2013 saw Egis pursue its strategy of incorporating sustainable development into the heart of its fundamental economic values. The results of our first sustainable development (SD) roadmap for 2011-2013 show significant progress in many areas.

Our group has continued its investments in research & development (R&D), contributed to numerous methodological think tanks and developed new tools, such as our Social Imprint® initiative, for a better evaluation of the societal impacts of development projects. In response to our strategy of conquering new markets as well as the expectations of our stakeholders, this initiative is a key means of differentiation in the development of our activities in France and abroad.

The emphasis on sustainable development in Egis’s governance and management systems is reinforced every year, as shown by the internationalisation of our network of correspondents, the contribution of our internal initiatives and networks on to performance and corporate social responsibility (CSR), and the preponderance of sustainable development in the work of our Executive Committee.

I have also ensured that sustainable development is reflected in practical terms in our products and solutions. Two business lines were created in 2013, in the strategic sectors of energy and sustainable cities. In this field, we are very proud to have won, alongside Eiffage and GDF SUEZ, the call for bids from the French government to develop Astainable® “a 3D sustainable city simulator” for the city of Astana, capital of Kazakhstan. In collaboration with key players in this market, our aim is to co-define a model of urban development that is responsible, sustainable and attractive.

I know how important it is for our strategies in terms of development, tools and methodological contributions to be defined and developed in close liaison with our stakeholders: staff and experts within our teams, public authorities, contractors, economic and financial partners, professional organisations, clients and, ultimately, the people for which the facilities are intended. This desire to make our operations ever more relevant, a topic regularly raised in the Egis Sustainable Development Steering Committee (whose work I greatly admire), is intended first and foremost to create value.

That is why this new CSR report and our future reporting exercises aim to better quantify the benefits of this strategy for all parties involved.

And while we still have work to do, both in the field and in terms of CSR reporting, initial feedback from the international market is very promising. With a good order intake in 2013, our group has positioned itself on a path of sustainable and shared growth for years to come. This is thanks to you.
As an engineer, consultant, architect and developer, our “sustainable” added value lies in our ability to:

- Create favourable conditions for the inclusion of responsible performance targets in projects.
- Put forward solutions to optimise the ratio between direct and indirect costs of projects and the benefits for the region and stakeholders: this means providing more benefits for the same resources and impact, or using fewer resources for the same benefits and impact.
- Report these achievements, and make sure they are recognised by third parties, particularly by users.

As an operator of infrastructure, we strive to:

- Implement a responsible and innovative corporate policy while respecting the concession company’s specifications.
- Work with local communities.
- Report to stakeholders.

For our project development work, the key is to identify the constraints and opportunities offered by SD from the very early stages of a project, and to discuss these within the consortium in charge of the project to provide the most responsible action.

In all cases, the real challenge is to identify our “added value” in terms of sustainable development, and to show in concrete terms how the consideration of SD issues, at the right time and at the right level of a project, creates value for a community. It is even one of the “challenges” addressed in our extra-financial reporting: quantifying the benefits and ensuring they can be audited.

Specifically, our “sustainable” added value is expressed in two major areas of expertise:

- We work on the eco-design and the financial and social acceptability of projects, by incorporating scales of space and time, disciplines, and the needs of stakeholders.
- Our extensive experience in technical and organisational governance means we can address the diversity of project stakeholders, by understanding and aligning their (often conflicting) goals.
At the same time, we are also changing our internal behaviour and operations (employment policy, environmental responsibility, business ethics).

These commitments are stipulated in our sustainable development charter, which includes twelve principles grouped into three areas of action:

**ANTICIPATE AND AVERT**

**ASSIST AND BUILD**

**ASSOCIATE AND INVOLVE**

These principles are consistent with the ten principles of the Global Compact, to which Egis has subscribed since 2011. Our principles are more comprehensive on some points.

**OUR COMMITMENTS**

The priority actions for SD/CSR are stipulated in a multi-year plan.

Our first roadmap covered the period 2011-2013. Significant progress was made in these three years. Specifically:

- Formalisation of our public commitments: SD charter, joining the Global Compact.
- Dialogue with our stakeholders: creation of a sustainable development steering committee.
- Continued work in R&D to meet the major challenges of sustainable operations and development in the regions: multi-criteria analyses/eco-comparison tools, management of projects’ sustainable performance, eco-design, bio-engineering, greater consideration of social impacts, and more.
- The gradual integration of CSR criteria into the managerial and operational processes of the Group’s performance management system.
- The gradual harmonisation of the corporate policies that drive the Group’s CSR: ethics and compliance, disability, gender equality, health and safety, corporate patronage and partnerships.
- The organisation of a solid foundation for extra-financial reporting.

The work undertaken must be continued and strengthened.

Our SD/CSR objectives for the next four years are in line with the group’s development strategy.

The 2014-2017 SD/CSR roadmap will focus on the following four areas:

- Making SD a key means of value creation, to ensure the competitiveness of our company as well as the attractiveness of the regions where we work. More efforts made on the following topics:
  - Cities (optimisation, resilience, power, influence, economy).
  - Energy and environmental transition (EET).
  - Sustainable operation of large infrastructures, facilities and new services (e.g. smart parking, etc.).
- Developing local roots through a sustained policy of stakeholder involvement, greater consideration of social issues and increasingly responsible practices.
- Ensuring the widespread application of SD practices across all our businesses and in all teams.
- Consolidating and increasing the reliability of our extra-financial reporting to better integrate it into the Group’s performance management system.

Available at www.egis-group.com
With regard to CSR governance, the highlights of 2013 include:

- The appointment of a Director of Sustainable Development on the Group Executive Committee.
- The gradual internationalisation of the network of CSR correspondents.
- The gradual integration of CSR into the company’s performance management system.
- The creation of two business lines focused on the key issues of sustainable cities and energy.

Created in 2009, the Sustainable Development and Performance Division relies on its internal stakeholders to speed up the integration of sustainable development issues in the management system and in projects. With this decentralised approach, governing bodies and all group-wide networks (project and functional teams) are involved in the SD/CSR process and contribute to the implementation of company commitments.

To instil CSR in the economic, technical and social reality of each of its subsidiaries and to enable the latter to develop solutions tailored to their own challenges, a network of SD/CSR managers has been established in all Group companies. Made up of an SD manager (strategic level), an SD coordinator (operational level) and for many of them, an internal network of correspondents (by geographic location or by specific job), this “ambassadors” initiative is essential to the successful deployment of the Group’s CSR policy.
In 2013, we appointed nine new SD correspondents in our international subsidiaries and operating divisions. Chosen for their motivation and their ideas on this topic, they act as key points of contact for sustainable development issues within their divisions. Their position in the field means they are best placed to identify the topics to be prioritised in feedback, to relay innovative ideas and practical applications on projects. To ensure that their actions are coordinated with the whole group, they attend meetings that I organise and report to me throughout the year.

The system is already a success. To give a few examples:

- Egis Poland has adopted Variways® (an eco-comparison tool for road variants developed by Egis and certified by the IDRRIM*) on the express motorway 86 (section Nowogard-Kolobrzeg).

- The Central Africa division has innovated in the fight against erosion in the Congo, using vetiver (a best practice for which we won a prize at the Caisse des Dépôts Group’s 2013 Innovation and Sustainable Development Trophies) (See photo opposite).

- The SD correspondent in the West Africa division initiated the creation of an SD Operational Guide, which was finalised collectively by all correspondents.

With regard to international development, this decentralised network, which acts as a link between head office and the field, is key to the deployment of CSR strategies and their application by operational teams.

* IDRRIM: French Institute of Roads, Streets and Infrastructure for Mobility.
EGIS, AT THE HEART OF AN ECOSYSTEM OF Stakeholders

As with any business, the activity of the EGIS Group takes place in an ecosystem made up of many different stakeholders. While the group has always maintained good relationships with key stakeholders, its business activities create the need to be open to others. The implementation of a CSR policy has thus resulted in even better consideration of all group stakeholders, whether they are impacted by EGIS’s business activities or in a position to influence the activity of the group.

At the heart of an ecosystem of stakeholders, EGIS has set itself the goal of strengthening the dialogue initiated and to improve it in order to better meet their expectations.

**Academia**
- Schools, universities, research laboratories, the scientific community, foundations, etc.

**Civil society**
- Citizens, associations, non-governmental organisations (NGOs), media, etc.

**Employees**
- Employees, temporary staff

**Social partners**
- Employee representatives, trade unions, etc.

**Regional players**
- Local authorities, associations of elected officials, local communities and residents affected by a project, local organisations, etc.

**Other public authorities**
- European Union, French government (head office of the group), other governments (location of subsidiaries, countries of operation), administrations, regulators, and so on.

**Clients**
- Public and private clients, lenders

**Financial partners**
- Shareholders, banks, investors

**Economic partners**
- Consortia, co-contractors, subcontractors, service providers/suppliers, insurance companies, extra-financial analysts

**Socio-professional groups and think tanks**
- Federations and professional associations, business clusters, think tanks.
THE MATERIALITY PRINCIPLE AND ITS IMPLEMENTATION BY EGIS

For years, Egis has been keen to put its solutions and strategies for sustainable development and CSR to the test in partnership with its key stakeholders. This dialogue on the best action to take in order to fulfil our sustainable development objectives in the various Egis businesses and services is continuous.

COMPARING VIEWS, IMPROVING STRATEGIC THINKING AND PUTTING CSR AT THE HEART OF OUR STRATEGY

Egis has voluntarily chosen to incorporate different contributors (associations and think tanks, working groups, etc.) allowing it to compare its views with others and enhance its discussions on the challenges and prospects of SD and CSR.

These exchanges with others enable Egis to refine its priorities in the topics at the very heart of its strategy (e.g. Sustainable cities, energy transition, etc.).

Implementation of the materiality principle

This methodological approach, based on the principle of relevance (or materiality) consists of cross-referencing internal perceptions with regard to our main development strategies, and the expectations of our stakeholders. This materiality analysis has contributed to the definition of our CSR policy, and guided its application in work processes, consultation mechanisms and other methodological tools.

In terms of reporting, work on reviewing these methods is required, using a materiality matrix: a complex task given the broad scope of activities covered by the group.

APPROACHES TAILORED TO EACH TYPE OF PARTNERSHIP

To better take into account the expectations of its stakeholders, Egis has implemented several approaches/processes and established specific methods of co-development:

- The Egis Sustainable Development Steering Committee, made up of internal and external stakeholders, Committee chaired by General Management
- The creation of Methodological Tools
- Participation in Expert Committees and work contributing to national and international discussions with proposed courses of practical action
- In the field, Partnerships, in particular with specialist NGOs
- Socially responsible Actions and community work
- In the following pages, we will detail each of these approaches.
A committee bringing together external experts and internal representatives

Established in 2010, the EGIS group’s Sustainable Development Steering Committee meets twice a year, bringing together internal representatives and external experts from diverse backgrounds. This sharing of views aims to foster innovation and the development of more socially responsible engineering practices.

Discussions in 2013 on two topical issues

A contribution to the national debate on energy transition

In 2013, the first meeting of this Committee was devoted to the issues of energy transition and energy efficiency. During national debate on energy transition, Denis Merville, Vice-Chairman of the Association of Mayors of France and member of the Steering Committee, presented the key points of the AFM’s contribution and discussed the involvement of cities in the energy sector.

A joint contribution from the Director of EGIS’s Energy Business Line and the Executive Director of Olimespace, a GDF SUEZ subsidiary, then highlighted the potential contribution of heat networks to policies of energy efficiency: France is among the lowest users in Europe, with less than 5% of buildings generated by heating networks consumed, compared to a European average of 10%.

