

GLOBAL COMPACT

Communication on Progress 2019

RESPONSIBLE,

Together!



This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact**.

We welcome feedback on its contents.



CONTENTS

Statement of Commitment	3
Human Rights	4
THE VIGILANCE PLAN.....	4
RESPONSIBLE PURCHASING.....	4
Labour	5
ABOLISHING FORCED LABOUR & CHILD LABOUR.....	5
OCCUPATIONAL HEALTH, SAFETY AND WELLBEING	5
GENDER EQUALITY AND EQUAL OPPORTUNITIES FOR CAREER PROGRESSION	8
EMPLOYMENT INTEGRATION	10
TRAINING, INTERNAL PROMOTION AND EMPLOYEE SHAREHOLDING	11
Environment	14
#1 TO OWN AN INCREASINGLY FUEL-EFFICIENT AND CLEAN MACHINERY FLEET	14
#2 TO RECYCLE EXCESS WORKSITE MATERIALS	15
#3 TO FOCUS R&D ON THE ENVIRONMENT AND BIODIVERSITY	16
#4 TO CONSERVE RESOURCES BY OPERATING ECO-RESPONSIBLE WORKSITES	16
#5 ECO-RESPONSIBILITY	18
Anti-corruption	20
The New Generations endowment fund	21

Statement of Commitment

St-Etienne-du-Grès, 6 July 2020

NGE conducts its business on the basis of **respecting the Environment** and all its stakeholders (employees, partners and customers) for the benefit of **current and future generations**.

Shrinking and controlling our environmental footprint, promoting occupational safety, social cohesion and employee personal and professional fulfilment, working to support regional development, and full compliance with business ethics are all integral to our strategy.

NGE has been a signatory to the United Nations Global Compact for several years. As a signatory, the **Group** supports and applies the ten principles of the Global Compact grouped together into four fundamental themes: human rights, working conditions, environmental protection and anti-corruption.

This document renews our **commitment to the Global Compact, and expresses our determination to advance these principles through our strategy and corporate culture.**

We have prepared this **Communication on Progress (COP) report to honour our commitment and demonstrate how we have integrated the principles of the Global Compact since our signature. It describes the practical actions we have taken and the results achieved during 2019.**

The full text of the 2019 COP is available from our website at www.nge.fr

Antoine Metzger



Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human right.

Principle 2: Businesses should make sure that they are not complicit in human rights abuses.

THE VIGILANCE PLAN

The Group has responded to French Law 2017-399 on the ‘Duty of Care of Parent Companies and Ordering Companies’ by preparing a Vigilance Plan. This plan identifies those risks to which Group employees, subcontractors and/or suppliers could possibly be exposed. Preventive measures against potential human rights abuses have been identified and implemented. A whistleblowing system also enables individuals to report any violation of human rights confidentially.



RESPONSIBLE PURCHASING



In terms of human rights, the Responsible Purchasing Committee has continued its efforts to prevent potential risks inherent in the relationships between the Group and its suppliers.

Its twin ambitions are: to exercise vigilance in order to avoid entering into contractual relationships with suppliers known to violate human rights, and to encourage our suppliers to be increasingly responsible in their own business practices.

The Purchasing Department implemented and updated the Responsible Purchasing policy during 2019:

- Our General Terms & Conditions of Purchase now require full compliance with the Group Code of Ethics and make direct reference to the NGE commitment to upholding the principles of the Global Compact;
- The comparison of offers from potential suppliers takes into account their level of responsibility;
- Suppliers are encouraged to sign a commitment to respect human rights and international labour standards, in addition to other commitments;
- Assessments and audits now include criteria designed to measure supplier responsibility.

NGE COMMITS!

Targets:

- To ensure that 100% of our suppliers working under framework agreements are also signatories of our Responsible Purchasing Commitments
- To ensure that the 100 largest Group suppliers not working under a framework agreement are also signatories of our Responsible Purchasing Commitments
- To help our suppliers progress with their own CSR policies

Action plan:

- Systematically ask our suppliers about their business practices and encourage them to sign up to our Responsible Purchasing Commitments
 - Measure the amounts we pay to suppliers that have signed our Responsible Purchasing Commitments, to SMEs and to companies working in the sheltered and adapted employment sector
 - Regularly ask suppliers that have signed our Responsible Purchasing Commitments about the initiatives they have implemented and the results they have achieved in terms of societal commitment
- Include societal criteria in strategic supplier audits

Héléna Blanc

Purchasing Manager
NGE National Major Projects



“CSR has become essential. No company that does not act responsibly can hope to progress”.

“We have become more vigilant, but we still have further to go”, says Helena. “Our aim is to ensure that price analyses take account of long-term human and material benefits, particularly in terms of lower energy consumption and improved products life cycles. Once you understand the importance of these issues, you no longer see the restrictions imposed by CSR, but rather what it actually contributes to the company”.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: the elimination of all forms of forced and compulsory labour;

Principle 5: the effective abolition of child labour; and

Principle 6: the elimination of discrimination in respect of employment and occupation.

ABOLISHING FORCED LABOUR & CHILD LABOUR

NGE contributes to the elimination of forced or compulsory labour and the effective abolition of child labour by working within the framework of its monitoring plan and by implementing a responsible purchasing policy. Both measures are described in Part I on Human Rights.

