Corporate Social Responsibility Report 2010-2011
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Our CSR reporting method

BESIX Group is proud to present its first report on Corporate Social Responsibility (CSR)

Even though the principles of CSR are solidly embedded in our business philosophy and in the way all BESIX Group companies behave in their daily operations, this report aims to gather all the information about the BESIX Group CSR intentions, achievements and overall long-term objectives.

The scope of this report includes BESIX Group S.A./N.V., the Group holding company in Belgium and all direct or indirect subsidiaries worldwide, whether or not controlled by BESIX Group S.A./N.V.

As it is the first CSR report at BESIX Group level, this report does not claim to be complete but has been set up to a large extent in accordance with the guiding principles of the Global Reporting Initiative (GRI). We do realize that information can still be missing and that, in addition, we need to draw specific attention to the reporting on particular CSR subjects in the future.

However, we are convinced that this report is largely comprehensive and detailed enough for the reader to understand how the major aspects of CSR have been integrated into our BESIX Group business model.

As a world player operating in about 17 countries, the Group often needs to consider the specificities and environment of each country to develop and apply CSR.

Therefore, this report will detail, on the one hand, all CSR initiatives that are common to the BESIX Group and, on the other hand, the CSR topics and actions that are specific to any country or BESIX Group company in relation to CSR. For the first CSR Corporate or transversal initiatives, this report will refer to BESIX Group while for the second range of actions and topics, reference will be made to the name of the BESIX Group company concerned (BESIX, Six Construct, …) or the country where BESIX Group or any of its companies is operating.
This means that such specific actions and topics are further regrouped in two geographically based sections of this CSR report, being the Middle East and Europe.

As this first report aims to introduce CSR in the BESIX Group, it will be the challenge of the second edition, expected to be within 2 years, to deliver performance indicators as suggested by the GRI standards, which will allow any stakeholder to monitor progress or areas in which there is room for improvement within each BESIX Group company in the areas that BESIX Group has prioritized and described at the end of this report as belonging to the 2012-2013 framework objectives in CSR and sustainable construction.

Finally, this report completes our BESIX Group yearly Activity Report. We would like to refer to this overview, which can be downloaded from our website (www.besix.com), for more detailed information on business activities, operations and recent achievements of BESIX Group in general and our subsidiaries in particular.

In a nutshell, our CSR reporting method follows the BESIX Group business model and organization and embraces the BESIX Group key drivers.

“Together for success and Building a better world, our BESIX Group constant key messages, have been effectively driving and supporting excellence in construction and sense of belonging for more than one hundred years. This report aims to emphasize the various ways in which CSR and sustainability have been valued and embodied in our projects and operations for years, even when it is not a mandatory requirement of the law or of our clients.”

Frédéric de Schrevel, Secretary General
“This report is a tribute to all our enthusiastic BESIX Group colleagues involved in CSR, sometimes without being aware of it and this is undoubtedly the best guarantee that CSR will enjoy a great future at BESIX Group. It is part of our nature.”

Frédéric de Schrevel,
Secretary General
Attached to this report is the GRI (Global Reporting Initiative, www.globalreporting.org) world reference table in which a link is made to the content and details of this report. By doing so, BESIX Group aims to comply with this world standard that includes:

**GRI general social themes:**
- Diversity, i.e. embedding diversity into the company’s culture, creating a more flexible working environment and increasing the diversity mix of the workforce. (H)
- Equal employment opportunities. (H)
- Health and Safety education, i.e. minimizing risk of accidents through education programmes in order for the employees and subcontractors to act responsibly. (H)
- Community Involvement. (H)
- Training and education of employees. (M)
- Employee retention. (M)
- Participation in local community programmes e.g.: (M)
  1. Donations;
  2. Education programmes;
  3. Building infrastructure for liveable communities; and
  4. Supporting sustainable community development.
- Employee volunteering. (M)
- Skills for the young. (L)

**GRI general environmental themes:**
- Global warming prevention through the reduction of CO₂ emissions. (H)
- Waste minimization, e.g. reduced waste going to landfill. (H)
- Reduced emission of pollutants. (H)
- Water conservation, e.g. reduction in drinking water demand and minimization of wastewater generation. (H)
- Ecosystem conservation. (H)
- Intelligent selection and use of raw materials, e.g. recycling and re-use of material, promotion and selection of materials which have a reduced impact on resource depletion. (H)
- Environmental management promotion throughout the supply chain. (M)
- Use of alternative transport, e.g. utilization of more efficient modes of transport and reduced reliance on motor vehicles. (M)
- Office recycling, e.g. paper, bottles and cans. (L)
- Reduction of office energy use and greenhouse gas emissions generated. (L)
- Promotion of biodiversity.