Based on the discussions held in meetings, and with the agreement of its members, a contribution by the Committee to the national debate on energy transition has been drafted.

It is available on our website www.egis.fr (under “EGIS in Action/Imagine a Sustainable Future”).

The specificities of French engineering applied to sustainable cities

A unique topic was put forward for the second meeting of 2013: the specificities of French engineering in work on Sustainable Cities.

The discussion was a response to EGIS’s involvement in Vivapolis, an umbrella brand that brings together French stakeholders, both public and private, aiming to increase international awareness of its shared ambition for sustainable urban development. Antoine Grumbach, architect, came to talk to the Committee members about his vision for the city of tomorrow: powerful cities, always in motion, with a need to evolve and continuously regenerate.

To illustrate the EGIS approach, the missions carried out on behalf of the city of Nouadhibou (Mauritania) were analysed. The specific features of what could be considered the French approach to sustainable cities were then discussed among members.

A committee appreciated by its members

After four years of existence, EGIS decided to review the workings of this Committee through a survey conducted in late February 2014 among its members. Overall, Members were happy with the content of meetings, the quality of discussions and the conduct of proceedings. Michel Colombier (IDDRI*) said he found it “beneficial to understand the real reasons for including SD considerations in customer relationships and the requirements/compromises that this involves”. Anne-Chaîrreyron Perchet (MEDDE: French ministry of environment) spoke of “the benefits of the contacts made”. Dorothée Briaumont (Solaris: French association for facilitating food donation) emphasised “the excellent level of listening by leaders and teams”.

Various suggestions for improving the committee were made by members. One such proposal was to open up the group to international experts, elected officials, foresight specialists, etc. Members would also like to go further in the discussion and co-development of experimental initiatives.

Nicolas Blanc (Caisse des Dépôts) therefore suggested “changing the demographics of the committee in line with the specific topics addressed”. Christine Grezes (Bouygues Construction) suggested “identifying topics for which we could come up with productive ideas together”, while Marc Mimram (DPLG) stressed the importance of “addressing the economic aspects of sustainable development”.

For upcoming meetings, several improvements will be put in place.

* IDDRI: French Institute for Sustainable Development and International Relations

Tendem Empreinte® is a pragmatic and participatory tool that helps to define the objectives, indicators and actions that enhance the sustainability of a project. Tested in 2009 on infrastructure and urban development projects, this tool helps to assess the sustainable development footprint of a project using a radar chart with five axes. This chart is a useful tool for dialogue and information as it enables users to visualise the impact of the strategies co-developed with people affected by the project: the footprint is then developed throughout the design process as the final actions are officially determined. Tailored to the size of the project and the client’s priorities, the Tendem Empreinte® system is now regularly used by EGIS teams. Its ease of use by stakeholders and its scalability over time make it a valuable tool for monitoring and sharing the sustainability of a project.

The excellent quality of discussions and the conduct of proceedings. Michel Colombier (IDDRI*) decided to review the workings of this Committee through a survey held in late February 2013 among its members. Overall, Members were happy with the content of meetings, the quality of discussions and the conduct of proceedings. Michel Colombier (IDDRI*) said he found it “beneficial to understand the real reasons for including SD considerations in customer relationships and the requirements/compromises that this involves”. Anne-Chaîrreyron Perchet (MEDDE: French ministry of environment) spoke of “the benefits of the contacts made”. Dorothée Briaumont (Solaris: French association for facilitating food donation) emphasised “the excellent level of listening by leaders and teams”.

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* IDDRI: French Institute for Sustainable Development and International Relations

Tendem Empreinte®, an SD management tool for projects developed by EGIS
The aim of the “Sustainable Campus for the Future” study, conducted by the organisation “Campus Responsables” was to determine the outlook for the responsible development of higher education establishments by 2030. Based on around forty interviews and the compilation of numerous studies, the work involved identifying factors of change that could make campuses into places of sustainable education and life. This study was supported by Ademe (Agency for environment and energy management; French public institution), the Caisse des Dépôts (French governmental financial organization), Egis and Gecina (French Investment institution). Just like business, higher education also needs to reinvent itself. Today’s students are tomorrow’s professionals and will need to innovate and constantly excel in order to solve new problems. The topics suggested for discussion included the need to better integrate information and communication technologies (ICTs) on campus, to encourage collaborative work and to provide training courses related to ecological, societal and digital transition.

**Co-developing other methodological tools:** The “Sustainable Campus for the Future” study

Through its participation in many social and professional associations and think tanks, and its corporate patronage activities, Egis has been involved in various contributions on issues of sustainable development and other multi-partner projects. Here are some examples for 2013.

**The joint development of three contributions to the national debate on energy transition**

Egis was heavily involved in the contribution of Syntec-Ingénierie, a professional federation for industrial engineering and construction companies, designed to share the lessons learned from their feedback on energy projects. It resulted in ten actions grouped into four strategic areas. Through this contribution, professional engineering has positioned itself as a key player in energy transition. In 2013, Egis was also very involved in the drafting of the Syntec-Ingénierie guide: “Engineering companies and Corporate Social Responsibility”.

The association of sustainable development managers, C3D, of which Martine Jauroyon, Director of sustainable development managers, C3D, of which Martine Jauroyon, Director of sustainable development at Egis, sits on the Board, has also actively participated in this national debate. C3D’s contribution emphasises the need to combine traditional approaches to energy issues with those resulting from new types of use in order to meet the challenge of this transition. In addition, a contribution by the Egis SD Steering Committee to this national debate has been drafted on the basis of discussions on this topic at the meeting of 30 May 2013 (available at www.egis.fr).

**Active participation in new think tanks**

Egis is part of the Comité 21 foresight committee, established in 2013. One of the fifteen professional and academic members of this committee is Raphaël Ménard, Director of Foresight Studies at the Egis group. The first project selected by this Committee of Experts aims to assess the impact of sustainable development initiatives in terms of attractiveness and performance in the regions.

Another think tank joined by Egis in 2013, the Sustainable Development Club France, will devote most of its efforts between 2013 and 2015 to civil society’s contribution to the UN Climate Conference (COP 21) to be held in Paris in 2015. In 2013, this group of 60 networks and partners produced a contribution on the objectives of sustainable development, submitted to the Government and ambassadors in view of discussions at the UN aiming to translate the commitments made by governments at Rio +20.
A strong commitment in the field of sustainable cities

Under the guidance of AFEP (the French Association of Private Companies), Egis has partnered with around fifteen other businesses and organisations to present to the government the implementation of a French approach to sustainable urban development in France and abroad. Such proposals show the ambition of these economic actors to create a clear and efficient French product when it comes to sustainable urban development, and proposals for the implementation of demonstrators in France. This initiative was behind the creation of Vivapolis, an umbrella brand that aims to bring together French stakeholders, both public and private, with the aim of increasing international awareness of French excellence when it comes to sustainable urban development.

This approach has already led to a project headed-up by Egis in partnership with GDF SUEZ and Eiffage: Astainable® (see page 47 for details).

What will the city of tomorrow look like? What are its challenges and how can we meet them? These questions are the raison d’être of Fondation Palladio. A unique tool for mobilisation, research and discussion in the long-term and in the public interest, the foundation brings together and encourages the involvement of all parties currently working on the construction of the city. Thanks to the support of its founding members, of which Egis is one, it also assists those who will contribute to the city of tomorrow. Twelve grants, representing a total allocation of 100,000 euros were granted in 2013 to PhD students and postdocs working on the subject of the city of tomorrow. Find out more: www.fondationpalladio.fr

PARTNERSHIPS WITH KEY STAKEHOLDERS SUCH AS SPECIALIST NGOS AND COMMUNITY SUPPORT

In the field, the group’s desire to better meet the expectations of local people translates into partnerships, particularly with specialised non-governmental organisations (NGOs).

Example of a project in the Democratic Republic of Congo: facilitating relations between village communities and forestry companies

In response to a call for bids on the negotiation of 80 social compensation agreements between local people and forestry companies in DRC, Egis has formed a consortium with FRM, a French consultancy firm specialising in the forestry sector, OKAR, a Congolese firm specialising in environmental and social impact studies in the Congo, and CODELT, an NGO specialised in the proper governance of forestry in the DRC. This NGO, mainly composed of lawyers, had already contributed to drawing up a Forestry Code in the DRC.

The objective of the mission was to enhance mutual understanding and benefits of these agreements for all those involved. An assignment made even more complex by the fact that the forest areas in question are isolated, local communities were suspicious about forestry, and the willingness of forestry companies to engage in this process was not always evident. The forestry companies had to be convinced of the added value of these (social) agreements, for themselves and the communities, in terms of preventing conflicts with communities and providing legal certainty. It was also an opportunity for companies to become compliant with forest legislation.

During this mission, the NGO CODELT helped train sociologists on the legal aspects of the agreements. It also jointly led a training course on the development of internal procedures for local committees in charge of the management and monitoring of social agreements.

Benefits for the region

> 80% of the compensation fund goes directly to community projects ($13 million for four years).

> In practical terms, this represents: 787 km of rural roads to be maintained, 1,163 classrooms to renovate and equip, 120 health centres to rehabilitate and equip and 29 water points to be set up.

> The compensation funds could significantly boost the local economy since community projects also favour the use of local labour and materials. So nearly 2/3 of the cost of the infrastructure will be directly injected into the local economy.

> The beneficiary population is estimated at 1 million people (65 agreements each covering an average of 15,000 people).
Fondation Egis: a tool to support creativity and innovation

Since 2006, through its foundation, Egis has promoted innovation and creativity in engineering, particularly in the areas of sustainable development, and has supported training, research and social and educational actions for French and foreign students.

In 2013, several highlights caught our attention: the Fondation Egis innovation prize awarded to the Cergy International Workshops for the project “Milieux entremêlés” (connecting environments). For this 3rd set of awards, the Fondation Egis prize was presented to the team behind the project “Milieux entremêlés” which proposed reconnecting the Plaine de Pierrelaye-Bessancourt with local ecological reservoirs through its enclosed field structure.

The promotion of CSR in Africa

To contribute to the emergence of a generation of young Africans actively involved in the deployment of a sustainable economy in Africa, the Fondation Egis supported the first ever CSR training course organised by the Ecole Supérieure des Sciences Économiques et Commerciales (ESSEC) in Douala (Cameroon), and provided by Kilimanjaro University (African University of CSR). This support also includes the funding of scholarships for two students.

The DumASSi project: a school built as part of a community support project for three villages

To contribute to the social development of several villages, Egis decided that, in parallel with its works supervision and monitoring on the Oyala-Evinayong motorway, it would build a school and a home for the teacher. Inaugurated on 6 September 2013, the school can accommodate between 80 and 100 pupils. With two classrooms, two offices, benches and tables, and a house for the teacher, the children will be able to start the school year in earnest. The project also helped create local jobs in the construction of the two buildings, employee training in this area, and helped generate business for existing companies.

“This project is innovative in its:
• Environmental approach: pollution is presented as an opportunity.
• Social approach: The woods create a link between people, infrastructure, forest, agricultural areas, and so on
• Economic approach: This project also has connections to Cosmetic Valley, to enhance local flower production.”

PRUDENCE DONGMO KENNANG
ENGINEERING STUDENT AT ISTAC
(INSTITUT SUPERIEUR DE TECHNOLOGIE D’AFRIQUE CENTRALES)

“For me, Corporate Social Responsibility was a concept that related to a few vague definitions of sustainable development (...). Discussing the implementation of a CSR policy has allowed us to identify a completely different method of business management (...). CSR strategies are focused on the development of human beings. This results in a different vision of businesses and organisations”.