OCCUPATIONAL HEALTH, SAFETY AND WELLBEING



Accident Prevention and ensuring the Health and Safety of all employees are crucial issues for NGE. NGE addresses them through its implementation of an annual Occupational Health and Safety Plan (PSST), which is then revised on the basis of previous years' accident data analyses, business trends and the risk assessments carried out locally by Group entities. In 2019, the Group strengthened its Accident Prevention, Health & Safety policy with the creation and introduction of new processes and procedures.

The vital rules

In 2019, a special working group of accident prevention officers, operations staff and Employee Representative Bodies prepared a series of non-negotiable safety rules that have been accepted and understood by everyone in the Group: These are 'The Vital Rules'. Their purpose is to remind everyone of instinctive responses that can save lives. They are structured around communal rules that will apply to everyone, and a series of specific rules that address the precise needs of certain job functions. Non-negotiable, they are binding on everyone and subject to disciplinary measures if ignored. During the year, the Vital Rules were the subject of an intense communication campaign involving e-mailings, printed information, posters, videos and site meetings.



High-impact operations

In summer 2019, NGE introduced two key events to re-engage its employees with safety issues for the long term. All work in France and abroad stopped on two occasions for 15 minutes of complete focus on occupational safety issues. The first covered road-related risks for the support functions, while operations teams were given a free choice of topic. The second was devoted to shared vigilance or how to ensure your own safety and that of others on a daily basis. A new initiative called 'Guardian aNGElS' asked each employee to draw lots for the name of another person for whose safety he/she would take personal responsibility for a fixed period of time. The aim of the initiative is to observe, analyse, compare and make a note of positive and negative responses as the basis for providing feedback and sharing best practices. Other initiatives are also in place, particularly in our Regions, including the appointment of a weekly joint safety officer from the teams.



Scott Clark

He sees it every day on the Crossrail project in the UK: when safety becomes a shared culture, everyone's a winner.

It's 7 in the morning on the Westbourne Park worksite in London: time for the team briefing. 20 minutes devoted to the work programme for the day, the specific risks to be anticipated and the exclusion zones to be set up. This daily briefing session is followed on Mondays by a health and safety meeting to put in place corrective measures based on the project-long weekly accident report. "Safety is the number one priority on the Crossrail project", explains TSO Site Agent Scott Clark. "Here, we're working with heavy machinery in close proximity to other teams and rail traffic. So the risk of a serious accident is very real".

Talking about safety is therefore one way of maintaining a constant state of vigilance and reinforcing the sense of individual and collective responsibility among team members. Now standard practice, this routine has helped the project to achieve noticeably low accident frequency rates. "Since joining TSO, I've been very impressed by the way colleagues are able to work together to achieve safety goals", continues Scott. "And once integrated, this safety culture is reflected in every aspect of the project, from the quest for quality to mutual supportiveness between team members and workplace wellbeing. Everything is intimately linked and interrelated".

ISSUES ASSESSED	INDICATORS	2019	2018
Health & Safety	Accident frequency rate	16.41	15.06
	Occupational accident severity rate	0.96	0.82
	Number of lost-time occupational accidents	349	286
	Number of non-lost-time occupational accidents	303	244
	Number of days lost	20,968	15,527
	Number of travel-related accidents	76	55
	Number of near misses and incidents reported (+ hazardous situations)	1,971	1,675
	Number of absences for occupational illnesses	57	53
	Number of worksite Safety inspections conducted by managers	2,034	2,111

NGE COMMITS!

Targets:

- An accident frequency rate below 10 by 2021
- For each Group entity to adopt and apply the Occupational Health & Safety Plan (PSST) and be able to report on its results

Action plan:

- Implement 'The Vital Rules' through communication and awareness-raising campaigns
- Take action to reduce the accident rate among temporary employees by limiting the use made of support personnel, ensuring that the skills of temporary employees are appropriate for the responsibilities they are given, and improving the way in which these temporary employees are welcomed and integrated into the teams
- Standardise the First 5 Minutes briefing session held at the start of each shift
- Ensure that supervisors make accident prevention inspections
- Encourage shared vigilance on all our worksites
- Digitalise safety risk prevention and analysis systems



Above all, NGE is a close-knit and spirited group of men and women passionate about the work they do and committed to building high-quality structures of practical benefit to their regions. As a company where living together as a team is essential, NGE pays particularly close attention to the wellbeing of its people, in the knowledge that the company's most precious asset is its human capital.

Action plan: the 10 key management behaviours and mandatory meetings

Rated as one of the best construction industry employers in terms of Workplace Quality of Life according to an independent study conducted in 2018, NGE continued its policy of further improving workplace quality of life during 2019, with implementation of a new action plan. The contents of the new plan introduce a mandatory base level of requirements that apply to all Group entities. It is structured around '10 key management behaviours' to be followed and applied by all managers, and 'mandatory meetings' which are intended primarily as opportunities for interaction and sharing. The ultimate aim is to ensure that worksite teams are led by their local managers, so that communication is not solely concentrated at head office, but can be instigated by managers in all Group entities to improve their response to employee feedback.