**GRI social themes particular for Construction:**
- Industry principles for combating bribery and corruption. (L)
- Special asbestos training and health examinations for staff. (L)
- Low cost/low income housing. (L)

**GRI environmental themes particular to Construction:**
- CO₂ emission reduction to be achieved with measures such as:
  1. Restricting the amount of soil taken off project sites;
  2. Reducing transportation distance; and
  3. Introducing driving practices that lower fuel consumption in construction vehicles and heavy machinery.
- Measures to prevent construction waste. (H)
- Adoption of “green” construction material in building design. (H)
- Re-use and recycling of construction and demolition materials. (H)
- Clinker content. Lowering the percentage of clinker cement by replacing it with other substances to reduce the use of natural raw materials. (H)
- Noise levels, e.g. use of non-percussive demolition methods, such as hydraulic crushers and noise barriers. (M)
- Preservation of fauna measures to be taken during construction. (L)
- Reduced and or safe use of dangerous chemical substances. (L)

**GRI general economic themes:**
- Community Economic impact/contribution. (H)
- Low-cost/low income housing. (L)
- Use of local resources. (L)
Message of our CEO and COO

CSR as one of the pillars of the BESIX Group’s growth and innovative construction solutions

In 2009, BESIX Group celebrated its hundredth anniversary. On that occasion, two major initiatives drew the attention of the Group’s stakeholders.

First of all, a book was published, *Building Experience, The Centennial History of BESIX, a Belgian Construction Company*, emphasizing BESIX Group’s sense of innovation and entrepreneurship. Further, a foundation was created under Belgian law, BESIX Foundation, as the Group vehicle for the effective support of social, humanitarian and environmental initiatives in the countries where the Group operates.

The creation of BESIX Foundation was the logical outcome of a sincere sense of responsibility which is not only embedded in the BESIX Group’s business, but is also related to the continuous attention to our impact on the human and social environment in all the countries where we operate. Since its creation, BESIX Foundation has supported more than 66 associations and initiatives.

At the same time, BESIX Group confirmed the core competencies that are at the very heart of its CSR development. *Flexibility, result-orientation, innovation, teamwork and entrepreneurship* are the visible pillars of all our initiatives in the field of CSR. They reflect the management’s conviction that awareness of CSR in general and Sustainable Construction, in particular, can be encouraged, on the one hand, through innovation and a permanent sense of responsibility and, on the other hand, by incentives and consistent action plans throughout the Group.

In 2010, the worldwide *Guidelines for social responsibility* were issued by the ISO organization under the name of ISO 26000. As in the past with ISO 9001 and ISO 14001, BESIX Group took the opportunity to make a step forward in the consolidation and promotion of its CSR initiatives.
In previous annual activity reports, significant CSR initiatives have already been highlighted as undertaken by BESIX Group’s companies. BESIX Group management decided that a “BESIX Group CSR and Sustainable Construction Report” should be published. The management felt that this was a necessary development and, in any case, stakeholders were increasingly requesting this type of information.

Capitalizing on a reputation and references of more than a hundred years and worldwide experience, the conviction of the management is that BESIX Group’s priority and responsibility is always to generate more creative, safe and sustainable construction solutions. For this reason, specific attention is paid in this CSR report to business and project related initiatives of Sustainable Construction.

Such specific actions and initiatives can only be served within the framework of a more extensive CSR philosophy. Therefore, this CSR report also describes our CSR management, our targets and our efforts in all related CSR fields.

In conclusion, this CSR report aims to constitute a real BESIX Group stakeholder engagement as recommended by the ISO 26000 guidelines. All stakeholders, internal and external to the organization, are encouraged to consider this report as an opportunity for dialogue and for suggestions that can contribute to the further sustainable social and responsible growth and development of the entire BESIX Group.
CSR is known as a form of corporate self-regulation integrated into the business model and it aims to embrace the organization’s responsibility for its impact on society and on its various internal and external stakeholders. BESIX Group is committed to designing and integrating its CSR initiatives and action plans into its business organization. The BESIX Group's business model can be summarized as …
Focus on the Construction Sector and the CSR trend

In Europe alone, 26 million workers are employed directly or indirectly in the construction sector (“FIEC” source). This represents about 30% of industrial employment in Europe.

The European construction and infrastructure sector is often perceived as:

- the source of a major part of the B-to-B industrial sectors;
- the high percentage of 30% of worldwide fatal injuries, with more than 100,000 workers dying on site every year;
- the “40%” industry with 40% of all energy & material resources used to build and operate buildings, 40% of CO₂ emissions coming from building construction and use and 40% of total waste resulting from building and demolition activities.

The construction sector is also more and more confronted with an increasing regulatory and normative context coming from various organizations such as the UN, the OCDE or the EU and in various disciplines, including:

- renewable energies & CO₂ emissions;
- sustainable materials management and sustainable public procurement;
- corporate governance;
- human rights and bribery;
- risk management and CSR;
- norms and standards, such as ISO 14001, ISO 14064, MVO Prestatieladder (NL), LEED, BREEAM, HQE, PromisE, ESTIDAMA, ISO 26000, Global Compact, Global Reporting Initiative, European Alliance for CSR and sustainability indexes.

The infrastructure and construction sector is gradually beginning to include the above CSR and sustainability regulations, norms and guidelines in its operation mode.

This trend embeds the six traditional CSR action domains, being environment, human resources, business behaviour, community involvement, human rights and corporate governance.

The CSR trend that the infrastructure and construction sector is considering in recent years is finally reflected in different awareness and maturity levels depending on the countries and their cultural, social and political profiles.
Business units

In order to respond effectively to the various market demands and opportunities, BESIX Group is structured into three main ‘Business Units’.

Contracting

All areas of construction, and the related resources, are grouped under ‘Contracting’, including the civil and marine works, building works, roads and infrastructure, foundations, environmental infrastructures and facility management.

