

# A trusted local and regional partner

In France and abroad, NGE contributes to the construction of major infrastructures and local projects.



▼ The Valenciennes bypass is facilitating mobility by removing city centre congestion. This is the bowstring bridge river crossing

## ENGINEERED STRUCTURES THAT IMPROVE LIVES

Every day, the Group actions its commitment to achievement and innovation by welcoming transformational changes as challenges and opportunities. Its Multi-expertise teams work hand in hand to build essential engineered structures that are helping to accelerate the ecological transition. NGE is playing its part in making our planet a better place to live by applying its commitment, expertise and can-do mindset to pushing back technical limitations and building more sustainable, safer engineered structures that are changing the world.

## MAKING CONNECTIONS AND POWERING GROWTH

As a major contributor to local economies, NGE builds infrastructures that open up entire regions, facilitate interaction between communities and make travel safer. These infrastructures help to strengthen relationships and breathe new life into regions by enabling new forms of activity that diversify local economies. Its solutions enhance the impact and effectiveness of public-sector regional development initiatives, and pave the way for greater energy efficiency through solutions like connected cities and low-carbon mobility. NGE is a leader in the construction of urban public transport systems, rail links and telecoms networks. The Group is also diversifying into new sectors that help leverage the ecological transition, and include landscaping, decontamination, deconstruction, electric vehicle charging points, materials recovery centres and smart networks.

## WORKING TO BOOST LOCAL DEVELOPMENT

The organisational structure of the Group in France has recently evolved with the creation of a fourteenth Multi-expertise region. This development serves its ultimate aim of working as closely as possible with contract customers on the basis of its detailed knowledge of regional characteristics. Working synergistically with the Group's National Specialist Subsidiaries, the Multi-expertise organisational model offers local economic actors a 'one-stop shop' with a single point of contact to manage and coordinate every area of expertise. The purchase order contracts and framework contracts that provide contracting authorities with long-term support in carrying out essential works now make up a significant proportion of the NGE order bank.

**30%**  
greater diversity in the annual revenue streams of Multi-expertise regions between 2021 and 2025

## NGE REASSERTS ITS INTERNATIONAL AMBITIONS AND REFINES ITS APPROACH

As part of accelerating its international expansion, NGE has introduced a set of minimum requirements to be rolled out for each of its operating countries. These requirements create a formal framework of CSR practices, with particular focus on safety, the environment and business ethics, but also encompassing HR, quality, plant, machinery, equipment and purchasing, to ensure that each country follows a trajectory identical to that of France. Group operations are structured into the 5 geographic regions of Europe, Africa, Middle East, Latin America and Canada to maintain a balance between the volume of work carried out for major projects and that undertaken by the fixed operating locations. 2022 saw expansion into a new country (Canada), and the Group's first steps in Germany. NGE Ingénierie was also created during the year to put in place a structural design company to work in partnership with major engineering firms on NGE design and build contracts. The result is an effective way for the Group to establish its position at a very early project stage in order to integrate the full range of local and environmental parameters. The first NGE Ingénierie branch has already opened in Bogota.

**2x**  
more annual revenue from international projects between 2021 and 2025.



▼ Upgrading the Bordeaux ring road to 6 lanes was essential to ease traffic congestion across the city

## HOW FUNDED PROJECTS ARE SPEARHEADING RESPONSIBLE DEVELOPMENT

Since its first concession contract in 2008, NGE has created more than 5 billion assets spread over some twenty projects in France and around the world. From roads to rail links, fibre connectivity, renewable energy and water, NGE contributes to regional and local development through long-term responsible investment to provide as many people as possible with more services, greater mobility and better accessibility. The Group is now expanding this concession contract model beyond the borders of France, with projects such as the Liverpool City Region ultrafast broadband rollout in the UK, and a rail freight line of around 300 km in Uruguay. NGE is also examining the feasibility of extending its concession contracting model to include local heating networks and rail branch lines as part of its ongoing commitment to investing in new-generation infrastructures that facilitate the ecological transition.

**4x**  
more investment in concessions between 2021 and 2025



## Improving the living environment and supporting economic development



NGE builds engineered structures that stimulate regional and local economies, and help to boost their attractiveness for inward investment. The Group is also applying its expertise to the creation of more sustainable and less energy-intensive cities with the installation of digital systems for public facility management, the development of sports and cultural centres and the visual upgrading of city centres. The creation of NGE Paysages in 2021 is enabling the Group to reverse soil artificialisation and reintroduce nature into urban environments.

### Ecologies at the heart of landscaped parkland

NGE is building 120 timber ecolodges among the waterfalls, suspension bridges, dykes and islands of the Futuroscope technology park. It also plans to plant no fewer than 14,000 trees. Framed and clad in timber, the ecolodges are being assembled in a temporary on-site production plant.