RAOUL SINKO NGAMENI
ENGINEERING STUDENT AT ISTAC
(INSTITUT SUPERIEUR DE TECHNOLOGIE D’AFRIQUE CENTRALES)

“CSR is a concept that is increasingly under discussion on the international stage. But in Africa too, companies need to get started because CSR is an opportunity to create wealth, while protecting the environment and people. The vocational nature of the training received means that at the end of the course, the applicability of CSR concepts is clear. It is an invaluable asset to have been on this training (...). It has taught us to integrate the CSR variable into all our businesses, right from the outset.”

Catherine Jatteau
DIRECTOR OF WASTE MANAGEMENT AT EGIS

The DumASSi project: a school built as part of a community support project for three villages

200m alongside the new motorway, a school for Dumassi and a house for the teacher.
Support for the new emergency response activity for buildings and infrastructure

For a doctor, working in accident & emergency is a speciality. The aim of the “Emergency response for buildings and infrastructure (UBI)” Master’s course, created by the ESTP (Graduate School of Public Works) in Paris, in partnership with the Fondation Architectes de l’Urgence is to extend this principle to professionals in the construction sector. During natural or humanitarian disasters, and in conflict situations, we need to find technical solutions for emergency construction and reconstruction that are tailored to the social, political, economic and logistical realities in the field. Through its foundation, Egis supports this year-long training course, open to graduate engineers and architects with a clear career path in the field.

"I am(...) very satisfied with the content of the training course (...). It is meeting all my expectations, placing emergency reconstruction within the broader topic of development (...). My first assignment (...) will take place at the UN-Habitat in Nairobi in urban planning.”

"For me, this UBI Master’s course represents the culmination of a university course and (...) the perfect launching pad for a carefully considered career. (...) The topics addressed are preparing me for work in the field, equipped with appropriate ideas and knowledge.”
SOLUTIONS AND METHODS

REALISING YOUR COMMITMENTS

Regardless of the business sector, we usually encounter three main scenarios depending on the context of the territories and the level of stakeholder commitment. Here are the different scenarios illustrated with achievements in 2013:

RADICAL CHANGE SCENARIOS

For industry players, developers and investors with a strong ability to mobilise stakeholders and those interested in systemic approaches, we help to radically change business models and ways of doing things.

> Preliminary studies for the new El-Ménéa city in Algeria: in 2020, this new city will house some 50,000 inhabitants in a modern and environmentally friendly city, a basis for developing sustainable agriculture and organised tourism. In this arid environment, Egis has managed to create a master plan for a fertile, mobile and inhabited city. It will be developed around a “green framework”, an expression of our “soft infrastructure” concept.

TRANSITION SCENARIOS

For those parties that have a commitment to excellence or visibility on one or two key themes, leading to a broader set of functions, we improve the living environment and processes, in the pursuit of energy efficiency and financial and social acceptability.

> The Flaubert neighbourhood in Rouen (France): Egis is active in the urban project management and the management of public spaces in the eco-neighbourhood. The project aims to regenerate 90 hectares in the heart of the city. Based on the concept of a “green and blue” environmental framework, it will play a vital role in improving mobility and will ultimately accommodate 10,000 people. The design anticipates the consequences of global warming, urban heat islands, and the rising water level.

> The Jacques Chaban-Delmas urban drawbridge in Bordeaux, winner of the Engineering Grand Prix 2013. Many innovations have focused on saving energy, and the use of prefabricated elements has significantly limited the impact on traffic and local residents.

Of course, there are no minor projects. Each project is an opportunity to develop local skills, a common culture, a better life together, to test ideas that will be implemented in the next project.

CHALLENGING SITUATIONS

To address concerns regarding the delivery of a concept or facility under certain constraints (time, governance, technical, lack of understanding, etc.) we bring together the proper expertise and mobilise the necessary governance.

> The Jacques Chaban-Delmas urban drawbridge in Bordeaux:

An exceptional structure that combines elegance, energy efficiency and innovation.

QUANTIFIED RESULTS

In 2013, we created an internal guide that provides benchmarks to help quantify, where possible, the added value of our studies and services in terms of sustainable development. It specifies, in four areas (buildings, roads, urban transport and cities) and for each major phase of a project (design, construction, operation), methods of optimisation and the possible benefits based on feedback gathered during our projects. The indicators examined are varied, such as greenhouse gas emissions (GHG), energy, water, materials, safety, quality of life, cost and acceptability.

Examples of energy benchmarks:

> For an energy efficient building, the operating energy represents up to 80% of the total impact. It is essential to reduce heating and cooling needs.

> For a project involving urban spaces, the energy budget is well distributed between manufacturing, materials and supplies to the site. But it is the latter of the three that provides easiest access to significant gains: doubled depending on the supply chain.
WHAT'S NEW?
The conclusions of the fifth IPCC report are clear: human activity and the use of fossil fuels has led to an exceptional increase in the concentration of greenhouse gas emissions. The climate is changing at an unprecedented pace. At the current rate of GHG emissions, temperatures are set to rise by around 4°C by the end of the century, with very significant consequences on melting ice and sea levels (rise of about 60 cm).

Because they are impacting the organisation of regions in the long-term, infrastructure and development projects must be designed, built and managed sustainably. It is not only about limiting the carbon footprint, but also building the capacity to adapt to climate hazards. To raise awareness among those involved in these projects, from their planning to their operation, Egis has developed a unique area of expertise, based on a broad range of skills, methodological approaches and specific tools. Whatever the level of intervention, Egis’s mission is to help its clients with:

> Understanding issues (duty of information).
> Risk assessment (prevention, control, capitalising risk) with a view to creating resilient regions (adaptation to climate change).

In addition to its specialised studies on adapting to climate change, Egis’s business activities will now include proposals for limiting the carbon footprint of projects: for more information, refer to the Energy, Mobility, Resources, Sustainable Cities pages of this report.

AN EXPERT OPINION

YVES ENNESSEUR
CLIMATE MANAGER
AT EGIS EAU

“Let’s be prepared to better protect our regions, our activities and our fellow citizens. Reducing GHG emissions to offset the effects of climate change is a first area for action.

But even if we reduce them, climatic disturbances are inevitable. It is imperative that we assess the degree of climate vulnerability of our natural and urban ecosystems, and optimise the resistance, adaptability and resilience of our facilities, equipment, and areas for production and living”.

In addition to its specialised studies on adapting to climate change, Egis’s business activities will now include proposals for limiting the carbon footprint of projects: for more information, refer to the Energy, Mobility, Resources, Sustainable Cities pages of this report.

KEY PROJECTS
ANTICIPATING AND PLANNING TO AVOID THE WORST

Cities are taking action, using our expertise

Egis was one of the first engineering firms to develop a GIS tool (GERICI*) to help identify the climate vulnerabilities of a section of road or a structure and to offer preventive measures by level of priority. This innovation, recognised both in France and abroad, has allowed us to be among the leaders in climate-related engineering. Since then, many other measures have been devised by our experts to speed up regions’ ability to adapt to existing climate disruptions and to exercise our duty to alert. We offer scalable techno-economic solutions that take into account the uncertainty of future climates and inform future choices in terms of planning and urban development. For development projects, we provide approaches such as climate resilience which involves testing their climate and energy behaviour by 2050-2100.

* GaRCI: a GIS providing Climate Risk Management for Infrastructures

In addition to its specialised studies on adapting to climate change, Egis’s business activities will now include proposals for limiting the carbon footprint of projects: for more information, refer to the Energy, Mobility, Resources, Sustainable Cities pages of this report.

A changing climate and natural hazards, the Wilaya of Algiers is ready

With nearly 3 million people, the Wilaya of Algiers has decided to increase its resilience to climate change and prevent the risk of natural disaster: floods, landslides, heat waves and cold snaps, coastal flooding and erosion, water stress, and so on. Egis has supported it in this process, assessing the risks of vulnerability between now and 2030 and developing action plans to increase its resilience to these risks.

Egis identified the investments required to protect property, estimated the cost of adaptation measures and made recommendations to strengthen institutional capacity to manage the impacts of climate change both in the long term and in an emergency. This included informing all local people, institutions, technical agencies, private individuals and citizens of the results of this study and this process.

A changing climate and natural hazards, the Wilaya of Algiers is ready.
Egis was tasked with devising a solution to reduce the impact of air conditioning across the Paris region, based on a diagnosis of the existing situation and a foresight approach to climate change (modelling based on the IPCC A2 scenario and the ARPEGE climate model developed by Météo-France).

“Doing nothing” is a scenario involving a lot of energy and discomfort, creating significant inequalities between neighbourhoods. Phenomena such as “the thermos effect” of recent constructions, and the problem of releasing the heat generated by internal use were of particular note.

It is possible to reduce the need for air conditioning and to choose lower impact methods:
- Densifying ground vegetation.
- Choosing materials with a high albedo (limiting the absorption of solar radiation).
- Controlling the release of anthropogenic heat.
- Reducing internal heating in buildings.
- Facilitating access to the district cooling network, Climespace.
- Developing geothermal energy on shallow aquifers and energy geo-structures.
- Making use of “thermal smart grids”.
- Encouraging the development of alternative air conditioning systems in buildings.
- Contributing to dissemination of feedback.

The study aims to give solutions on various scales, from buildings to urban spaces, as well as focusing on the crucial task of raising awareness among stakeholders and users of the city.

A foresight study (up to 2100) on the future of air conditioning in Paris for the Urban Planning Division of the «Ville de Paris».

**METODOLOGICAL IMPROVEMENTS**
**TOOLS AND METHODS TO HELP US SPEAK THE SAME LANGUAGE**

**Guide to Energy-Climate Interactions Volume 2 Resilience**

The inclusion of climate considerations in project management and consultancy assignments is one of the major challenges Egis has decided to take on, by offering its partners and customers tools for analysis and dialogue.

To fulfil this duty of information, Egis has published a “Guide to Energy and Climate Interactions” (2nd volume in the collection) dedicated to climate adaptation strategies. This guide highlights in particular the changing trends in energy needs for the different typologies established.

Designed and created by the group’s foresight studies department, this book provides a visual and educational way of presenting the RESILIS research results on climate resilience.

**Resilis**

An ANR* research project funded by Egis to develop urban resilience through improved assistance for governance of urban systems.

**Strengths:**
- An in-depth study of the city.
- The identification and development of technical, organisational and cultural tools.
- An approach tailored to companies.
- Study trials with partner communities.

*ANR (French national research agency; provides the scientific community with instruments and conditions that promote creativity, openness and stimulate new ideas and partnerships particularly between the public and private sector)
The way the world deals with climate change today will have a direct impact on the development prospects of a large section of humanity. If we are to believe some experts, technological innovations should be able to provide solutions while encouraging growth.

AWARE of the challenges, Egis has been investing in R&D on this topic for many years, with a variety of partners. Feedback on two examples of innovative projects:

**ADAPATAIO**
Integration of adaptation to climate change in the design of urban development projects: new tools and business activities. It is important to consider adaptation and mitigation at the same time, and right from the start of a project, with a focus on two key resources: water and energy. To achieve this, the team will offer a simple tool for assessing energy consumption by climate scenario. It will also identify the contributions of a newcomer to the city: the designer, Project partners: CDC Climat, CSTB (Scientific and technical center for the building industry; French public institution), EVP (School of engineering of the city of Paris), Egis, Ville de Paris

**ROADAPT: ROADS FOR TODAY, ADAPTED FOR TOMORROW**
Adapting roads to climate change through a method devised for concession companies and operators of roads and motorways, enabling them to assess the climate risks to which their infrastructures are exposed. Roadapt also helps to assess the socio-economic impacts of the consequences of climate hazards, and identifies strategies for adapting to climate change in the design of roads and structures, as well as in maintenance and operation methods.