This structure is intended to address activities on a global and a local basis, to maintain growth, to secure high-level operational quality and to promote synergies and competence centres or networks within BESIX Group.

BESIX Group seeks, at the same time, to undertake and complete audacious construction or infrastructure projects relying especially on transversal competencies of its major Group companies BESIX and Six Construct and to act locally for traditional and medium-sized contracts through its affiliated local or regional contractors.
Real Estate Development

In real estate, BESIX Group essentially develops residential projects, offices, supermarkets, shopping malls, hotels, mixed projects and pre-construction sales. BESIX Real Estate Development (BRED), mainly in Belgium, and few other BESIX Group companies in various countries are operating in this business unit.

Concessions & Assets

BESIX Group continues to develop its expertise in the context of public-private partnerships, concessions and assets. Presenting itself as a developer, it offers public authorities projects that include an all-in service, from the design, construction and maintenance of the completed project (building, speedway, tunnel, etc.) to even financing support and investment from a reputed private partner. In doing so, it takes full advantage of the synergies available within BESIX Group.

More detailed information on the recent projects and achievements of our business units can be found in the BESIX Group annual activity report.

Key figures are also included in the BESIX Group annual activity report.

From a CSR prospective, each of the BESIX Group business units considers and assesses its own clients and stakeholders as well as the requirements of its markets to define the impact of its activities on society and stakeholders and further its CSR objectives and action plans.
Our geographical spread
Today, BESIX Group operates in 17 countries on 4 continents and employs more than 18,000 people worldwide. BESIX Group also accounts for more than 60% of Group turnover with international and local suppliers and subcontractors.

It has forged itself an impressive reputation in the international arena, particularly in the European Union, Eastern Europe, North Africa and Central Africa, but also in the Middle East, Central Asia and more recently Australia.

From a CSR point of view, each BESIX Group business unit and even each of the BESIX Group companies needs to evaluate the requirements of all country stakeholders, from the client to the suppliers and subcontractors and, last but not least, to the authorities. The CSR appetite of each BESIX Group company highly depends on the impact of its activity, development and growth on such stakeholders and on the society in which the company operates.

BESIX Group’s geographical spread and specificities, consequently highly influence CSR awareness and actions.

It is nevertheless BESIX Group’s commitment to systematically and significantly strive for higher CSR standards and rules than the ones usually referred to in the country concerned. Such commitment makes it possible to locally align BESIX Group’s main goal of ‘prosperity’ and both high and specific ambitions and responsibilities around ‘people’ and ‘planet’.
CSR roots within BESIX Group

CSR towards our stakeholders

CSR in relation to corporate citizenship

CSR on sites

Future prospects
In the next chapters, this report aims to illustrate the various ways in which BESIX Group is guided by CSR in governance, daily operations and global objectives.

**Vision**

- Constantly develop expertise in engineering structures & high quality buildings.
- Grow as a world player in the construction and associated industries, favouring sustained geographic expansion and diversification while keeping a strong Belgian identity.
- Expand the Group range of skills for real added value services, including alternative forms of contracts generating long-term and recurring income such as PPP (Public-Private Partnership), DBFM (Design, Build, Finance and Maintain) or concessions.
- Improve the management of Health, Safety and Environment.
- Involve BESIX Group in the community where it operates and support corporate social responsibility initiatives, among others through BESIX Foundation.

**Mission**

- Offer clients a total and “tailor-made” service with a sense of entrepreneurship and risk management.
- Use the know-how and creativity of the in-house engineering resources to deliver innovative solutions.
- Offer a consistent and complementary structure compatible with a long-term approach and strategy favouring permanent opening to new opportunities.
- Promote synergies between BESIX Group companies and colleagues under the banner of a common identity and shared values.
Our **values** and **core competencies**

BESIX Group is driven by **five values** in its relations with external stakeholders.

**Excellence**
We are committed to upholding the highest standards of professionalism and performance.

**Innovation**
We constantly seek innovative ways to enhance our performance.

**Safety**
We provide a safe work environment for those who work for and with us.

**Team spirit**
We believe in teamwork and the unlimited possibilities of collaborative energy.

**Challenge**
We continuously increase our expertise through new challenges.

In its internal stakeholders’ relationship, BESIX Group puts at the heart of its CSR initiatives **five Group core competencies** which BESIX Group wishes all staff members and workers to share. New and existing employees alike must develop and implement these competencies in their daily communications, tasks and activities in order to ensure strong and successful performance.

**Flexibility**
Be open-minded, embrace new opportunities, adapt behaviours and approaches when necessary for the best achievements.

**Result orientation**
Focus on determined goals, objectives and results.

**Innovation**
Apply original thinking, initiate, manage and energize change process, generate and enable new and innovative solutions, achieve and surpass results against the relevant internal or external standard of excellence.

**Entrepreneurship**
Be a self-starter, seize profitable business opportunities and see change as a challenge.

**Teamwork**
Maintain the ability and desire to work co-operatively with colleagues from different backgrounds and cultures to achieve shared goals.
Our code of conduct

BESIX Group so far definitively promotes compliance by each BESIX Group company with the specific rules, codes and guidance as made applicable for any project or activity by the client, public or private, and by the local authorities involved with such project or activity in the country or region concerned.