**14,000** trees | **120** timber ecolodges

These ecolodges are being built in more than 100 hectares of landscaped parkland as part of a 100% eco-designed flagship Multi-expertise project

### New showcases for French rugby

At the end of 2022, NGE delivered the new east stand of the Rabine stadium in Vannes, increasing its capacity and updating its infrastructures to create one of the most impressive English-style stadiums in France. Other rugby-related projects include the new Toulon Rugby Club Campus clubhouse, and construction of the Rugby Innovation Centre in Pantin, on the outskirts of Paris.



Design & Build The east stand of the Rabine stadium in Vannes was delivered two weeks ahead of schedule in December 2022



Fibre connectivity rollout in the Dordogne

### Fibre connectivity: ensuring the long-term future of business in France and expanding internationally

From fibre connectivity to mobile networks and through-life network maintenance, NGE has become a leading force in the telecoms industry. 2022 saw completion of the superfast broadband rollout in the Grand Est Region of France on behalf of the Losange and Rosace Public Initiative Networks for which NGE is the concession holder. In 2022, Rosace negotiated a refinancing package of €154 million to secure its future. Although similar rollouts continue in the departments of Gironde, Var, Hérault and Dordogne, the NGE fibre connectivity business in France is currently being transformed into a locally-based provider of telecoms network operation and maintenance services. The Centric contract with Orange to maintain its fibre and copper cable networks in the south-east and north-east of France is just one example of this new organisational structure in action. NGE also has an international fibre connectivity presence in Karlsruhe in southern Germany, and Liverpool and Norfolk in the UK. The Group's acquisition of Avanzit Technologie Maroc at the end of 2022 was made in anticipation of the development of FttH connectivity in Morocco, which is a government priority project targeting the connection of more than 5 million homes to fibre networks by 2025.

**1.9 million** fibre connections installed by the end of 2022

### The Greater Reims urban community takes a major step forward to smart city status

NGE and KPMG are working alongside the Greater Reims urban community and the City of Reims authority in their transition to digital. NGE Connect is installing and providing ongoing support for a digital hypervisor platform that will give both authorities the ability to control all public service infrastructures, including street lighting, traffic lights, electric vehicle charging points and smart street furniture. The benefits for citizens will include more services and a higher level of environmental performance as a result of this new optimised infrastructure management capability.

### Making city centres more attractive and vibrant

At Brignoles, NGE is redeveloping the area around the Cours de la Liberté in the town centre with a project to construct a mixed-use residential and retail neighbourhood, complete with leisure and cultural facilities. The foundation stone for this project, which forms part of the Town Centre Action Plan, was laid in October 2022.





Key to the success of the Château-Gontier bypass project, the Mayenne viaduct opened to traffic in October 2022

## Greater freedom of movement

As the trend towards urbanisation and increased urban density intensifies, public authorities are looking for solutions to relieve traffic congestion in cities, improve road traffic flows, and make short journeys safer. The NGE Multi-expertise model gives them a local turnkey solution for projects that demand a high level of technical expertise to bypass city and town centres.

### The Valenciennes bowstring bridge

The NGE teams working on the Valenciennes northern bypass have succeeded in the demanding technical challenge of installing a 476-tonne, 76-metre-long bridge over the Escaut canal with millimetric precision.

### The Taillan-Medoc bypass in the Gironde

This project, which forms part of the combined French State and Regional

infrastructure plan, runs through a wetland habitat of special ecological interest. Its purpose is to calm traffic flow and maximise road safety in the city centre, which is used as a through route by 20,000 vehicles on a daily basis. Special attention has been paid to water quality and wildlife with a series of special measures, including construction of an ecobridge.

### The Mayenne viaduct at Château-Gontier

At 296 metres long and 28 metres high, this impressive structure bypasses Château-Gontier to relieve traffic congestion in the centre of this town located on a major arterial road. The viaduct spans the River Mayenne, and has dedicated lanes for cyclists and pedestrians.

## Promoting sustainable mobility

NGE builds and maintains urban public transport infrastructures in France and abroad. Its involvement in Grand Paris Express project worksites continues, and the Group has also been awarded the contracts for Line 5 of the Montpellier tramway and the extension of the Toulouse metro system. Internationally, NGE is expanding its operations in megacities like Toronto, Cairo, Panama, Mexico City and London.

### 250 electric vehicle charging points for Nice

Supporting low-carbon mobility also means addressing the energy supply challenges around urban electric vehicle recharging infrastructures, like the City of Nice project to provide 250 EV charging points, the contract for which was awarded to NGE. Affordable prices for users, durable hardware and the robust maintenance needed to deliver a high-quality service were the most persuasive elements of the NGE tender.

### A first in Canada

NGE is a member of the consortium contracted to lay 15.6 km of rail track on concrete slabs through tunnels and over viaducts. Together with a partner, the Group will supply and install the track and catenary systems, as well as building the project depot that will house the rolling stock.

