laboratory. About 50 people are working full time on the project, which is scheduled for completion in 2013.

To control these high-risk operations carried out in a highly restrictive work environment, Nuvia disseminated workers' booklets as part of its forward-looking jobs and skills plan.

** Airtight compartments used for work in contaminated atmospheres*

SELLAFIELD
A Nuvia delegation at the SDP Sellafield R&D site.

NUVIA LTD

SELLAFIELD, UNITED KINGDOM

Sellafield Ltd is constructing a new plant at the Sellafield site (Cumbria), the Silos Direct Encapsulation Plant (SDP). Significant progress was made during 2010 towards its goal to treat some of the site's legacy radioactive waste.
SDP is being built to process waste retrieved from the Magnox Swarf Storage Silos (MSSS) which date back to the 1960's and is one of the high hazard decommissioning projects at Sellafield. Working within an integrated project team with Nuvia Limited, Sellafield Ltd and Nuvia have successfully designed and manufactured full scale test rigs that are now being used to run the testing programmes for waste handling, tipping, screening and mixing. The massive rigs will have to handle many different waste forms as each skip of waste retrieved from the MSSS will be unique. These trials will demonstrate that a range of samples can be tipped from the MSSS skip into the mixing vessel and that their behaviour is fully understood. The work is essential to underpin the SDP Process Design, Mechanical Handling, and ultimately the SDP installation quality.

SOLETANCHE FREYSSINET

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