At tendering and upon contract award, the BESIX Group company involved is entering into the relevant commitments and documentation in this respect, in addition to its quality, health & safety and environmental declarations compliant with its various ISO or similar certifications.

Having decided to align its CSR self-regulation with the world standards of ISO 26000 and GRI, BESIX Group decided that, once this CSR report is validated, it would create a solid BESIX Group framework for the development of a sincere CSR policy and in accordance with the six CSR disciplines traditionally referred to, these being human resources, environment, business behaviour, community involvement, human rights and corporate governance.

BESIX Group shall accordingly issue a BESIX Group Code of Conduct. It shall constitute a framework that can then be further developed by each business unit and BESIX Group company with due consideration for the standards and impact analysis applicable to its activity and to the country where it operates.

BESIX Group will further gather a comprehensive set of best practices and ethical guidelines in order to complete the BESIX Group Code of Conduct with due consideration for guidance and standards that already exist due to the initiative of world organizations.

Compliance with the same will be monitored at BESIX Group level and the Code shall be applicable to each BESIX Group company. The company will nevertheless be authorized to justify limited deviations in relation to the specificities of the country or business sector concerned, subject to the condition that the company shall at all times be required to apply higher standards than the ones prevailing in the geographical or business segment concerned.

The issuance of the BESIX Group Code of Conduct is one of BESIX Group CSR framework objectives for 2012-2013.
Our corporate governance

BESIX Group follows the Belgian recommendations on good corporate governance for non-listed companies. BESIX Group has also adopted Group Rules, being governance rules for BESIX Group and BESIX Group companies.

Board of Directors

BESIX Group’s Board of Directors plays an active and regular role, assisted by advisory committees, in supporting the CEO and his management, in the operational and financial control of BESIX Group as well as the BESIX Group companies and in protecting their interests, particularly in the event of a crisis or conflict.

The Board of Directors is composed in such a way that it can ensure balance and independence, with four external directors, including the Chairman. Decisions are taken collegially and the functioning of the Board is regularly reviewed.

Advisory Committees

Advisory committees are set up within BESIX Group’s Board of Directors. These committees prepare information, opinions and recommendations to the Board of Directors:

The Audit Committee focuses on the consolidated annual and interim accounts and on the statutory accounts, in consultation with BESIX Group management and the statutory auditor. It also monitors the internal control systems and the major risks linked to the BESIX Group activities as well as the BESIX Group entities’ governance.

The Remuneration & Appointments Committee monitors and assesses the performance of BESIX Group senior managers as well as the human resources policy of BESIX Group and its deployment in BESIX Group companies.

The Executive & Strategic Committee concentrates on vision, mission and related strategic objectives of BESIX Group and its companies as well as on their implementation and control.

To ensure quality performance, proper reporting and a collegial spirit, BESIX Group management is involved in the implementation of the strategy defined by the Board of Directors and implemented by the CEO. To this end, BESIX Group management is also represented in the Executive & Strategic Committee.
BESIX Group
Board of Directors
and Committees
(situation as per March 30th 2012)

Board of Directors
Baron Jean Stéphenne ¹
Johan Beerlandt ²
Nassef Sawiris
Luc Vandewalle
Baron Philippe Vlerick
Philippe Quoilin
Osama Bishai
Salman Butt
Yves Windelinxc ³

Chairman
Vice-Chairman,
Chief Executive Officer
Vice-Chairman
Director
Director
Director
Director
Director

End of mandates: 2013

Audit Committee
Luc Vandewalle (Chairman)
Baron Philippe Vlerick
Fadi Kiama
Yves Windelinxc ³

Remuneration and Nominations Committee
Baron Jean Stéphenne ¹ (Chairman)
Johan Beerlandt ²
Nassef Sawiris

Executive and Strategy Committee
Johan Beerlandt ² (Chairman)
Nassef Sawiris
Philippe Quoilin ⁴
Paul Mouton ⁵
Jules Janssen ⁶
Philippe Dessoy
Frédéric de Schrevel ⁷
Geert Aelbrecht ⁸

Chief Executive Officer
Vice-Chairman
Chief Operating Officer (Contracting)
Chief Financial Officer
General Manager (Construction)
General Manager – Middle East
Invited member,
Secretary General – General Counsel
Invited member,
Group Human Resources Director
The corporate governance of BESIX Group, as also reflected in the above Group Rules, also requires that any BESIX Group company is managed by a board of directors or a management body that operates with the same responsibilities and scope as the ones prevailing in Belgium for the board of directors of a “société anonyme – naamloze vennootschap”. The same is regularly verified by the BESIX Group companies’ shareholders and all BESIX Group companies are regularly inspected by their statutory auditors.

In case of joint-venture companies with third parties, specific attention is paid before or at incorporation to shareholder agreements determining the operating rules and all relevant arrangements within and around the joint-venture company, preventing any conflict of interest and organizing the means of exit.

All BESIX Group companies are set up with shareholder limited liability, subject to specific BESIX Group governance rules if and when a project should require larger support or guarantees.