Induction days for all

Previously held at head office exclusively for supervisory staff and management, company induction days represent a major milestone in welcoming new employees, because they are structured to improve their understanding of the Group, introduce them to the senior management team and give them an opportunity to network with their peers. They have now been introduced for all new employees and decentralised to entity level.

NGE COMMITS!

Targets:

- To improve the level of information received by everyone
- To harmonise healthcare coverage across all employees
- To provide support at the point of retirement

Action plan:

- Promote social dialogue
- Improve the integration and management skills of managers
- Standardise and decentralise induction days throughout the Group
- Introduce an appropriate local private health scheme in each of our permanent locations abroad
- Introduce identical health schemes for management and non-management staff
- Study the feasibility of teleworking by improving online meetings and limiting commuting

GENDER EQUALITY AND EQUAL OPPORTUNITIES FOR CAREER PROGRESSION



Promoting gender diversity within our teams and making the principle of workplace equality between men and women a reality is a priority for NGE. Ever since it was formed in 2017, the 'Mixité' working group has worked alongside the Human Resources Department on implementing measures designed to accelerate the integration of women into the Group, facilitate their career development and promote a healthy work/life balance.



Workplace gender equality index

In accordance with the French law *Pour la liberté de choisir son avenir professionnel* (for the freedom to choose your own future career) introduced in 2018, NGE has calculated its Workplace Gender Equality Index at 84/100. All the results for those Group entities employing more than 250 people are above 75/100, the level below which companies must implement corrective measures to achieve at least 75 points within 3 years. The Group is committed to improving this Index across all its entities.

Accelerating the integration of women into our teams

NGE continues to introduce a stream of initiatives to recruit more women, particularly in operational worksite roles, where improving the gender balance has so far proved challenging. As part of sharing best practices with other companies and business sectors, NGE has joined the *Cercle InterElles* and the non-profit organisation *Elles Bougent*, both of which work to attract more women into scientific and technological careers. In 2019, the 'Mixité' working group became the NGE MIXITE network, throwing open these issues to all employees keen to share their visions and experiences. The gender diversity initiatives implemented by NGE during 2019 have delivered real progress in a number of areas, including the development of PPE tailored to women's body shapes, the introduction of a mentoring programme for new recruits, and Group participation in the events of non-profit organisations (the *Elles Bougent* jobs forum and the *Cercle InterElles* annual conference). The initial results of these initiatives are already clear, with the feminisation rate up from 8.62% in 2017 to 10.43% in 2019.

Childcare places for employees' children

In September 2019, NGE entered into a partnership with BABILOU, France's leading network of childcare facilities with more than 1,800 nurseries throughout France. This partnership is in addition to the 8 places already available at a local childcare facility for head office employees. Conscious of the need to provide practical solutions for achieving a healthy work/life balance, the Group wanted to offer comfort and peace of mind to young parents, who often have to resort to a variety of different childcare solutions. This new provision allows NGE to provide parents struggling with these issues the guarantee of childcare place availability throughout France, and meets the associated reservation costs. The first registration campaign was a great success, with 15 employees finding places for their children at the start of the school term in January 2020.



Anne-Laure Spagnoli

Anne-Laure’s goal is to make young women want to put on their boots and hard hats, and join her and her technician and engineer colleagues.

As an active member of the NGE Mixité network that brings forward initiatives to promote gender equality within the Group, Anne-Laure is convinced that: “When the gender balance has been improved, we’ll stop expecting different things from women. I can’t wait for the time when we’re seen as just as competent or incompetent as men, without using gender to explain everything!” Anne-Laure has also joined the ‘Elles bougent’ non-profit organisation, and is its coordinator within NGE. And she is in good company, since 32 female employees of the Group have now joined its network of mentors.



THE IMPORTANCE OF LEADING BY EXAMPLE

Structured as a network of mentors passionate about the work they do, the main purpose of the non-profit organisation *Elles Bougent* is to put an end to the negative perceptions that still persist among young women in middle school, secondary school and further education about technical and engineering careers. So NGE mentors are making a real contribution to showing young women that working in, and building a fulfilling career in the construction industry is an option they should consider. By sharing their experience of working in an industry sector chosen by relatively few women, they highlight professional opportunities that are exciting, but often little known to their audiences.

ISSUES ASSESSED	INDICATORS	2019	2018
Gender equality and balance	The Group gender equality index	84/100	84/100
	Percentage of women in the workforce	10.60%	9.40%
	Number of NGE women technicians and engineers who are also Elles bougent mentors	32	-
	Number of places reserved for NGE employees in childcare facilities	20	8

NGE COMMITS!

Targets:

- 400 women on our worksites by 2022, i.e. twice as many in management roles and three times as many in production roles
- To measure the gender equality index in entities employing fewer than 250 employees

Action plan:

- Attract more women into production roles by hosting training sessions in construction industry careers for people undergoing retraining
- Make worksite living conditions more welcoming for women, with appropriate PPE and appropriate worksite facilities
- Encourage women to take on worksite responsibilities through mentoring and leadership training
- Encourage female employees to share their experiences in school careers forums

EMPLOYMENT INTEGRATION



Employment integration is an important priority for NGE. The Group recruits and trains a large number of interns and work-study students every year. It also makes an active contribution to providing employment opportunities for jobseekers in its operating regions through partnerships with public-sector agencies and non-profit organisations.