Project partners: Deltares (coordinator, Netherlands), Egis, KNMI (Netherlands), SGI (Sweden)

**WHAT’S NEW?**
Since the beginning of the industrial revolution, global energy consumption has continuously increased. It has more than doubled in forty years, from 1973 to 2013. But just as needs increase, the resources available on the planet, such as fossil fuels and raw materials are becoming more and more scarce. It is therefore crucial that we take action. Although both individual and collective behaviour needs to change, engineering also has an essential role to play. It is a question of responsibility.

Debate on energy transition

In 2013, six suggestions were made by the Egis Sustainable Development Steering Committee to help better share opportunities for energy transition, through socio-technical, economic and innovative engineering. Find the Steering Committee’s contribution at www.egis.fr (Under Egis en Action / imaginer un futur durable)
Designing and implementing projects that are in line with this new and complex energy model, but that are more powerful in economic and ecological terms, and more open to residents and stakeholders, is definitely possible.

By combining a vast array of approaches and solutions, by working in partnerships, and by continuing to pursue new ideas, Egis undertakes to support the transformation of the energy model at all levels of its business: from upstream (consulting) to downstream of its services (design, operation). In mature regions, we help our clients to optimise their industrial processes and construct energy positive buildings with low environmental impact.

**Egis : engineering for the Allianz Riviera stadium in Nice: the first UEFA Euro 2016 stadium to be energy positive**

With every last detail designed to reduce its impact on the environment, the Allianz Riviera, a new multi-purpose stadium in the city of Nice, is a model of eco-construction. It was designed using as many natural and renewable resources as possible.

- Mass use of structural wood (3100 m³) = avoiding the release of 3000 tons of CO₂ into the atmosphere = the equivalent of 3000 return flights from Nice to New York.
- Geothermal energy to produce hot and cold air.
- Natural ventilation to regulate the ambient air using the winds of the Plaine du Var = reduced consumption of air conditioning and heating.
- Recovery of rainwater for watering the grass and supplying the toilets.
- Implementation of a photovoltaic power system with a surface area of 8500 sqm, making this an eco-positive stadium = production of 1500 mWh/year, equivalent to the annual consumption of 600 homes.

Assigned by the promoter, Adim Côte d’Azur, Egis carried out general and environmental engineering work for the project. Elioth, an Egis group entity specialising in complex structures, carried out studies on the geometry of the stadium, the design of the structural steel framework, and the PVC and ETFE cover (40,000 m²) as well as the environmental performance of the structure. Architect: Wilmotte & Associés Project owner: Nice Eco Stadium

**The renovation of a former postal sorting centre to high architectural and energy standards**

The Nef project, in Tours, received the Silver Pyramid award in 2012. It was awarded by the French Federation of Property Developers (FPI) for its aesthetic and environmental performance.

- As a minimum, the housing must meet the criteria of the “Patrimoine Habitat et Environnement” and “BBC-effinergie” certifications.
- The renovated building is also aiming for HQE (high environmental quality) certification.
- An innovative geothermal system: it heats the housing, while the cold air is stored to cool offices, via radiant ceilings. This principle helps achieve a satisfactory level of comfort without air conditioning.
- The roof terrace will be equipped with 1600 m² of photovoltaic panels to produce approximately 240,000 kWh/year. Added to the renewable energy generated by the geothermal system, this will cover all the building’s energy needs.
- The building’s energy performance will be monitored using an internet portal allowing each inhabitant to monitor their own energy consumption in real time. The instructions for the building are provided for future residents.

The project includes the recovery of rainwater from the roof for reuse in the households (supplying toilets and watering the vegetated facade that will cool down the building naturally during the summer).

All insulation components and the framework of the homes on the terraces are made of wood, which significantly limits CO₂ emissions.
A FORESIGHT INITIATIVE
FOCUSBING ON THE ENERGY MIX

In order to diversify energy sources, we are working on the development of renewable energies such as geothermal, wind, solar, hydro, biomass and energy recovery. We have also been a partner, for more than 60 years now, in the construction of nuclear facilities in France and abroad, with considerable safety expertise in particular.

Imagining the fuel of the future with the GIRoFLE pilot project in Grenoble

Studies, construction and on-site assembly of the GIRoFLE biomass gasifier (innovative gasification in an entrained flow reactor).

The aim of the Genevi platform developed by the Grenoble CEA (centre for research into nuclear and renewable energy - LITEN laboratory), as part of the “facilities of excellence” tender, is to provide the scientific and industrial community with a robust technology solution to characterise the various stages of gasification of carbonaceous materials from biomass. For this platform, Egis designed and supplied a turnkey prototype gasifier (called GIRoFLE). Capable of operating at high temperatures and high pressure, it will be the only reactor in Europe whose size and flexibility are representative of the problems of the industrial production of bio-fuels.

User behaviour

Universities in Rennes, France, have decided to control their energy consumption... and all occupants will be involved in the challenge

What strategy should be adopted for greater efficiency in terms of energy and water consumption? What is the best way to manage real estate? This is the mission that the two Rennes-based universities have entrusted to the consortium led by Egis since November 2013. The study is also supported by local authorities, the Caisse des Dépôts, Ademe and the Water Agency.

The study includes a section on involving the entire university community, at the same time as providing legal, financial and technical expertise. The goal is to come up with an action plan to motivate and educate students and staff, and change behaviour by creating a group dynamic. These actions will complement and enrich the diagnosis and the methods of optimisation identified.

Teaching tool

A small manual on energy transition for buildings and cities. The convictions and solutions of design engineers

When writing this booklet, the Egis designers and engineers set themselves the task of explaining the diversity of energy-related issues in a simple and didactic way and educating our partners and clients on the simple, accessible and user-friendly solutions available. The hope is that the manual will also reveal solutions for energy rehabilitation and the fight against fuel poverty.
MOBILITY
CITIZENS IN MOTION, SOLUTIONS FOR A NEW TYPE OF MOBILITY

WHAT’S NEW?
The world is changing. In 2025, the planet could well be home to more than one billion additional people. The urban concentration observed is affecting mobility, quality of life and greenhouse gas emissions. Despite this, peri-urban and rural areas need mobility to boost or increase their attractiveness, dynamism and competitiveness. Together we need to devise and manage solutions for transport and planning, the two key components of sustainable development in our regions.

AN EXPERT OPINION
PASCAL SEUM SOUK
HEAD OF THE MOBILITY BUSINESS LINE AT EGIS FRANCE

Tomorrow’s mobility will be economical in terms of energy, resources and space, to better integrate into a society that is low in carbon -but not in spirit! Urban areas have been expanding for several years now. This is leading to increased energy needs, for which fossil deposits are becoming scarce. We need to speed up the transition of our transport systems, towards solutions that are more flexible, more modular and more accessible. In this regard, Egis faces the daily challenge of ensuring the vitality of regions, and allowing everyone to move around while protecting the environment, their time and their quality of life."

KEY PROJECTS
DEVELOPING SIMPLE AND EFFICIENT PUBLIC TRANSPORT

Egis clients pay close attention to the performance of their projects. We share this concern. Whether this involves reducing the ecological footprint of transportation, optimising their total cost, or strengthening the expected benefits for the region, Egis endeavours to adhere to budget constraints while maintaining the quality of spaces and services provided to users.

Feedback on examples of eco-solutions for tramways:

Montpellier tramway: an eco-design initiative that makes savings

A sustainable approach to optimising the project was established to meet customer expectations. Three tools were used to assess and monitor the project’s sustainable performance: daily monitoring indicators, sheets for the analysis of actions, and the “carbosim” software for carbon assessment. In total, 152 proposals emerged from a dozen workshops, bringing together thirty experts; seven major actions were selected. They helped to validate new solutions totalling nearly €2.6 million in savings compared to the original budget.

Examples of sustainable development gains:

Tracks built on asphalt:
> Investment savings estimated at €500 k for a carbon footprint three times lower than conventional concrete.

Energy Recovery Substations:
> Braking energy can be recovered and re-injected into the tram’s power network or be sold to ERDF, and losses due to heat dispersion are reduced. On this project, we expect to recover 37,700 kWh / year, with a return on investment of 30 years. This solution remains neutral in terms of cost, and will contribute to reducing GHG emissions and energy consumption in the operation phase.

Alternative vegetation:
> The goal is to save a quarter of water consumption over two thirds of the 45,000 m² platform, which means savings estimated at €25,000 a year. Plant coverings on the platform usually involve watering, as well as the use of plant protection products and regular mowing. Trials provide a way of selecting the most suitable plant combinations.
While soft mobility solutions have made a comeback in cities, shared public spaces are still dominated by motor traffic. Yet the demand for natural and pedestrianized public spaces in cities has never been so high.

By reintroducing nature into the city, and by increasing access to public spaces while promoting soft modes of transport, we are offering cities another perspective on their urban roads, to encourage active modes of transport. This infrastructure provides an easy access network for all, a large reticular public facility for neighbourhoods and the agglomeration as a whole, allowing everyone to enjoy the city at their own pace, according to their desires and in a pleasant and calm environment.

Depending on the specific context of each road section, we offer appropriate, possibly sequenced, planning, giving an important and relevant role to vegetation, and offering spaces that encourage strolling, recreational use and active modes of transport in a principle of harmonious coexistence.

Poolings orders can generate 10 to 20% savings

When several cities join forces to buy trams, the grouped order can generate real savings in terms of investment in rolling stock.

A FORESIGHT INITIATIVE
INTRODUCING SMART SOLUTIONS INTO URBAN CAR PARKS TO HELP THE CITY FLOW

Because 40% of traffic in cities is generated by people looking for parking spaces, increasing CO₂ emissions and stress levels, and only 30% of parking spaces on the road are paid by motorists, Egis is now proposing the use of new technologies for a more relevant and efficient parking management system.

Using predictive data for traffic in real time and sensors for instant information transmission, Egis is providing value-added services to citizens and municipalities by using urban data in an innovative way (guide to available spaces, real-time monitoring of fee-free spaces, organising the routes of parking officers).

Not to mention the revenues that could be invested in other sustainable mobility services.
PROTECTION OF RESOURCES AND BIODIVERSITY,
OUR RESOURCES ARE NOT INFINITE
PRACTICAL IDEAS FOR PROTECTING THEM

WHAT’S NEW?
Nature often gets it right, as long as we respect it. The natural depletion and pollution of resources is now an indisputable reality. The common sense solution would therefore be to preserve, renew and protect them. But our lifestyles, consumption and economic realities mean we are using them more and more.

AN EXPERT OPINION
DOROTHÉE LABARRAQUE
PROJECT MANAGER FOR BIODIVERSITY AT EGIS ENVIRONNEMENT

“Let’s protect our natural wealth to better share it. The preservation of vital resources such as water, air, soil, and biodiversity will dictate the future of generations to come. Protecting it is one of our main concerns. Managing these resources involves the pursuit of equality, optimisation between different uses, and a constant effort for environmental protection and sustainable management.”