1. Permanent representative of Innosté SA
2. Permanent representative of Bevafin SA
3. Permanent representative of Windy SPRL
4. Permanent representative of Philippe Quoilin SPRL
5. Permanent representative of Sheep Management SPRL
6. Permanent representative of CJ Projects SPRL
7. Permanent representative of Arthepa SPRL
8. Permanent representative of Gacco SPRL
CSR reference life cycle and 2010-2011 landmarks

Referring to the usual CSR standards, the diagram consolidates, around the key BESIX Group activities and business (in the central wheel), the various stakeholders (in the blue wheel) of BESIX Group, both internal and external to BESIX Group, and the scope (in the external square blocks) of the CSR objectives and initiatives that are or shall be developed around the triple PPP (prosperity, people, planet) and the six above mentioned CSR disciplines generally monitored in the construction sector.

The life cycle shall be the driving and monitoring tool of all objectives, plans and realizations of the BESIX Group companies in the fields of CSR.

Each BESIX Group company is invited to document its CSR objectives, plans, realizations and indicators with due reference to the BESIX Group life cycle and to the GRI world standard as from 2012.

Future landmarks shall consequently be documented and monitored. As an illustration of the above BESIX Group approach, some of the 2010-2011 landmarks are regrouped on further pages in an anticipation of the various initiatives that will be commented on later in this CSR report.
People

BESIX Foundation turned 2 years old in January 2011.

BESIX Group counts for 167 new employees (30 of these are junior engineers) in 2011.

BESIX Group was nominated for the Belgian Solidaritest Award (which rewards companies for their CSR initiatives and Best Practice Award (which recognizes innovative projects in terms of social solidarity) in May 2011.

BESIX Group launched its first competition for the HSE Chairman Awards in June 2011. This is awarded for innovative solutions in safety, health and environment.

BESIX Foundation’s Solidarity Days involved 260 colleagues to help nonprofit organizations in Belgium and abroad in 2011.

BESIX Foundation ‘Right 2 Learn’ organizes IT courses for workers in Dubai in order to teach them how to use a computer and to offer them an opportunity to exchange e-mails or speak directly to their family back home for free, thus avoiding the cost of expensive phone calls. These courses were launched in September 2011.

With Climbing for Life, the BESIX Group bicycle team (38 participants) reached the peak of the alpine Col du Galibier in France in September 2011 and so helped to raise funds for the treatment of cystic fibrosis and asthma through this sporting achievement.

BESIX Young Community in Qatar sponsored a concert in Doha in December 2011 with part of the money raised by ticket sales going to the “Resto du Coeur”, a well-known charity in Belgium and France.
Planet

The Cleveland Clinic is the first LEED project in the Middle East, and is being executed by Six Construct, in joint venture. The Clinic will be a world-class hospital, complying with LEED (Gold) certification that has been awarded in Abu Dhabi since 2010.

Major certified projects were launched in 2010, such as Carpe Diem – certified HQE (very good) & LEED (Gold), Euralille - certified HQE, a first eco-district in Namur, Aeropolis II – largest passive building in Belgium, …

After ISO 14001 certifications for BESIX, Six Construct and Jacques Delens, Vanhout and Wust were also certified in 2011.

BESIX Nederland received the ‘CO₂ conscious certificate - level 5’ in October 2011 which is the highest level of the CO₂ performance ladder set up by ProRail for its contractors and suppliers.

After Vanhout, BESIX created a sustainable construction competence centre, aiming at centralizing all references and initiatives to be proposed to clients in terms of green innovative solutions, in December 2011.

Prosperity

BESIX received the Best Tall Building Middle East & Africa Award for the Burj Khalifa (Dubai) from the Council on Tall Buildings and Urban Habitat in Chicago in October 2010.

Further to the outcome of the CSR working group, the decision was taken to launch the first CSR report in April 2011.

At the Annual meeting, BESIX Group senior managers met in order to brainstorm about strategy in February 2011 and to consider the CSR business model in detail in March 2012.

EUR 1.8 billion turnover was reached by BESIX Group in 2011.

+20% was booked in the order book 2011 (EUR 3.7 billion).

BESIX Group was active in 3 new countries in 2011, Australia, Azerbaijan and Switzerland, each time with local partners and subcontractors.

More than EUR 350,000 were allocated to projects supported by BESIX Foundation in 2011.

2% reduction of CO₂ production based on the Bilan Carbone® principle, was reached by BESIX in 2011.
Engineering for innovation and construction excellence

BESIX Group does not invest in research and development as such since this is merely applicable in the construction and infrastructure sector.

Only foundations techniques are further developed and maintained in the assets of Franki Foundations and its subsidiaries.

BESIX Group’s largest investment resides in its technical capacities, skills and developments in the areas of engineering and design in construction.

All the technical competencies of BESIX Group employees are centralized in a BESIX Group database maintained by the BESIX Group HR department.

All design & build projects that are tendered by, or awarded to, BESIX Group companies are monitored by the above teams that operate as a business unit to promote efficiency, accountability and ownership.

In line with BESIX Group’s values and competencies, engineering contributed to the CSR achievements of BESIX Group in 2010 and 2011.

The main engineering activities are lodged among the design resources located in BESIX headquarters in Brussels and in Six Construct headquarters in Dubai, both teams working closely with each other and maintaining, among other things, a central technical knowledge management system.
**Design contributing to CSR in 2010 and 2011**

In order to meet the construction project criteria, or when environmental conditions require it, the necessary arrangements or options with regard to sustainability are made early in the design process. With innovative tendering promoting technical alternatives or options, BESIX Group can better profile itself in the fields of CSR. The innovative capacities of BESIX Group lead to improved efficiency, stimulation of product and process innovation, and added value with promotion of sustainability as a consequence.