Membership of the HOPE programme

During 2019, NGE joined the HOPE (Accommodation, Guidance, Employment Pathway) programme designed to facilitate the social and employment integration of refugees. Supported by the AFPA network of vocational training centres for adult learners, this programme makes it possible to train and recruit refugees under permanent contracts of employment at regional level.

The Emploi 45+ label

NGE is also committed to providing employment opportunities for people aged 45 and over. Introduced on an experimental basis by the French department of Val-de-Marne, the Emploi 45+ label was awarded to NGE at the end of 2019... the first construction company to receive this accolade. It recognises and rewards the work done by the Group to facilitate the employability of seniors, and highlights its openness to recruiting people aged over 45. These seniors have skills that are in demand and must be passed on to younger generations. NGE is putting in place the processes needed to facilitate their internal mobility through skills assessments, so that they can be offered appropriate roles in training, design, logistics, etc., depending on their physical abilities.

The École de la Fibre in Strasbourg

As part of the project work to connect 370,000 homes in 700 local authority areas of Alsace to superfast broadband, NGE has set up its own optical fibre training facility in Strasbourg. PLATE FORME, the Group's in-house training centre, has joined forces with the FIBR'ALSACE EIG, the Alsace Chamber of Commerce & Industry and AFPA, the vocational training centre for adult learners, to build a FttH technical platform centre and provide training. This tailor-made employment integration and training facility has helped to sustain the pace of the optical fibre rollout in eastern France. In this way, NGE has successfully transformed the employment integration clause of this contract into an opportunity to develop local skills.

The training centre inducts groups of 20+ trainees, who receive theoretical and practical instruction for periods between two and six months, depending on the job profile concerned. The students on the training course attend three external workshop sessions, learning how to install optical fibre cables on poles, underground and by cable jetting. The only one of its kind in Alsace, this apprenticeship centre also includes a classroom and eleven workstations for teams to train in techniques such as optical fibre welding. The profiles of trainees cover a broad spectrum, since the centre provides training for jobseekers, people switching careers and those engaged in learning basic skills. In 2019, more than 100 trainees completed courses, and have now entered the labour market with the benefit of substantial expertise.

NGE COMMITS!

Targets:

- To induct 24 refugees to the HOPE programme
- To have 300 work-study contracts in place Group-wide in 2020

Action plan:

- Host and coordinate group information sessions on training and careers in construction, working alongside local employment agencies, the local employment integration and jobs plan and the *Pôle emploi* national employment agency
- Build partnerships with institutions

TRAINING, INTERNAL PROMOTION AND EMPLOYEE SHAREHOLDING



The amount invested in training by the Group in 2019 was equivalent to 5% of the total payroll. On average, 50% of employees received training during the year. Against a background of rapid growth and the need to learn new skills for new jobs, NGE is investing massively in skills development for its people.



PLATE FORME

For this purpose, the Group relies particularly on its PLATE FORME in-house training centre network, which operates four centres and two technical training units. In September 2019, PLATE FORME reached an important new milestone with the award of Apprenticeship Training Centre (CFA) status. NGE has also set up a further three training centres: a multi-expertise centre in Morocco, a construction careers centre in Brittany and a rail infrastructure careers centre in the Aisne region of France.

Mentoring... linking generations

The mass arrival of large numbers of new employees means that mentoring has a key role to play in inducting and integrating them, and ensuring the long-term future of NGE Group culture. Mentors are the people who pass on the expertise of the company and teach others how to do the job effectively, stay safe and embrace the core values specific to NGE. In 2019, the Group took its mentoring commitment to a new level by relaxing the conditions around mentorship to offer any employee keen to take on this role the opportunity to do so. All those selected complete an in-house training course in mentorship.

The Professional Qualification Certificate (CQP)

AGILIS, the NGE subsidiary that specialises in road equipment, sports surfaces and open space development, works closely with trade bodies such as SER and SPECBEA to promote our career opportunities through the introduction of the Professional Qualification Certificate scheme (metalworking, concrete, road markings, etc.):

- by contributing to the preparation of career baselines
- by providing ongoing theoretical and practical support to our employees
- by providing members of awards judging panels
- by introducing applicants
- and by gaining qualifications

NGE COMMITS!

Targets:

- To increase the number of certification-based training courses delivered by PLATE FORME
- To promote expertise transfer by introducing more AFEST (Actions de Formation en Situation de Travail) workplace training initiatives on our worksites
- To provide accident prevention management training to 100% of supervisors over the next 3 years

Action plan:

- Build partnerships to ensure that our training courses lead to recognised qualifications
- Give employees the opportunity to develop their digital skills, with particular focus on a partnership with the La Plateforme digital training college in Marseille.
- Adapt our training programmes, expand our network and support our in-house trainers
- Triple the number of accident prevention training initiatives



NGE wants all its employees to enjoy a fulfilling professional career. Using its newly acquired talent management systems, the Group has set a clear target: to promote between 7% and 10% of its employees every year.