KEY PROJECTS
PRESERVATION: FOR EACH DEVELOPMENT PROJECT, WE IDENTIFY THE NEGATIVE IMPACTS IT GENERATES AND PROPOSE SOLUTIONS TO AVOID, REDUCE AND OFFSET THEM

Removal of micro pollutants in water:
Saint-Pourçain-sur-Sioule (France) has come up with a treatment plant that’s almost one of a kind

This town, south of Moulins, is a rural community of 5000 inhabitants with a high concentration of medical and hospital establishments. When designing a new wastewater treatment plant, the local council assigned Egis to ensure that the future station would process drug residues in effluents, mainly from cardiovascular, antidepressant and antiepileptic drugs. Cutting edge technology that for the time being is not mandatory but in Saint-Pourçain-sur-Sioule, the municipality has preferred to get ahead of future standards.

In late 2013, Saint-Pourçain-sur-Sioule opened its new wastewater treatment plant. A new kind of plant, with only two in France and five in the world, this station can process molecules that before now were released into nature.

To treat these drug residues, the treatment system used essentially consists of adding low load activated sludge wastewater to the wastewater treatment unit, designed for 10,000 PE*, an ozone treatment followed by a biological filtration on expanded clay. This twofold ozonation/filtration process allows for a removal yield of 93% on the drug residues identified and present in the plant’s effluent.

* PE: Population Equivalent - unit of measure for assessing the capacity of a wastewater treatment plant

In 2013, Egis and INERIS joined forces, to reduce the release of pollutants in surface waters

This alliance aims to offer a joint service to industry firms for their studies on the knowledge and control of industrial emissions of micro pollutants in water.

The Saint-Pourçain treatment plant removes up to 93% of drug residues
On-site stormwater management: a reference guide for the profession

Featuring best practices and technical solutions, this guide provides benchmarks for preparing sites for the risk of very rainy periods.

The control of stormwater and natural exterior runoff has become one of the key success factors of an environmentally friendly site. For the surrounding aquatic environment, the challenge is both quantitative in terms of changing water flow conditions, and qualitative in terms of the risk of degrading the quality of the surroundings (pollution by suspended materials, or hydrocarbons, etc.).

Heavy rainfall is of course an aggravating risk factor. Work planning and organisation of the sites needs to take these into account. It is a challenge for the project itself since any occurrence of pollution that is directly or indirectly due to the works will have a direct impact on its progress. All project participants are exposed to legal prosecution if the work does not meet the provisions established to protect the environment. Numerous work sites are the subject of litigation and work stoppages due to impacts found on the aquatic environment.

Development projects
(infrastructures, business districts, urban planning, etc.)

A method for maintaining the services provided by nature in the various stages of our projects: public debate, preliminary studies, design, comparison of technical solutions:

- It helps to evaluate losses in the services provided by the ecosystem, caused by the various planning options, providing a new criterion for choosing between these options and improving the assessment framework of the Avoid Reduce Compensate (ERC) process.
- It includes the loss of biodiversity and ecosystem services into the socio-economic assessment of projects to inform the choices of policy makers in planning projects.

Example of a linear infrastructure studied in France in 2013

- Situation before the project
  The establishment of a list of services provided by nature: over a study area measuring 110 km long and almost 2 km wide related to an infrastructure project studied in France, fifteen services were identified and assessed (mostly regulation services).

- Impact of the project
  Calculation of the loss of services due to the project: the loss of services calculated for the road variants studied was very informative and helped distinguish between them on this topic. In addition, integrating the loss of services into project costs significantly alters the socio-economic balance (a 20% reduction of the discounted profit).
A Foresight Initiative
Designing and Experimenting Today
For Tomorrow

To tailor its services to the challenges of protecting resources and biodiversity, Egis is focusing on innovation. Numerous research projects are underway, conducted alone or in partnerships, to develop practices and technologies for the future. While ensuring it makes the most of the place’s characteristics and natural strengths, we look for solutions to optimise the use of what exists and develop renewable resources, while protecting them.

Eco-design: new proactive materials for marine biodiversity

For coastal developments implementing concrete infrastructures such as port facilities and offshore rigs, we are looking for concrete mixtures that will enable these facilities to be environmentally proactive, in addition to the structural adaptation of constructions, whether direct or through installations. The potential is promising:

> Improving the potential for colonisation by marine organisms (fish, algae, microfauna, etc.).
> Improving the effectiveness of artificial reefs.
> Increasing the ecological potential of maritime infrastructure.

Still ongoing, this research on materials is at the heart of Egis’s “green engineering”. They are essential for innovation in this sector and target technical, economic, sociological and ecological benefits.

Sustainable Cities
For the Future of Cities
Let’s Focus on a Better Way of Living

What’s New?

In 2030, two billion people will live in slums and 60% of the world population will be concentrated in urban areas.*

Demographics are changing. This raises a crucial question: how can we adapt and develop new territories? By imagining and renewing cities in a new way, with creativity, consistency and pragmatism. That is why housing, facilities, infrastructure, and transport must be rethought together in an innovative way. With one main aim: putting people and quality of life at the heart of each project.

The wider variety of people needed to meet the challenges of sustainable cities requires a renewal of expertise for more transversal work. The city that we see as “inhabited and shared” must therefore be devised collectively with more consultation and partnership.

Egis has been designing cities for over fifty years, and its expertise is now widely recognised, whether for the creation of new towns, tourist resorts or urban rehabilitation projects. Internationally, the group has had some great successes in the past two years, like the new city of El Menéa in Algeria, and more recently Nouadhibou in Mauritania, and Taif and Badr in Saudi Arabia.

To rise to these enormous challenges, Egis has created a business line called “My city by Egis” which upholds the strong values that drive its vision of the city. A vision that puts citizens at the heart of the process.

Our Experts’ Opinion

Jean-Michel Ristori
Co-Director of the “My City by Egis” Business Line

“Our ambition is not to design a generic city, but to create public spaces where everyone can find the quality of life they want. We don’t develop predefined models of cities, we have to contextualise our plans to create a project that can take into account real needs, access to services, solutions to precarious housing, development of the economy and local employment, all while contributing to a truly inclusive city. To do this, innovation, listening, sharing and long-term commitment are key.”

Krishna Nistala
Co-Director of the “My City by Egis” Business Line

“Egis is a major player in French sustainable cities with Vivapolis. We are actively engaged in the export of French engineering expertise and the design of sustainable cities, we are delighted with the creation of Vivapolis, a French brand for sustainable cities abroad. This brand will allow our group and its private and public partners to join forces in a very competitive international market. Just recently, alongside Eiffage (agent) and GDF SUEZ, we won a call for bids issued by the French Ministry of Foreign Trade and the DGT (Directorate General of the Treasury) for the creation of Astainable© a “3D sustainable city simulator” for the city of Astana, capital of Kazakhstan.”

Cities are diverse in their history, and their economic, cultural geographical, topographical, climatic and social conditions. Ideas and actions for the future of a city are therefore specific to it. The design of all components that make up a city: urban planning, energy, transport, landscape and the water cycle must be handled interdependently. With major objectives: housing for all, comfort and environmental performance and all this from the outset.

The new city of Taif developing the design of an entire city in three months, across seven project platforms throughout France and India while offering solutions for optimising SD: a challenge for Egis’s expertise, which must adapt to the local culture and produce a project that the company can be proud of.

The city of Taif is located 80 km from Jeddah and 65 km from Mecca in Saudi Arabia. Across 1200 hectares (about two Parisian arrondissements) in the desert, a new city is set to emerge just 20 km from the historic city. With the focus on mass housing construction (60,000 new inhabitants are expected in time) and strong cultural specificities, Egis has managed to gradually integrate solutions to reduce the negative impact of the project while respecting the local culture.

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By placing people at the heart of projects and limiting the destruction of natural habitats

The eco-rehabilitation of suburban residential areas and business districts involves making these areas into eco-neighbourhoods, linking the improvement of thermal performance (and efficiency in overall use) and densification, in a participatory urban planning project that reconciles private (financial valuation of land, appreciation of the built heritage) and public (high quality urban project) interests.

Egis has created a very innovative approach that helps make aging suburban neighbourhoods (mainly built in the 50s-80s in the outskirts of cities) into eco-neighbourhoods:

> Improving the energy efficiency and performance (in response to the aging population) of homes.
> Densification of neighbourhoods (valuation of usable land).
> Restructuring of the road network (development of public transport and active modes, opening up the road network to the city).
> Improving public spaces.
> Mix of housing, social and generational diversity.
> Participatory management.
> Innovative solutions to water, energy and waste problems.
Pilot projects

This approach is now being trialled in the town of Angers for a residential area of 90 households in Bouchemaine (French town in southwest of Angers), in partnership with the French Urban Planning Agency and with the financial support of the Caisse des Dépôts. It is reproducible in France and abroad, and also in other sectors:

- Business districts in decline, whose transformation is possible using a comparable process (initiatives underway in Poitiers-Portes du Futur, and Plaisir - 21 des Gatinets).
- Aging co-owned housing for which insulation and upgrading could be financed at least in part by building on rooftops.

This solution was awarded a prize at the Innovation and Sustainable Development Trophies organised by the Caisse des Dépôts. The jury particularly appreciated the systemic approach of the initiative, which touches all aspects of urban design and goes well beyond the simple renovation of buildings: societal dimension (recreating links in the neighbourhood), environmental (rethinking structures and mobility) and economic (creating value for both public and private actors).

A FORESIGHT INITIATIVE DEVELOPING OUR MODELS TO BETTER DESIGN THE CITY OF TOMORROW

Egis’s contribution to the Caisse des Dépôts’s Ville 2030 foresight discussions: a common understanding of the challenges of the future and a shared analytical framework to question the activities of the Caisse des Dépôts Group (CDC)

Initiated by the CDC in 2012, a foresight initiative was launched to foster potential strategic inflections and to adapt and develop the CDC group’s business activities. The purpose was to analyse the robustness of our design and production methods for contemporary French cities and to test the adaptability of spatial organisation options, regardless of the scale (building, block, neighbourhood, city, country...).

Four scenarios were analysed and discussed:

- The competition scenario: unequal cities, in competition, with limited resources and unsustainable environmental impact.
- The local scenario: green and inclusive cities, undergoing ecological transition, with the support of the people and led by local initiatives.
- The scenario of decline: cities in crisis, unliveable and unaffordable, that fold in on themselves.
- The scenario of alliance: balanced cities, planned by public authorities, relaunching green growth.

Think Global is a European Economic Interest Grouping (EEIG) bringing together several actors from the technology and urban planning sectors. It offers solutions based on the Network of “Things” to meet four growing urban challenges: mobility, environmental monitoring, street lighting and waste collection.

Egis, partner of Think Global, a network of “Things” for urban spaces
CONTINUOUS PROGRESS

ECO RESPONSIBILITY

A FUNDAMENTAL APPROACH

A key player in sustainable planning, Egis states in its values and in its Sustainable Development Charter its commitment to environmental management. This commitment translates in practical terms into several recurring actions:

> The development of the environmental performance of our activities: 45% are ISO 14001 certified. We are continuously developing tools to support environmental design and performance, and maintain many environmental qualifications (studies and works).

> The gradual consolidation of our teams on shared, interconnected and more efficient production sites: we thus brought together teams in Clermont-Ferrand and Dijon in 2013, and prepared the design of our new headquarters, « START », in Guyancourt (near Paris), which now accommodates about 900 people. While the average consumption of our French offices is around 180 kWh/m²*, we hope to make significant progress with the new START headquarters, in line with HQE, BREEAM and BBC standards.

> Environmental reporting of our production systems: since 2011, we have made progress in monitoring the environmental impacts of our operations in France, using a set of buildings that covers half of our surface area. A diagnosis of good sustainable practices was conducted across twenty sites. Our no. 1 source of greenhouse gas emissions is transportation. The gradual harmonisation of management measures has already enabled us to analyse 70 million kilometres per year for travel.