### NGE consolidates its market positions in Latin America

In Panama City, where the Group has had an operating presence for several years now, NGE has won the subway Line 1 extension contract, and has had its Line 2 maintenance contract extended for a further 3 years. In Mexico, it is involved in the project to upgrade 4.6 km of track for Line 12 of the Mexico City subway system.



The official opening of London's Elizabeth Line in May 2022 was attended by Her Majesty The Queen

### Official opening of the Elizabeth Line in London

A global flagship for urban mobility projects, the Elizabeth Line crosses London from east to west, serving 10 new stations. Officially opened on 17 May 2022 and commissioned a week later on 24 May, this complex new rail link was built by the ATCO joint venture, which includes NGE rail infrastructures subsidiary TSO. This project is all about innovation, from design to methods and materials, with solutions like the autonomous concrete train, which delivered record-beating performance.

**118**  
km of track

**2**  
tunnels 21 km long

### The Grand Paris adventure continues

Having completed Phase 1 of the Grand Paris Line 15 project, NGE was awarded, and started work on, the contract for the above-ground section of Line 17, which includes a spectacular 3 km viaduct and the metal-framed Parc des Expositions above-ground station. Although the Éole Line 11 and Line 16 projects will be completed in 2023, NGE is now tendering for a series of new design-and-build work packages for Line 15 based on two years of design work involving 40 people. The estimated values of these 4 work packages range from €1 to 3 billion.

**19**  
Grand Paris work packages involving NGE



## Making long-distance connections

Whether with roads or rail links, NGE works alongside public authorities to deliver their regional development projects. As well as building and maintaining key transport infrastructures, the Group also operates upstream of the value chain through funded projects, where it makes equity investments, commits for the long term, and takes responsibility for infrastructure operation.

### High-speed Egypt

NGE has a long operating presence in Egypt with projects including the Cairo metro system and the track laying for the 10<sup>th</sup> of Ramadan LRT link, and has now been awarded a contract for the project to build an all-new 330 km high-speed line to link Ain Al Sokhna with Borg El Arab via 6<sup>th</sup> of October City and Fayum. This project will break NGE's own record of 320 km of track laid on the South-East Atlantic HS line in France. Work begins early in 2023.

### The Lyon-Turin tunnel

NGE is part of a major cross-border mobility project in Europe that will help to reduce the continent's greenhouse gas emissions. As a member of a contract consortium, it is helping to build a twin-tube (2 x 2,839 m) tunnel with 7 safety tunnels. In 2022, work focused on completing the external preparations, but 2023 will see the start of excavation, which for geological reasons will use the traditional drill & blast method, rather than a tunnel boring machine.

**57.5** km total excavated length | **2** parallel tunnels



Work begins on the French entrance to the Lyon-Turin rail tunnel

### Getting the A69 rolling

As the A69 Castres-Toulouse motorway concession holder, builder and operator, NGE is now preparing to start work on site having obtained all the necessary environmental permissions. The concession operating company Atosca is committed to building a cutting-edge motorway with this project, which will create 1,000 new jobs. During the earthworks phase, materials will be extracted from the site itself to remove the need for temporary quarrying operations. Local wildlife protection and conservation measures include 25 hectares of new planting, 200 wildlife corridors and continuity of groundwater/surface water connections. The A69 will be a new-generation motorway designed to fully embrace the challenges of ecological and energy transition by encouraging the development of car sharing and electric vehicles with the installation of 16 electric vehicle charging points and 20% lower tolls for ultra-low emission vehicles.



The NGE BOA factory train can replace and upgrade 270 km of track per year

### Rapid rail replacement

SNCF Réseau has awarded NGE a 7-year rail replacement contract. Its rail infrastructures subsidiary TSO has taken this process to an industrial level with its BOA factory train, which replaces entire panels of track in a single operation. This is the 4<sup>th</sup> rail replacement and upgrading contract won by NGE.

**270** km of rails replaced per year

### Connecting the continent with the Seine-Nord Europe Canal

The Seine-Nord Europe Canal is a major regional development project that will ultimately connect Compiègne with Aubencheul-au-Bac on completion in 2030. This 107-kilometre wide-gauge canal is the French section of the Seine-Scheldt canal that will ultimately connect the Rhine and Seine basins. NGE successfully delivered the first canalside quay areas in Pimprez and Ribécourt-Dreslincourt, as part of which it introduced local job creation and employment integration schemes.

### NGE links a paper mill to the sea

The Ferrocarril Central rail link project has already achieved key milestones for the signalling aspects of the contract and the construction of large-scale steel bridges. In 2022, 8.5 km of track was laid to bypass the city of Santa Lucia. Connecting this new track to the existing line has enabled plant and machinery to be routed more easily to the rest of the project. 2023 will focus on completing worksite tasks - especially in and around the port city of Montevideo - and live traffic testing.

**273** km of new rail link



NGE delivered the first quay areas of the future Seine-Nord Europe Canal in 2022