The career path of **Romain Tena** Site Supervisor -EHTP - Languedoc-Roussillon Region

NGE COMMITS!

Targets:

To promote between 7% and 10% of employees every year

Action plan:

- Roll out the mobility pack
- Put in place a procedure for identifying individuals with particular potential for career development among site operators, staff, technicians and supervisors
- Roll out a Job and Competency Management Plan (GPEC) for all company employees

When he left secondary school at 15, Romain Tena had only one ambition: to earn a living quickly. Having gained a CAP vocational qualification in general masonry, he was hired by a family building company before moving on to public sector contracting. When he joined the Group as a temporary labourer in 2006, it marked the beginning of an extraordinary career progression. “I very quickly got the bug to progress, learn new things and show what I was capable of”, recalls Romain. “The company really has put its faith in me”. Recruited as a permanent employee, Romain took a series of training courses to become a team leader within a very short time. A few years later, the manager of the Lunel branch put him forward for the Future Site Manager training course.

A COMPREHENSIVE TRAINING PROGRAMME

Twelve team leaders and assistant site managers were selected to join the second of these training opportunities. Over the period of a year, they completed a very comprehensive work-study programme that included trainer-led theoretical sessions in management, IT and safety, backed up by input from Group experts.



In 2019, NGE successfully launched its fifth employee share ownership campaign. Worksite operators, staff, technicians, supervisors and managers... 7,818 of our employees are now shareholders in the company; that’s 948 more employees than in 2018. The success of this new campaign and the withdrawal of Bpifrance from our shareholder base have raised the percentage equity holding of employees and managers from 65% to 80%.

Sébastien Fauvernier is proud to be a shareholder

Unable to see any downside, Sébastien subscribed to the fifth NGE employee share ownership campaign, and is now one of the Group's 7,818 employee shareholders.



“I’m proud to own shares in the company I work for”, says GUINTOLI machine operator Sébastien Fauvernier. Having joined the Group under a fixed-term qualification contract, this native of Avignon is now an experienced bulldozer driver. He’s taken up the opportunity to invest on several occasions as part of employee share ownership campaigns: “It’s an opportunity the company gives us, and there aren’t many investments that are this profitable”.

Sébastien is also motivated by the opportunity to contribute to the growth of a Group he has worked in for more than 20 years. “As a shareholder, I feel that I’m making my contribution to developing the business”, he explains. “And if the Group does well, my work will be even more productive”.

NGE COMMITS!

Targets:

- 15% of the company’s equity capital owned by employees
- To increase the proportion of site operators in our shareholder base

Action plan:

- Continue the rollout of NGE shareholding opportunities at worksite level, and ensure that all employees are aware of the benefits and appeal of share ownership.
- Encourage site operators to subscribe for shares.

ISSUES ASSESSED	INDICATORS	2019	2018
Training	Total number of training hours (inc. work/study)	433,425	332,689
	Percentage represented by work/study	66%	56%
	Percentage of payroll devoted to training	5%	4%
	Number of trainees (inc. work/study)	10,665	9,834
	Number of tutors	297	297
Internal promotion	Number employees promoted	1,229	926
Employee shareholding	Percentage of equity capital held by Group senior executives and employees	80%	65%

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: undertake initiatives to promote greater environmental responsibility; and

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

THE ENVIRONMENT PLAN 3 YEARS AFTER ROLLOUT

2019 was the first year of implementation for the new environmental plan, which covers the period to 2021. Its ambition is to roll out a series of extremely practical initiatives built around the equation that reducing the actual impact of NGE on the planet equals saving money. As a result, environmental performance is now integral to all entity roadmaps. So, in addition to Group-wide initiatives, each entity is encouraged to incorporate an environmental initiative tailored to its local business context and economy. Five main goals are addressed through specific initiatives and follow-ups, some of the indicators for which are shown below:

2019-2021 Environment Plan : 5 commitments				
1 To own an increasingly fuel-efficient and clean machinery fleet	2 To recover materials for re-use	3 To focus R&D on the environment and biodiversity	4 Natural resources	5 Eco-responsibility
Reduce energy consumption and greenhouse gas emissions by 8%	13 recovery/recycling centres... 1 in each NGE Region	1/3 of the 2019-2021 R&D budget	50% of all waste recovered and recycled Reduce drinking water consumption by 10%	100% of employees trained and fully informed

#1 TO OWN AN INCREASINGLY FUEL-EFFICIENT AND CLEAN MACHINERY FLEET

Reducing the fossil fuel consumption of machinery and vehicles



Fossil fuel energy consumption by machinery and vehicles is a significant source of energy depletion and greenhouse gas emissions. So NGE has implemented a series of practical measures to reduce fuel consumption, with particular emphasis on reducing engine idling time.

Idling is defined as the length of time that the engine of a piece of machinery runs at low rpm while stationary and not performing any task. This period is calculated automatically by onboard computers and the indicator data uploaded via a telematics system. The head office plant and machinery department produces monthly indicators of machinery idling rates for each region, and forwards this data to individual branches, all of which have their own idling rate reduction targets.