> Training in eco-driving. In its motorway operations subsidiaries, Egis has been training managers in eco-driving for several years now. Once trained, the managers then organise training for their staff. The benefits of these training courses are well established in terms of:
  - fuel economy, maintenance costs;
  - reduction of CO₂ emissions, heavy metals;
  - improvement in road safety, fewer accidents.

In 2013, nearly twenty managers completed the trainer training, in Croatia, Poland and Portugal. In Portugal, managers have trained nearly forty employees. The results are of particular interest: fuel savings of up to 27% with an average of 14.5% for an almost equivalent journey time.

* the average annual final energy consumption of commercial buildings in France is 250 kWh/m²/year - source ADEME Dec. 2011
“TRACING OUR FOOTPRINT”, VISUALISING OUR EFFORTS

“Empreinte à la trace” (tracing our footprint) is an online platform, firstly for visualising the environmental footprint of our main sites and secondly for sharing and promoting good environmental practices. This playful interface allows each employee to understand and anticipate the environmental impact of the site where they work.

The goal: to raise awareness of environmental performance

In its activities, Egis provides support to those working on buildings (existing or new) - owners, users and operators, to optimise the environmental performance of buildings, particularly thanks to the certification process for operations and design (HQE, BREEAM, etc.). In this respect, getting users involved and questioning their practices is a key means of improvement that is both inexpensive and durable. The development of a tool for visualising environmental performance meets the need to inform and alert the user about their impact. Employees can better understand the potential of their site and their role in reducing their impacts. By also providing a set of tools for measuring and monitoring performance and investments, we are offering a wide range of solutions, presented on the website www.larenovation.fr.

THE BENEFITS OF “GREEN-IT “

To support our development worldwide, the performance of our IT infrastructure needs to be improved. The design of our new headquarters in 2013 was an opportunity to speed up the development of our equipment. Actions were implemented on three levels:

> Our IT resources use virtual servers, which divide by five the number of machines required.
> Documents are now printed with a badge, which avoids orphaned pages.
> Communication resources are being gradually unified worldwide through Exchange and Lync, which aims in particular to reduce travel requirements by 10% as well as the need for low current wiring in buildings (several hundred kilometres saved).

Find a wide range of solutions on www.larenovation.fr

ETHICS

A RENEWED POLICY OF ZERO TOLERANCE WITH REGARD TO CORRUPTION

Upholding our values in our business practices is a constant concern that applies to the here and now. More than a concept, ethics is a compass that guides our behaviour, and must find its concrete application in the practices at the heart of our business.
AN INTEGRITY PROGRAMME

2013 saw the implementation of a coherent set of actions that marks new areas of progress in our ethics policy. With regard to the six components that make up the Egis integrity programme, achievements in 2013 included:

- The commitment of top management, with a renewed policy of zero tolerance when it comes to corruption, and the cruising speed achieved by the Ethics organisation in the running of its three bodies (Ethics Committee, Steering Committee and Ethics Correspondents Network).
- The development of our ethical policies and procedures, with the initiation of a Code of Integrity that will specify the group’s rules on the topic, and the strengthening and more systematic implementation of fundamental procedures for checking the compliance of our partners (customers, agents, subcontractors, etc.), almost 300 partners have been the subject of due diligence procedures in 2013.
- And to close the cycle, the implementation of internal measurement and monitoring tools for ethics, aiming to verify the effective implementation of procedures in projects, and the development of operational and performance indicators used to measure progress.

These actions have contributed to disseminating and developing a culture of integrity within the group, and to significantly improving the performance of our Ethics approach. However, important measures still need to be taken, such as the publication of our Code of Integrity, the writing of new rules on specific subjects such as gifts and hospitality, the development of the Ethics section of our intranet, and the continued training of employees in our international subsidiaries.

Olivier Bertram
EGIS Projects Lawyer

"Egis’s commitment to ethics is a gateway to the future. The ethical behaviour of the company and its control through compliance have become the conditions for its sustainability and success in the markets."

Egis’s main ethics actions in 2013

- Top Level Commitment
  - Renewed Zero Tolerance requirement
  - Launch of the Ethics Committee
  - Smooth operation of the Ethics organisation
- Risk Assessment
  - Continued analysis of corruption risks by subsidiary
- Policies & Procedures
  - Initialising a Code of Integrity
  - Strengthening procedures
  - Sales agents and KYC (Know Your Customer)
  - Establishing the Ethics control procedure
- Due Diligence
  - Systematic implementation of procedures for sales agents and partners/private customers (282 in 2013)
  - Commissioning of a KYC (Know Your Customer) database
- Com. & Training
  - Launch of training courses (120 employees in 2013)
  - Communications (News / Internal Newsletters - Ethics Presentation)
  - Creation of an Ethics logo
- Monitoring & Review
  - Audits including an Ethics component
  - Ethics Operational Controls
  - Performance Indicators and annual report

SOCIAL POLICY AND H&S IN THE WORKPLACE
DOING EVERYTHING WE CAN TO MAKE OUR BUSINESS A SOURCE OF VITALITY

Our markets are changing, we are moving towards new countries and in new areas

Recent orders at Egis have been marked by a growing proportion of complex “assembled” projects assigned to the group, and their location outside of the French market, in high growth markets in Qatar, Saudi Arabia, India and Brazil. The Taif project alone mobilised 80 Egis employees for over seven months, including 60 employees on a special platform in Lyon.

Wherever possible, career paths need to be in line with these new operational requirements. This condition will ensure they are dynamic and secure.

* H&S: Health & Safety in the workplace
A “New employment pact” has been created, which specifies:

- A more proactive role of management with regard to employees, especially in situations where changing skills requirements are most evident.
- Employees’ commitment to careers that may include geographical or professional mobility, including the constraints and opportunities this represents. These career paths require increased personal support (individual career assistance, training).
- The commitment by group management and its subsidiaries to develop information on internal employment opportunities, which, in a larger group, are not always sufficiently well known. Examples of internal careers are now widely available (intranet, and now job fairs by major site).
- The involvement of social partners: on 12 December 2013, all the Group’s trade unions signed an employment agreement which aims to develop strategic workforce planning, and establish the broad guidelines as defined earlier, showing special attention paid to career support.

This new initiative has already seen results in figures:

- More than 400 French Egis employees (nearly one in ten), in all types of employment, have changed positions during the year,
- A growing presence of French Egis employees abroad, with more than 200 expatriate employees on assignments of longer than six months in 2013, 30 people on International Corporate Volunteer programmes (VIE), and more then 700 French Egis employees on short-term assignments abroad.

SOLUTIONS FOR ESTABLISHING WELL-BEING AT WORK

To move with the times, a telecommuting agreement has been established

The Egis Group signed an agreement with trade unions last December. The development of remote communication tools has created new ways of organising work.

By gradually equipping the whole group with the LYNC telecommunications system, Egis has chosen, along with its employees, to facilitate telecommuting. There are many benefits to all parties: flexibility and responsiveness for better customer service, better work-life balance for employees.

To manage the system, and maintain the cohesion and effectiveness of teams, the agreement specifies the types of teleworking, the compatible positions and activities, and the organisation based on the twofold principle of voluntary action and reversibility, both at the initiative of the employee and the employer.

Objectives: reconciling personal and professional life and, at the same time:

- reducing travel, reducing fatigue,
- reducing the risk of accidents,
- reducing costs, reducing absenteeism.

LYNC, a real-time communications platform for optimal comfort and flexibility in work organisation

With the adoption of LYNC, Egis has chosen to offer its employees a unique communications platform, to simplify tasks, enhance collaboration, improve responsiveness in discussions, and enable remote working. Using this platform, employees can call, email or chat online, organise a conference call or a video call, and share documents. And to top it off they can view the availability of their contacts using the real-time availability indicator, and choose the best way to contact the person they need. By the end of 2014, all Egis offices in France will be equipped, as well as five international sites.
Commitment to older workers

Egis is committed to recruiting at least 10% of older workers on average over the next three years.

Commitment to young people

Egis has committed to a recruitment ratio of at least 45% of permanent employees aged under 30 in the total number of hires made during the term of the agreement.

To encourage involvement at all levels of the company, awareness campaigns on disability

To empower all employees, a major campaign for awareness and recognition of disability was organised in 2013.

During the week-long event dedicated to the employment of people with disabilities, a series of videos were aired, and a personalised handbook was distributed to all employees to make sure the messages are applied in our daily work.

Video clips to raise awareness throughout the year:

- What is disability, what are the differences between a disabled person and a disabled worker?
- What are disabling diseases?
- What is the point of declaring your disability?
- How to get your disability recognised?

The use of the protected sector, for well-identified services (catering, printing, maintenance, etc.).

In 2013, the amount spent on purchases from disability-friendly companies was over €160 k.

A partnership with the “snowboard and disability” organisation was established to allow Sylvain Bréchet (Egis employee), a disabled snowboarder, to participate in March 2014 in the Coupe de France for snowboarding in Auron in the Southern Alps. Sylvain won 3rd place; he was the top French competitor.

To improve quality of life at work, action has been taken on psychosocial risks

Because professional activity should be a source of personal fulfilment for each employee, without any fear of negative effects on health or work-life balance, Egis is working with social partners on writing a “well-being at work” charter. It will provide a definition of psychosocial risks, specify the role of each individual when faced with these phenomena, and indicate the commitments and actions of management.

An agreement on generation contracts, so that everyone has their place, at any age, to ensure the long-term integration of young people in employment, through access to permanent contracts, as well as increased hiring, the continued employment of older workers, and the transmission of knowledge and skills, Egis signed an agreement on “generation contracts” in September 2013. As part of the law of 1st March 2013, this agreement was signed for a period of three years. It targets young people under 30, and older employees aged over 50 for recruitment and over 55 for continued employment.

Recognising that the successful integration of newcomers depends largely on the quality of the welcome and support they are given, Egis has organised a special support and monitoring initiative.

The use of the protected sector, for well-identified services (catering, printing, maintenance, etc.).

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HEALTH AND SAFETY: AN APPROACH IN LINE WITH OUR VALUES AND COMMITMENTS

An essential component of any CSR approach, the health and safety policy at Egis has been part of the group SD charter since 2012 and is one of our key commitments. Our customers are also increasingly demanding on these topics and several group subsidiaries already have structured and certified policies on this matter (OHSAS, MASE).

In 2013, an initial review of the challenges and practices was carried out. Following this analysis, General Management wanted to reinforce the management of these actions at Group level, by appointing a Corporate Health and Safety Coordinator in June 2014.

The aim is to create and sustain a H&S culture in the Egis group, which will be of real value for our employees, customers and partners.

Best practices

In 2013, within an OHSAS 18001 certified company, “chats” (a term specifically chosen for these very informal meetings) were established. Staff of a geographical site meet over coffee or a meal to discuss an event, a good practice or an incident. Freedom of expression is the rule, as well as listening and sharing. The idea is to discuss a topic together, outside of the management hierarchy, and come up with shared ideas to move forward. The topics are put forward by staff, in response to an event or suggestion by the health and safety officer. Generally, two or three subjects are discussed per “chat”. A brief report is then prepared, with suggestions for corrective or preventive actions to be integrated into the QSE system. Then the circle is complete. Among other subjects, in 2013, staff discussed:

- The feedback on a traffic accident.
- Alcohol and Drugs in the Workplace (Prevention Plan).
- The organisation of project management.
- Bids...

These meetings work well and the formula is already highly acclaimed by the Human resources division which wants to draw inspiration from this for their own needs.