Engineering is more than design work: it is a process in which cost control, constructability and feasibility, safety considerations and environmental care are involved.

Taking engineering capacities and capabilities into account at the tendering stage can significantly improve the quality, sustainability, environmental friendliness, feasibility and competitiveness of the final offer. They also constantly improve BESIX Group credibility and client confidence.

In 2010 and 2011, the creation of Vanhout and of the BESIX centres of competence in sustainable construction, completed the competencies already build up by BESIX Real Estate Development in the area of project development and investment.

**A major CSR initiative in 2010 and 2011: the Green engineering solutions**

BESIX design department in Brussels can optimize contractors’ bids by minimizing costs or providing alternative construction methods. At the same time, it can offer sustainable solutions.

An example in 2011 is the underground car park at the Gent St-Pieters’ railway station, for which BESIX suggested alternative construction methods, leading to considerable quality improvements in the construction phase and an environmental advantage through CO₂ reductions of about 65%.

Tendering – Design – Execution are the three pillars bringing innovative solutions to sustainable construction. In 2010 and 2011, BESIX faced a growing number of requests for this integrated approach from clients.
A major CSR initiative in 2010 and 2011: the BIM model

Building Information Modelling or BIM is the process of generating and managing project data throughout the project life cycle. It creates methods for sharing information during the entire life of a project and with all parties involved.

BESIX and Six Construct engineering teams are increasingly using BIM models at different stages and for different types of projects. Three-dimensional BIM models are used for commercial, communicative and technical purposes.

BESIX BIM department has been developing since 2010. Research projects are also performed in collaboration with Belgian universities, mainly with respect to BIM utilization in the evaluation and development of more sustainable solutions.
Great attention to Methods & Planning

The Planning and Methods resources complete the BESIX and Six Construct engineering teams.

The synergy between these actors helps to efficiently respond to the needs of all projects as well as the tendering teams.

All BESIX Group building and civil engineering projects, large or small, call upon the services of the in-house planners and methods engineers.

This adds value at various stages of the projects, namely: tendering, site preparation, site progress and resource audit, updating of the schedule during the course of the site works, analysis to recover lost time or speed up the works, preparation of claims for submission to the client.

In addition to the traditional GANTT (bar) chart, the engineers provide additional information in the form of sub-schedules by zone, resource, material, subcontractor, etc., time-chainage charts, graphical 3D presentations, descriptions of assumptions made and means considered, histograms (graphs) of resources and materials.

The methods team studies and advises on phasing and methods of construction, site installations and required equipment as well as formwork selection and design based on long-term experience and draws up the relevant method statements.

A separate cell provides analysis and calculation of permanent and temporary steel structures and devices. This cell works in close collaboration with the geotechnical specialists for the design of specific temporary foundations and retaining structures.

The above specialities are complemented by the continual updating and maintenance of an interactive Technical Knowledge Management database to which all technical office engineers within BESIX and Six Construct have access.

As BESIX Group is convinced of the relevance of planning and methods, a number of training courses are regularly organized to train engineers to use these new techniques.

Moreover, the BESIX Group HR management rules stipulate that engineers should work in the planning and methods centre of competence for a certain time to gain experience of schedule design and to learn how to use the in-house specific planning and calculation softwares.
Our accreditations

All BESIX Group companies have always paid a lot of attention to changes in standards applying to their business sector. **BESIX was one of the first construction companies in Belgium to obtain the ISO 9001 and VCA**\(^*\) **certificates**, which confirm the efficiency and high standards of the organization in terms of quality, health and safety.

By 1994, BESIX had gained its ISO 9001:2000 certification, followed in 1997 by VCA\(^*\) (BTR) certification and, in August 2010, by ISO 14001:2000. BESIX and Entreprises Jacques Delens have an IMS (**Integ**rated Management System) in which all systems in the areas of quality, health & safety and environment are fully certified.


In 2010 and 2011, BESIX Group companies further developed their environmental management during the ISO 14001:2000 certification process.

By so doing, BESIX Group increased its overall capability to better recognize and manage the environmental impact of its activities significantly in 2010 and 2011. Management responsibilities for the environment represented a real springboard for sustainable development and CSR during that period.

In 2011, Franki Foundations launched the ISO 9001:2000 accreditation process that was successful in early 2012.

A number of companies in the BESIX Group obtained a total of 14 accreditations in health, safety, quality and environment in the period 2010-2011.

By 1994, BESIX had gained its ISO 9001:2000 certification, followed in 1997 by VCA\(^*\) (BTR) certification and, in August 2010, by ISO 14001:2000. BESIX and Entreprises Jacques Delens have an IMS (**Integ**rated Management System) in which all systems in the areas of quality, health & safety and environment are fully certified.