So for more than 5 years, NGE has been purchasing production machinery that is ready-equipped with onboard telematics to measure fuel consumption and idling times. The data generated allows us to optimise the use we make of machinery in ways that reduce its environmental impact.

Awareness and information campaigns have also been run on all Group worksites. NGE added the first hybrid-powered vehicles to its fleet in 2016, and 100% of all new vehicles purchased over the 3 three years since then have Start/Stop systems.

Monitoring the engine idling rate also allows us to identify machinery operators who have the potential to improve their driving technique in ways that reduce fuel consumption. These operators then attend eco-driving training sessions run by PLATE FORME, the NGE Group training centre.

Reducing energy consumption in non-production activities

NGE is also working to monitor the amount of energy consumed by its non-production activities. Analysing the energy consumption monitoring data allows us to identify the most energy-intensive activities and implement appropriate corrective measures. For example, the most energy-hungry sites may have their insulation upgraded, be the focus for investment in renewable energy or perhaps have their energy supply contractually negotiated. In parallel with these initiatives, Mobility plans are also in place. These plans are designed to optimise employee travel, whether in terms of commuting or business travel. Initiatives in this area include increased use of videoconferencing, carpooling and car sharing.

#2 TO RECYCLE EXCESS WORKSITE MATERIALS



Fully aware of the issues surrounding recycling in the construction sector, NGE is continuing its efforts to increase the proportion of waste it recycles and recovers. NGE has set itself the goal of using a materials recovery and recycling centre in all its multi-expertise regions by 2021. REVAMA in Martignas-sur-Jalle is one of them.

The materials recovery centre at Martignas-sur-Jalle combines profitability and sustainability

As dawn breaks, the ballet of trucks begins: having passed over the weighbridge, they dump their loads of excess materials from building demolition and road construction, as well as gravel, sand, earth and rubble from waste collection centres. Many leave fully reloaded with the materials processed at this centre, including untreated gravel and crushed concrete.

AN ECOLOGICALLY VIRTUOUS CIRCLE

Currently occupying a three-hectare site, the REVAMA centre is expanding fast.

It was opened at the end of 2016 to produce materials at lower financial and environmental cost in a region with few primary materials available. Because if it proves profitable, this model is also extremely virtuous. “There’s a double ecological gain”, explains Mathieu. “Demolition materials no longer go to landfill, and the use of recycled untreated gravel helps to conserve natural material resources. Not to mention the amount of truck mileage avoided in terms of empty return trips and trips to materials production sites”. So the reduction in carbon emissions here is significant.

A PRODUCTION RESOURCE THAT LEADS BY EXAMPLE

But this centre goes further still towards reducing its own environmental impact.

“We’ve taken the decision to develop a production resource that leads by example”, continues Mathieu Argelès. “We have a rainwater collection and treatment system to limit noise and dust. And in response to a request from a local environmental protection organisation, we’ve allowed indigenous plants to colonise unused areas to create an eco-corridor. As a result, our project has attracted substantial financial support from the Region of Nouvelle-Aquitaine and ADEME, the French Environment and Energy Management Agency”.

MATHIEU ARGELÈS
AREA MANAGER - REVAMA - AQUITAINE
 A lawyer by training, Mathieu is now a specialist in construction materials recycling. When he joined SIORAT in 2014, his mission was to boost industrial development in the Nouvelle-Aquitaine region.

#3 TO FOCUS R&D ON THE ENVIRONMENT AND BIODIVERSITY

Controlling invasive plants

Controlling invasive plants is a major focus for the NGE R&D department. The fact is that Public Works projects are undertaken in a broad diversity of environments and disturb the ecological stability of the areas around worksites. This type of work can therefore be a factor in the spread of invasive alien plant species. Between 2017 and 2020, the NGE Group supported a research project on this subject by providing funding for a doctorate thesis in association with the Tour de Valat Research Institute and the Mediterranean Institute of Biodiversity and Marine and Continental Ecology.

Managing polluted soil

The second key environmental issue addressed by NGE is the management of polluted soil, and in particular its separation on extraction in order to optimise transit zones and appropriate onward removal (inert materials or those that are hazardous to a greater or lesser degree).

To deal with this need, the Group has developed a 'sorting' process called DIAGNOSOL Express® in partnership with startup company ENVISOL. This innovative solution continuously characterises soil components and any pollutants it contains, thereby accelerating the identification of excavated spoil, and routing it to the appropriate recovery or storage channels. GUINTOLI, the NGE subsidiary leading this project, also won an award for its solution at the Société du Grand Paris innovation competition in 2017.

Diagnosol Express® combines three technologies: self-learning big data analysis, X-ray spectrometry and industrial chemistry. The algorithm developed by ENVISOL allows the system to refine its diagnostic abilities through continual learning, so the more data it processes, the more efficient it becomes.

The experimental phase began in 2017 thanks to sponsorship from the Société du Grand Paris and ADEME. The solution was first implemented in 2018 on the worksites of the Grand Paris Express infrastructure project, which were looking for solutions to protect Paris Region residents from the intrusion caused by such large-scale projects, and optimise the lack of waste outlets and storage space.

#4 TO CONSERVE RESOURCES BY OPERATING ECO-RESPONSIBLE WORKSITES

NGE is fully committed to the creation and implementation of increasingly eco-responsible techniques and tools.