As SD manager I wanted CSR to be fully integrated into our QSE (Quality Safety Environment) system: so it is part of our daily work and not just a “sublayer” or “overlay” in our management system. To inform, share and comment on sensitive topics such as health and safety, these “chats” are ideal. Modern means of communication such as email and web conferences have their limitations. Employees today feel a strong need to meet, to talk freely and contribute to good work in their company.

CATHERINE JATTEAU
EGIS WASTE MANAGEMENT DIRECTOR

2013 benchmarks

25 % of Egis activities are OHSAS or MASE certified (up 5 % compared to 2012).
Compliance with the Global Compact

Egis’s first COP (Communication on progress) was published in November 2012 for 2011 data. For each principle, it explains the policy implemented, the objectives and the associated indicators.

The second COP published in 2013 for the 2012 data has been integrated into the CSR report. The table of compliance below invites the reader to:

- read the COPs for 2011 and 2012 to find certain parts of the policy and associated achievements,
- discover the new measures implemented in 2013 and described in this report.

### Human Rights

**Principle of the Global Compact**
- Support and respect the protection of internationally proclaimed human rights.
- Make sure that their companies are not complicit in human rights abuses.

**Sources**
- Procedure see COP 2011 & page 5
- Renewal of membership to the GC see COP 2012
- Publication of an SD charter see COP 2012
- Support actions see COP 2012 & pages 20-24
- Procedure see COP 2011 & page 18
- Ethics see COP 2011-2012 & pages 55-57
- Risques see COP 2012
- Labour relations and working conditions see COP 2012 & pages 59-60
- Health and Safety see COP 2012 & page 62

### Labour

**Principle of the Global Compact**
- Uphold the freedom of association and recognize the right to collective bargaining.
- Eliminate all forms of forced and compulsory labour.
- Abolish child labour.
- Eliminate discrimination in respect of employment and occupation.

**Sources**
- Procedure see COP 2011
- Labour relations and working conditions see COP 2012 & pages 59-60
- Procedure see COP 2011
- Procedure see COP 2011
- Procedure see COP 2011
- Equality, diversity and social diversity see COP 2012 & pages 60-61

### Environment

**Principle of the Global Compact**
- Support a precautionary approach to environmental challenges.
- Undertake initiatives to promote greater environmental responsibility.
- Encourage the development and diffusion of environmentally friendly technologies.

**Sources**
- Procedure see COP 2011-2012 & pages 17, 42-46, 53-54
- Procedure see COP 2011 & pages 42-46, 53-54
- Procedure see COP 2011-2012 & pages 42-46, 53-54
- Procedure see COP 2011-2012 & pages 17, 42-46, 53-54
- Procedure see COP 2012 & pages 42-46, 53-54
- Procedure see COP 2012
- Procedure see COP 2012 & pages 22-23
- Procedure see COP 2012 & pages 22-24
- Procedure see COP 2012 & pages 53-54
- Procedure see COP 2012 & pages 74-75
- Procedure see COP 2011 & page 59
- Procedure see COP 2012 & page 46
- Procedure see COP 2012

### Fight Against Corruption

**Principle of the Global Compact**
- Work against corruption in all its forms, including extortion and bribery.

**Sources**
- Procedure COP 2011 & pages 55-57
- Procedure COP 2011-2012 & pages 55-57
Egis has embarked on a proactive approach to extra-financial reporting. This approach is changing every year, as our business activities and our operations develop. The tables in this document bring together the main consolidated points. They are organised into challenges (4), broken down in goals (14), illustrated by indicators (over 30) and achievements. It is a way of ensuring we keep to our commitments, by encouraging questions and suggestions from our stakeholders.

**HOW TO READ THE TABLE OF INDICATORS**

Each goal is followed by 1-10 qualitative or quantitative indicators. The reference column indicates whether there is a match with a possible indicator in the Global Reporting Initiative (GRI).

On the right of the table, the reader will find a selection of achievements from the past year and the objectives for the following year.

**HOW WERE THE QUANTIFIED INDICATORS ESTABLISHED?**

Environmental indicators are measured across a section of the scope, then a calculation is used to generalise them. Other indicators are comprehensive in their scope. All indicators are auditable, and documented in our management system.
### OUR ECONOMIC AND GOVERNANCE CHALLENGES

#### OUR GOALS | OUR INDICATORS | SCOPE | REF. | 2012 | 2013 | ACHIEVEMENTS 2013 | OBJECTIVES 2014
--- | --- | --- | --- | --- | --- | --- | ---
Being a committed player in sustainable engineering | Commitments | Qualitative | Group | Internal | Qualitative | Qualitative | • New commitments: the signing of responsible purchasing charters provided by our key accounts customers (FNR, ARRIVA, etc.).
• Monitoring of previous commitments: publication of the first CSR report, which also provides information on our progress as part of the Global Compact.
• Reviewing our 2011-2012 CSR roadmap.
• Gradual integration of CSR criteria into the Group’s performance management system.
| Innovation | Influence of R&D investments eligible for research tax credit (CIR) | Group | Internal | €14 m | €13.2 m | • Launch of a new, more market-oriented R&D innovation process.
• Engineering Grand Prix for the Jacobs Chaban-Delmas urban drudgery.
• Two Caisse des Depots “innovation and sustainable development” trophies (biennale engineering network used to stabilize soil remediation and the eco-rehabilitation of residential areas and special planning zones (ZAC)).
• Monitoring of European work on defining the framework for R&D in the field of transport infrastructure.
• Finalisation of the NREL’s urban resilience research project, contributions to Europe’s green taxes (thinking about cities, architecture and landscapes from an energy standpoint).
• Active participation in GISC Lab., the proposed concept of a "mobility crossroads" to promote soft and inter-modal transport in medium-sized transportation hubs.
| Strengthening relationships with stakeholders in areas where Egis operates | External partnerships | Qualitative | Group | Internal | Qualitative | Qualitative | • Continued support for the forum for CSR pioneers in Africa (Ihada).
• Contribution to the study led by TDM-Transport - Development - Intermodality - Environment for the environmental assessment of transport infrastructures projects.
• Contribution to the "campus of the future" study in collaboration with Sodeco" of Orleans and the CDC.
• Involvement in many business hubs and clusters, such as Advancement, Lyon Urban Trucks and buses, RhôneAlpes Valley. This last cluster selected our proposal for demonstrative dynamic ways of sharing of urban spaces and soft-modes of transport in Brestaise.
• Numerous technical partnerships organised by our business lines. In 2013, a new partnership with teams involving microplastics.
| Dialogue with stakeholders | Qualitative | Group | Internal | Qualitative | Qualitative | • The continuation of our sustainable development steering committee, which is still going strong after 4 years of existence.
• Active participation in establishing the droppale brand (sustainable cities, the French way).
• The joint development of three contributions to the national debate on energy transition via:
  • The Egis SD steering committee.
  • Our professional union Syntec Ingénierie.
  • The CDC (per association of sustainable development managers).
• Contribution to drafting the Guide to implementing a CSR strategy in engineering companies via the CSR club at Syntec Ingénierie.
• Membership of the France Sustainable Development Club.
• Participation in the Comité 21 planning committee: discussions on how CSR policies can contribute to the competitiveness of regions.
• Membership of the Think Global collective (meat services).
| Solidarity and corporate partnerships | Qualitative | Group | Internal | Qualitative | Qualitative | Some symbolic examples of our support:
• For art:
  • Fondation Yves-Y, Musée des Arts in Reims;
  • Biennale de Lyon;
• For culture:
  • A scholarship for the 31st international workshop for urban project management in Cergy Pontoise;
  • Support for the Master’s degree in emergency buildings and infrastructural reconstruction at the ESTP;
• For education and CSR actions carried out by our corporate foundation:
  • The 3rd international workshop for urban project management in Cergy Pontoise;
  • Support for the Master’s degree in emergency buildings and infrastructural reconstruction at the ESTP;
• For education and CSR actions carried out by our corporate foundation:
  • The 3rd international workshop for urban project management in Cergy Pontoise;
  • Support for the Master’s degree in emergency buildings and infrastructural reconstruction at the ESTP;
• For partnership:
  • The Egis SD steering committee;
  • Our professional union Syntec Ingénierie;
  • The CDC (per association of sustainable development managers).
  • Contribution to drafting the Guide to implementing a CSR strategy in engineering companies via the CSR club at Syntec Ingénierie.
  • Membership of the France Sustainable Development Club.
  • Participation in the Comité 21 planning committee: discussions on how CSR policies can contribute to the competitiveness of regions.
  • Membership of the Think Global collective (meat services).
| Placing our employees at the heart of corporate governance to participate more strongly in its long-term performance | Opening up of capital to employees | Composition of the 25% share held by employees | France Executive partners and external funds open to all employees | Partners: 73% (420 people) Mutual fund (FPEE): 13% (approx. 2550 people) CDC and Invesco lock: 14% | Partners: 77% (440 people) Mutual fund (FPEE): 22% (approx. 3750 people) Treasury stock: 1% | • Very good results following the re-opening of the FCPE: nearly 90% of employees have invested in the fund.
• Discussions coordinated by the Partner Circles.
System to be maintained.
| Strengthening internal due diligence, particularly in view of our ambitions for international growth | BUSINESS ETHICS | Total number of people trained in the promotion of corruption, criminal or illicit activities prevention | Group | S03 | 95 managers trained in late 2012 | 224 managers trained in late 2013 | • The Ethics strategy is being rolled out in line with a multi-year plan:
  • Exposure of the network of Ethics correspondents (55 subsidiaries represented, which is 3 subsidiaries more for 2013);
  • Introduction and implementation of new tools in 2013 of an ethics committee, Egis’s highest decision-making body in terms of business ethics,
  • A new ethics training program.
• Strengthening of existing procedures, means of control and implementation: a system of internal audits, monitoring indicators, analysis of ethical risks, a web-based KRCT (Know your Customer database).
| Meeting our customers’ expectations in the best possible way | Monitoring customer satisfaction | Proportion of Egis’s business that has ISO 9001 certification | Group | Internal | 84% | 82% | • Creation of a group business development division
• Deployment of a Key Accounts policy
• The changes to this indicator between 2012 and 2013: accounting for road traffic operations is more accurate by company rather than business line.
• Harmonisation of business procedures at corporate level (Business Core Model).
• Introduction of a customer relations monitoring tool (CRM).
### Contributing to the development of local employment.