In late 2011, Wust and Vanhout obtained their ISO 14001:2000 certification while Cobelba launched the process to obtain the same certification.
<table>
<thead>
<tr>
<th>Accreditation</th>
<th>Department/Company</th>
<th>Year of award</th>
<th>Year of next renewal</th>
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<tr>
<td>VCA** certificate + addendum BTR (works near railways)</td>
<td>Safety / BESIX</td>
<td>1997</td>
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<tr>
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<td>Each year</td>
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<tr>
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<td>2013</td>
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<tr>
<td>ISO 14001:2004</td>
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<td>2010</td>
<td>2013</td>
</tr>
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<td>Tug Boat / Six Construct (Safe vessels operations certification)</td>
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<td>2012</td>
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<td>Department/Company</td>
<td>Year of award</td>
<td>Year of next renewal</td>
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<tr>
<td>--------------------------------------------------</td>
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<td>Carbon Footprint / BESIX the Netherlands</td>
<td>2011</td>
<td>2014</td>
</tr>
<tr>
<td>VCA** 2008/5.1</td>
<td>Safety / Jacques Delens</td>
<td>2010</td>
<td>2013</td>
</tr>
<tr>
<td>VCA** 2004/04</td>
<td>Safety / Cobelba</td>
<td>2008</td>
<td>2012</td>
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<td>VCA** 2008/5.1</td>
<td>Safety / West Construct</td>
<td>2011</td>
<td>2014</td>
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<td>/</td>
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<tr>
<td>Accreditation</td>
<td>Department/Company</td>
<td>Year of award</td>
<td>Year of next renewal</td>
</tr>
<tr>
<td>-------------------------------------</td>
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<td>----------------------</td>
</tr>
<tr>
<td>VCA** 2008/5</td>
<td>Safety / Vanhout</td>
<td>1995</td>
<td>2013</td>
</tr>
<tr>
<td>Milieucharter Provincie Antwerpen</td>
<td>Environment / Vanhout</td>
<td>Since 2010</td>
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<td>2014</td>
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<tr>
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<td>2005</td>
<td>2014</td>
</tr>
<tr>
<td>SMAS (Safety Management Advisory Services certificate)</td>
<td>Safety / Franki Grondtechnieken</td>
<td></td>
<td>2013</td>
</tr>
</tbody>
</table>
From the academic year 2005-2006 until now, BESIX Group has awarded a student prize during the ‘Masterproefprijzen’ ceremony. The award winner has to be a student at the KUL (Katholieke Universiteit Leuven) who graduates as a civil engineer or a civil engineer-architect.

The prize is awarded for the best thesis, focusing on aspects such as innovation or improvement of the nature or the quality of materials, at competitive prices, and of a building process including methods of construction.

BESIX Group companies also support students (graduate or not yet) by welcoming them for training. Students from university to post-graduates may seek and get support from our experts and they can be introduced to new innovative techniques within the Group. Some of these students are also recruited by BESIX Group companies.

More specifically in relation to CSR, BESIX Group sponsored one of its young engineer-architects during his post-graduate MBA course at the Vlerick Management School under the sponsorship of Professor Céline Louche, by offering him the additional opportunity to analyze and coordinate a BESIX Group workgroup on CSR in 2010. The thesis that he wrote as a result, allowed him to earn his MBA degree cum laude and contributed to the preparation of this CSR report through workshops attended by representatives of all BESIX Group companies under his coordination.
“The role of an MBA consists in challenging our habitual ways of thinking both through study and through student exchanges. This is a real review of our everyday knowledge. My MBA in CSR allowed me to do a study in human, ecological and economical terms, but especially within a Group such as BESIX. The idea of creating a working group (comprising all activities of the Group) enabled me to start this research and brought about a better exchange of best practices between the Group companies. I am proud to conclude that the results of my MBA contributed to the completion of this first CSR report.”

Geoffroy Ceulemans,
Project Manager, MBA in Corporate Social Responsibility
(Vlerick Management School)
CSR towards our stakeholders
Our general approach

One of the major responsibilities of BESIX Group is to create added value for all of its stakeholders.

However, apart from this, BESIX Group has to assume responsibilities in relation to any individual or stakeholder concerned with its activities, in order to assure sustainable returns in the future.

If BESIX Group considers the personal ambitions and objectives of its staff members, clients, suppliers and all other stakeholders, BESIX Group strongly believes that it can take decisions that duly reflect its responsibilities in an appropriate way.

BESIX Group maintains contact with all of its stakeholder groups via several different information channels, both formal and informal. Shareholder meetings, annual activity reports, corporate website, events, networking, magazines and newsletters are only a few of the Group’s many means of communication.

BESIX Group has only one website consolidating BESIX Group information and, in addition, focusing on each of the BESIX Group companies. A separate website has been created for BESIX Foundation aiming to position the latter independently of the business of BESIX Group.

In 2010-2011, some eight magazine releases were published to report, update and share the above information and focuses with BESIX Group colleagues on a continuing basis. They were distributed internally and personally to more than 4,000 colleagues.

In the same period in each magazine, more than sixty colleagues drawn from throughout BESIX Group directly or indirectly contributed to reporting on BESIX Group performance, awards, successes and major events.

BESIX Group aims to further develop both its internal and external communication, in order to create and stimulate open relationships and solid partnerships with all of its stakeholders.
BESIX Group and the media

Access to information is essential for the society in which BESIX Group is operating. In this context, BESIX Group contacts the press on a regular basis.

BESIX Group organizes at least one press conference each year to inform journalists (mostly from Benelux and France) about its financial results and about its present and future projects. During this event, journalists can meet BESIX Group general management and can interview them directly. It is an opportunity for them to get additional information and for BESIX Group to interact with the press stakeholders.