Reducing water consumption



In 2019, the Group set itself the goal of reducing its water consumption by using closed or semi-closed loop processes wherever possible.

Having conducted an initial inventory of those sites and processes that use the most water, NGE then decided to install meters to improve the monitoring of water consumption, and leak detectors to help avoid waste.

At the same time, NGE is also committed to reducing its consumption of drinking water as quickly as possible. The fact is that it is environmentally unsustainable to use this refined water for purposes such as washing machinery or damping down dusty website routes. Water in the natural environment must also be conserved, especially given the increasing number of drought orders being issued.

NGE designs deployable initiatives to recover rainwater, which is perfect for many uses, by installing on-site holding reservoirs, cisterns and recovery tanks, closed-circuit water recycling systems, etc.

The La Roumer viaduct on the A85 motorway: an eco-responsible worksite

Christophe Belgeulle



The mobile washing station developed by Christophe and his team prevents hundreds of litres of effluent from being discharged into the environment every day.

This modular unit measures around 10 m² and contains a sink, a boot washer, a drain cleaning system, a concrete collection tank and a drainage system that allows polluted water to be removed via a boom to the drum. The water is then returned to the concrete plant water treatment installation. Designed by NGE Civil Engineering Site Supervisor Christophe Belgeulle and Site Manager Alexis Delarue, the mobile washing station was first used on the La Roumer viaduct worksite on the A85 motorway. "It all started with a request from the customer to treat all the water from the construction site, which is located in a Natura 2000 protected area", explains Christophe. "To be honest, without this requirement, we'd never have come up with this innovation. But everyone was keen to get involved, including our site operators who suggested changes to improve the process. The outcome has been a complete success!" Following on from the two prototypes installed either side of the La Roumer river, consideration is now being given to manufacturing more of these stations for all civil engineering worksites in the region.



The Avignon Tramway: a doubly innovative project



It's a first in France. For this tramway project, NGE has prefabricated concrete track modules known as 'Ladder Track'. It's a technique that avoids the need for on-site formwork, steel reinforcement and concreting. Its benefits go beyond the recovery of waste materials, because it uses fewer resources to begin with, and also produces less waste. The teams in Avignon also opted to use the electric welding technique that generates fewer harmful fumes and imposes a significantly smaller carbon footprint.

The ITM Atlantique multi-sports facility: a worksite that successfully conserved its wetland environment

In 2019, NGE subsidiary AGILIS was awarded the contract to build a city stadium and carry out all the work required to ensure full compliance with PRM accessibility standards. NGE was able to respond fully to the concerns of the project owner to ensure maximum conservation of the surrounding wetland environment. As part of the upgrading project, the teams installed a 9-cm thick porous concrete slab to allow rainwater to percolate through the surface. They then installed the multi-sport surface supplied by local French manufacturer Sport Nature. The PRM paths were surfaced with stabilised sand; a mixture of local sand and cement.



Low-carbon concrete

Julie Armengaud is a believer in low-carbon concrete!

As a specialist in engineering concretes with defined properties, it's her job to raise operator awareness of the need to use eco-responsible materials.

The rationale is undeniable. To reduce its environmental footprint, NGE must focus its efforts on its core business. "We use very large volumes of materials on our worksites", says Julie Armengaud, the Group's concrete specialist. "That's particularly true of concrete, but we're delivering real improvements in our carbon footprint by replacing cement, which is very energy-intensive to produce, with steel industry by-products". Blast furnace slag makes effective binders that are cheaper and less polluting: their production generates 20 kg of CO₂ per tonne, compared with 850 kg for cement. "For engineering concretes with defined properties, up to 50% of the cement content can be replaced by slag", explains Julie. "Cement manufacturers are starting to offer it, but to reduce costs further, we must have control of our own formulations". So-called 'low-carbon' engineering concretes with defined properties have already demonstrated their effectiveness on several holding tank worksites in Clermont-Ferrand and Annecy, and in the form of civil engineering concrete for the L16.2 metro project. "The potential for progress is enormous", continues Julie. "Our goal now is to train operators throughout France to increase their use of these 'low-carbon' concretes".



JULIE ARMENGAUD

**CONCRETE SPECIALIST
IN THE NGE SCIENTIFIC
& TECHNICAL
DEPARTMENT**

Her thesis on shotcretes led to her joining NGE FOUNDATIONS in 2017 as an R&D engineer. The concrete-related training, consulting and expert services she provides are now available to all Group subsidiaries.



150 KG of CO₂ per m³ of concrete (based on concrete made using 350 kg of cement): that's the reduction in emissions associated with the use of low-carbon concrete, which equates to the emissions generated by a car travelling 1,250 kilometres.

#5 ECO-RESPONSIBILITY

Informing and educating employees

The main contributory factors to being eco-responsible are reducing consumption, limiting waste and working to reduce your overall environmental impact. So it's clear that every employee has the ability to contribute to the environmental responsibility of their company by taking part in initiatives, such as sorting waste, reducing the amount of documents printed, reusing/repairing rather than replacing and limiting energy consumption.

Which is why NGE has set itself the three-year (2019-2021) goal of informing and educating all its employees about these issues.