<table>
<thead>
<tr>
<th>OUR GOALS</th>
<th>OUR INDICATORS</th>
<th>SCOPE</th>
<th>REF.</th>
<th>2012</th>
<th>2013</th>
<th>ACHIEVEMENTS 2013</th>
<th>OBJECTIVES 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local jobs</td>
<td>Local employment rate</td>
<td>EC7</td>
<td>99% of 2520 people</td>
<td>99% of 2763 people</td>
<td>70%</td>
<td>70%</td>
<td>Opening of several new engineering offices: in Mongolia, Ukraine, Qatar, and more.</td>
</tr>
<tr>
<td>Actions taken in favour of local people and residents</td>
<td>Proportion of executives originating from the region in which they operate</td>
<td>All Egis companies</td>
<td>70%</td>
<td>70%</td>
<td></td>
<td></td>
<td>Launch or development of road operations in Macedonia, Armenia, India and Zambia.</td>
</tr>
</tbody>
</table>

### Working with communities.

<table>
<thead>
<tr>
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<th>2013</th>
<th>ACHIEVEMENTS 2013</th>
<th>OBJECTIVES 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions taken in favour of local people and residents</td>
<td>Qualitative</td>
<td>Group</td>
<td>Internal</td>
<td>Qualitative</td>
<td>Qualitative</td>
<td></td>
<td>Inauguration of a school and teacher’s housing in Dungassi, Equatorial Guinea - funded by Egis - the school will be able to accommodate around 80 students.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Note: Egis has developed consulting contracts specifically dedicated to rural development, thus reinforcing institutional capacity and improving social conditions. In 2013, for example, we contributed to the development of employment clauses in several forestry operations in the Democratic Republic of the Congo, benefiting nearly one million inhabitants.</td>
</tr>
</tbody>
</table>
OUR SOCIAL CHALLENGES

Providing a positive environment and attractive working conditions for our employees

<table>
<thead>
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<th>2013</th>
<th>ACHIEVEMENTS 2013</th>
<th>OBJECTIVES 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs</td>
<td>Total number of permanent staff</td>
<td>France excl. operators</td>
<td>LA 1</td>
<td>4,559 pers.</td>
<td>4,303 pers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seniority (years)</td>
<td>France Permanent staff</td>
<td>Internal</td>
<td>9.20</td>
<td>9.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average age (years)</td>
<td>France Permanent staff</td>
<td>Internal</td>
<td>40 years</td>
<td>41 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Staff turnover (incl. resignations)</td>
<td>France Permanent staff</td>
<td>LA 2</td>
<td>352 people, or 8.02% (resignations 4.2%)</td>
<td>355 people or 7.4% (resignations 3.9%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work organisation</td>
<td>% of part-time employees</td>
<td>France</td>
<td>LA 1</td>
<td>8.36%</td>
<td>8.87%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average part-time</td>
<td>France</td>
<td>Internal</td>
<td>76.5%</td>
<td>77.32%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal mobility</td>
<td>Number of internal transfers</td>
<td>France</td>
<td>LA 1</td>
<td>75 transfers</td>
<td>219 (134 transfers (6 individual transfers))</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Developing the skills of our employees

| Training | Percentage of employees trained | France | Internal | 65% out of a workforce of 2,946 | 50% | (one subsidiary’s training postponed) | | |
| Careers | Number of career internships | France | Internal | Approx. 400 | Approx. 200 | | |

Ensuring the safety and health of our employees, everywhere

| Health and Safety of employees | Qualitative | Group | Internal | Qualitative | Qualitative | | |
|                                |   |   |   |   | 43 | |
| Labour Relations | % of employees covered by a collective agreement | France LA 4 | 100% | 100% | | |
|                                | % of employees covered by a HSEC | Group LA 6 | 84.5% | 94% | | |

Safety Management System

| Number of Egis companies listed as OHSAS or MASE certified | France Internal | 20% | 25% | | |

Developing social dialogue

| Agreements | Number of collective agreements signed for group | Companies linked to the Syntec-Egisset convention and with a share of over 60% | Internal | 8 | 14 | | |
| Respecting and promoting equality, diversity and social diversity

| Disability | Employment rate of persons with disabilities | France LA 13 | 1.63% | 1.80% | | |
| Old workers | Employment of over 55s | France LA 13 | 13.66% | 13.63% | | |
| Gender equality | Proportion of women in governing bodies | Group LA 13 | Egis Board: 4/9 | Egis Codir: 2/9 | Egis Codir: 2/10 | | |
|                                | WIF ratio of gross base salary | France LA 14 | Exclus: 0.80 | Non-exclus: 0.96 | | |

- International mobility has continued to develop: more than 200 expatriates employees for stays of over 6 months, and 700 employees on short-term assignments abroad.
- Organisation of an international event to familiarise employees with practices and outcomes in the Middle East.
- Actions to encourage internal mobility and to facilitate gateways between business activities and/or subsidiaries.
- New “employment pact” signed by all trade unions.
- Signing of an agreement on teleworking.
- Fewer training courses that are longer and more targeted, with the focus on career development.
- Egis Campus: launch of a “Managerial Excellence” course.
- Continuation of safety audits on sites in France.
- Introduction of a Psycho-Social Risks charter for international Egis employees.
- OHSAS certification for 3 companies (International, Environment and Industry).
- Group-wide discussions to strengthen Corporate H&S commitments.
- Appointment of a Group H&S coordinator.
- Three main agreements: Generational contract; Telecommuting; Strategic Workforce Planning.
- Appointment of an agreement on Strategic Workforce Planning.
- New employment pact signed by all trade unions.
- Signing of an agreement on teleworking.
- Renegotiation of the Group profit-sharing agreement and subsidiary agreements.
- Specific actions are being taken to encourage the use of the disability adapted work sector for well-identified services (catering, printing, maintenance, etc.). In 2013, the amount spent on purchases from disability-friendly companies is increased by €170 k.
- Campaign for awareness and recognition of disability: A “handbook” dedicated to disability, and to the “Recognition of the Quality of Disabled Worker” (RQTH) given to all employees; Creation of a “pop-up” and email for the launch of DisabilityWeek (November); Posting of a video series raising awareness and promoting recognition of disability on the intranet.
- Sponsorship of the “snowboard and disability” organisation.
- Signing of the Generation Contract, to improve the employment rate of young people and over-55s and encourage transfer of expertise and skills.
- Two female directors joined the Group Executive Committee in January 2013.
- Organisation of a think-tank on diversity, raising awareness among management executives on this topic during the annual convention.
- Continuation of measures to raise awareness of disability.
- Launch of concrete actions in favour of diversity including mentoring.
## OUR ENVIRONMENTAL CHALLENGES

<table>
<thead>
<tr>
<th>OUR GOALS</th>
<th>OUR INDICATORS</th>
<th>SCOPE</th>
<th>REF.</th>
<th>2012</th>
<th>2013</th>
<th>ACHIEVEMENTS 2013</th>
<th>OBJECTIVES 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house environmental policy</td>
<td>Number of EGIS companies listed an ISO 14001 certified</td>
<td>Group</td>
<td>Internal</td>
<td>51%</td>
<td>46%</td>
<td></td>
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</tr>
<tr>
<td>Sustainable use of resources</td>
<td>Electricity consumption and purchase of heating &amp; cooling</td>
<td>French sites</td>
<td>EN 3</td>
<td>19,911 MWh or 0.577 MWh/m²</td>
<td>19,911 MWh or 0.561 MWh/m²</td>
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<tr>
<td></td>
<td>Consumption of mains water</td>
<td></td>
<td>EN 8</td>
<td>26,436 m³ or 5.9 m³/m²</td>
<td>21,861 m³ or 5.1 m³/m²</td>
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</tr>
<tr>
<td>Pollution and waste management</td>
<td>Paper purchases and the percentages of which are eco friendly</td>
<td>EN 12</td>
<td>142 tonnes incl. 14% of which is green</td>
<td>153 tonnes incl. 30% of which is green</td>
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<td></td>
<td>Production of sorted and recycled non-hazardous waste</td>
<td>excl computer waste</td>
<td>EN 22</td>
<td>400 tonnes incl. 30% material, 35% heat recovery or 0.11 kg/tonne</td>
<td>670 tonnes incl. 35% material, 62% heat recovery or 0.21 kg/tonne</td>
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<tr>
<td>Climate change</td>
<td>Energy - direct and indirect GHS</td>
<td>Linked to fixed sources of combustion and heat transfer fluids</td>
<td>EN 16</td>
<td>Direct: 1,391.1 eq CO₂, indirect: 1,551.1 eq CO₂, or 341 eq CO₂/tonne</td>
<td>Direct: 571 eq CO₂, indirect: 1,641 eq CO₂, or 88 eq CO₂/tonne</td>
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<tr>
<td></td>
<td>Travel - GHS emissions from our main corporate trips</td>
<td>Cans and travel agency review plan, planted partial scope</td>
<td>Internal</td>
<td>11,550 eq CO₂, approx. 4 eq CO₂/tonne</td>
<td>11,927 eq CO₂</td>
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</tr>
</tbody>
</table>

### Our direct annual impact: reducing the environmental impact and CO₂ emissions of our operations (built assets and travel)

- Analysis of the differences between 2012 and 2013 for the indicators opposite:
  - the accounting for in-house operations is more accurate (by company rather than by business line).
  - This particularly impacts the proportion of certified business.
- A tool to visualise our buildings' environmental footprint (water, energy, waste, etc.) has been implemented (“tracking our footprint”). This tool has helped to benchmark the performance of our various buildings.
- Anomalies were identified and corrected on the basis of actual billings. An important correction was made to the 2012 data.
- There is still some uncertainty regarding accounting for shared spaces and services (such as the staff canteen). Differences in water consumption can be explained by disparities in billing (the time taken to retrieve the details of buildings that we do not manage).

- **Significant actions:**
  - Merger or preparation for the merger of staff in Orly, Montpellier and at the headquarters in Guyancourt.
  - The START building (head office) is labelled BBC, and certified HQE / BREEAM. Office relocation has caused a high production of waste.
  - A fair review of the environmental data in our CSR reporting conducted by Price Waterhouse Cooper.
  - Actions to reduce the impact of travel, our main source of GHS emissions: improved monitoring (over nearly 70 million km travelled), audit of the vehicle fleet, testing communication tools for reducing the need to travel.

### Our indirect impact through our customers’ projects: facilitating the expected economic and social benefits for local areas by controlling environmental impacts

- **Solutions with considerable SD benefits**
  - **Qualitative**
    - Group: Internal
    - Quality: Qualitative
    - Creation of new business lines offering an integrated package with regard to key areas of sustainable development:
      - Energy Business Line
      - My City by EGIS Business Line, an international urban package.
    - New developments in the societal field:
      - Social Imprint®, managing the societal performance of an urban development project.
      - Psychosocial approach to landscapes
    - At the crossroads of the economy and the environment:
      - A methodology for incorporating the services provided by ecosystems into project assessments.
    - Publications:
      - **Managing rainwater on project sites:**
      - The energy transition handbook: buildings and cities.
    - Visit www.egis-group.com to see the projects awarded or delivered in 2013 whose sustainable nature was given recognition, such as:
      - The Allianz Riviera Stadium in Nice
      - EGIS has obtained certification from IDRRIM for Variways®, its ecocomparator for road variants;
      - The Jacques Chaban-Delmas urban drawbridge.
      - Continued consolidation of regional sites.
      - Continued feedback on projects to better quantify the gain in terms of SD on all solutions implemented.
      - Development of a CSR maturity model to monitor the implementation of SD practices in our different business activities.

- **Concrete tools to measure and compare**
  - **Qualitative**
    - Engineering: Internal
    - Qualitative: Qualitative
    - Founding partner of the International Sustainability Alliance (ISA), EGIS has supported the development of this global benchmarking initiative since its creation in 2013.
    - A new “vehicles” policy to significantly decrease the level of GHSs certified by our vehicle fleet.
    - New developments in the societal field:
      - Social Imprint®, managing the societal performance of an urban development project.
      - Psychosocial approach to landscapes
    - At the crossroads of the economy and the environment:
      - A methodology for incorporating the services provided by ecosystems into project assessments.
    - Publications:
      - **Managing rainwater on project sites:**
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Egis

Egis is an international group offering engineering, project structuring and operations services. In engineering and consulting its sectors of activity include transport, urban development, building, industry, water, environment and energy. In roads and airports its offer is enlarged to encompass project development, equity investment, turnkey systems delivery, and operation and maintenance services.

With 12,000 employees, including 7,500 in engineering, and a turnover of €881 million in 2013, the group is present in over 100 countries and has around 40 offices in France.

Egis is a 75% / 25% owned subsidiary of the French “Caisse des Dépôts” and “Iosis Partenaires” (“partner” executive and employee shareholding).