In 2019, three information campaigns covered the most essential topics: management, purchasing and design, and operations. Delivered as an e-learning package, these modules explore the concepts of eco-design, responsible purchasing, the circular economy and life cycle analysis.

Raising awareness among suppliers and encouraging them to act eco-responsibly

In addition to their own initiatives, companies also have the opportunity to involve all their stakeholders, from customers to partners and suppliers. By incorporating selection criteria such as eco-design into its relationships, companies can help to energise the local circular economy (through eco-manufacturing, responsible consumption and zero waste) and integrate the life cycles of its products and services (all manufacturing related activities, transport and the uses made of a product or service).

Other initiatives have also been developed in parallel, including partnerships with suppliers of biosourced materials (hempcrete, rice straw insulation, etc.), reduced demand for transport (by using local partners) and life cycle technical studies (as part of calls for tender).

Promoting and sharing good practices within the Group

Ultimately, monitoring and correcting things when they go wrong is good, but working on the basis of good practices can also be very rewarding.

So NGE promotes good experiences and feedback, whether purely practical (such as the testing of small pollution prevention solutions) or more ambitious (the development of environmental projects).

A number of successful experiences and good practices were seen in 2019, including a temporary bridge created using decommissioned frames and panels, washing of concrete mixer truck chutes and environmental work carried out on rivers.



ISSUES ASSESSED	INDICATORS	2019	2018
#1 To own an increasingly fuel-efficient and clean machinery fleet	Direct GHG emissions from the machinery fleet (plant + trucks) as a proportion of annual revenue (geCO2/€ AR)	64	74
	GHG emission reductions as a result of encouraging the use of rail transport for employee travel (TeCO2)	1,022	986
	Average CO ₂ emissions from the truck and van fleet (g/km)	118	114
	Idling rate of production machinery (the length of time that the engine of a piece of machinery runs at low rpm while stationary and not performing any task)	28%	31%
#2 To recover materials for re-use	The proportion of NGE Regions with materials recovery and recycling centres	62% (8 regions out of 13)	54% (7 regions out of 13)
#3 To focus R&D on the environment and biodiversity	Proportion of R&D expenditure devoted to environmental issues	41%	-
#4 Natural resources	Worksite excess materials recovery rate (Consistent with government and industry (FNTP) targets)	70%	-
#5 Eco-responsibility	Number of feedback submissions (good practices and/or reference cards)	58	-

Anti-corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.



Group-wide dissemination of ethical business

Throughout 2019, NGE introduced a series of initiatives to raise awareness of business ethics within the Group; these included training, awareness information sessions at business conferences, and the use of posters to highlight the principles set out in the Code of Ethics.

Strengthening the corruption and insider influence prevention policy



In 2019, NGE also continued the rollout of its corruption and insider influence prevention policy by introducing an increasingly formalised structure for every aspect of that policy.

As a result, an Ethical policy document was produced setting out the Group’s responses to each of the eight pillars of the French ‘Sapin 2’ anticorruption legislation. It was accompanied by the distribution of practical tools describing the third-party evaluation processes for its main foreign suppliers and its commercial partners and intermediaries.

The Ethics Committee meets quarterly to monitor the progress of policy implementation and to bring forward new initiatives with the potential to improve the way this risk is mitigated. For example, the decision was made to review the risk analysis methodology as the basis for updating the corruption and insider influence risk map. The committee has also developed new indicators to measure progress and monitor initiative implementation.

NGE COMMITS!

Targets:

- To train 100% of senior management in criminal risks
- To ensure that 100% of new managers complete the business ethics e-learning course

Action plan:

- Improve our ethical risks map
- Continue with our training initiatives
- Conduct support inspections to implement anti-corruption measures

ISSUES ASSESSED	INDICATORS	2019	2018
Business ethics	Percentage of staff receiving classroom training on Criminal Business Risks relative to the target	96%	-
	Number of staff receiving training in the form of e-learning modules during the period	423	757
	Number of whistleblowing alerts during the period	3	1
	Total number of proven cases of corruption during the period	2	0
	Total number of proven cases for which employees have been dismissed or disciplined for corruption during the period	2	0
	Total number of proven cases where contracts with business partners were terminated or not renewed due to corruption-related violations during the period	1	0
	Corruption-related public legal proceedings brought against the organisation or its employees during the reporting period, and the outcomes of such proceedings	0	0

FONDS DE DOTATION NOUVELLES GÉNÉRATIONS POUR L'ÉDUCATION ET L'ENVIRONNEMENT

Asserting our social responsibility is, of course, primarily about implementing practical initiatives that reduce the impact of our own business activities: that is the aim of the Group CSR policy. Looking beyond this framework, NGE has taken the decision to act in the general interest by means of a corporate fund targeting environmental and educational issues.



The Group is working through this fund to support projects that combat social exclusion, prevent school dropout, and encourage integration into the world of work, as well as initiatives that help to limit global warming and protect biodiversity and natural resources. And its employees are fully involved in this commitment to social responsibility, because they are the ones who voted to choose the first two non-profit organisations that NGE is supporting: l'École Deuxième Chance and *Pure Ocean*.