Press releases are published on the BESIX Group website and sent by e-mail to world press contacts on each occasion. It generally concerns beacon projects awarded to BESIX Group companies or specific landmarks. Contacts with media can also occur when specific events happen worldwide (economic, political, environmental, sociological). Interviews are regularly organized with journalists at their specific request. In this manner, more details about various subjects linked to BESIX Group or the construction sector are given upon the request of media professionals or sometimes of NGO’s (non-governmental organizations).

Eight press releases were circulated in the period 2010-2011 via the website and mailings.

In the same period, BESIX Group faced sensitive situations in Belgium relating to some of the public investments to which it contributed as contractor and to crisis situations in some countries in North Africa. Each time, BESIX Group profiled itself as a responsible organization without political connotation and with an on-going concern for its own agents and those of its local partners. Crisis procedures are included in the quality plans of all BESIX Group companies and of all projects in execution. In addition, a BESIX Group overall crisis communication policy is in place to secure consistency and transparency.
In 2010 and 2011, BESIX Group defined clear targets for all its companies with respect to Health, Safety and Environment (HSE) with an overall focus on:

– protection of individuals by doing everything possible to prevent risks and avoid physical injuries;
– protection of the environment by avoiding possible impacts associated with its activities, by adhering to sustainable development principles and by paying attention to safeguarding natural resources;
– prevention tools, which, prior to any activity, make it possible to identify potential hazards and to develop appropriate preventive measures.

The targets are included in the HSE plans of each of the BESIX Group companies and HSE officers throughout BESIX Group assist them with their knowledge and competences in a responsibility that primarily belongs to the general, operational and site management.

The purpose of the permanent CSR framework objectives of BESIX Group is to monitor and control participation in project tool-box meetings that constitute one of the strongest indicators of awareness and HSE management and performance within the Group.

Behind the HSE statistics there are colleagues to take care of.
The accident frequency rate, a key indicator in 2011

BESIX Group aspires to become a top tier HSE performer in the construction industry. The health and safety of our fellow employees is a major concern. The accident frequency rate for 2011 decreased by 15% compared to the average rate of the three previous years (2008-2010).

In 2010 and 2011, a specific effort was deployed to raise the safety level of BESIX subcontractors in Benelux and France and the contribution of subcontractors has been closely monitored since early 2010.

In the same period, hiring subcontractors in the same countries was subject to their being able to prove that they possessed VCA** certification or a similar HSE management system and small subcontractors have been obliged to comply with the BESIX Group companies’ HSE management system.

BESIX Chairman’s HSE Awards, a première in 2011

HSE is an important topic for BESIX Group. It is the reason why BESIX Group organized its first BESIX Chairman’s Excellence in Health, Safety & Environment (HSE) Performance Award, throughout the Group in 2011.

BESIX Group strives to become a benchmark for performance in the construction industry. The Awards should help to identify innovative and outstanding achievements in the field of HSE within the entire organization. At the same time, it creates the opportunity to spotlight people who are driving forces behind those achievements.

Any staff member who introduces new ideas or achievement(s) concerning HSE has the chance throughout the entire Group, on behalf of all employees, project teams and stakeholders. The 2011 BESIX Chairman’s HSE award was awarded on 11th January 2012 to the MECA system suggested by a BESIX employee. It consists of the development of a lifting accessory to simplify and secure the vertical transport of steel rebar used in trenches and walls. The advantage of this accessory is limiting the risk of falling steel rebar and contributes to the reduction in physical load.

“The idea came to me on the RER site in Uccle. We were trying to achieve the reinforcement of an abutment located near a railway track with catenaries. This operation was risky. The MECA system greatly reduces effort and risk and improves the ergonomics.”

Carlo Meli, Winner of the BESIX Chairman’s HSE Award 2011
Increasing safety through personalized actions on site

HSE training renewed efforts

BESIX Group is developing extended HSE Training programmes in all its companies. Generally, it takes the participants through an ‘Incident and Injury Free’ orientation and is followed by a number of workshops that cover all main HSE hazards in the construction industry, such as working at height, lifting operations, life traffic, confined space entry, working with hazardous substances, fire fighting, as well as other key tools and processes such as incident reporting and investigation, risk assessment and control, Job Safety Analysis and Last Minute Risk Assessment (LMRA).

The training programme is rolled out and aims to become mandatory for the general management, operational line management, technical office managers and engineers and site supervisors. In the course of 2012, additional training modules will be developed with due attention to local specificities.

Contributing to making the whole sector aware of the importance of safety, in this way, is crucial for BESIX Group in the context of its CSR commitment.

HSE poster campaign

A poster campaign is organized throughout BESIX Group each year. In addition, since late 2011, a poster has been distributed quarterly to all offices and projects.

During the poster campaign, a specific toolbox meeting (TBM) is organized to complete the action.

In addition to the poster campaign, other monthly toolbox meetings are organized. Subjects are chosen on the basis of investigations of accidents in the previous year. The most common causes of accidents are order and cleanliness, scaffolding, etc.

HSE welcome procedure

It is essential that each employee knows his/her job-specific rights and obligations especially in the field of safety, environment and associated risks.

In this way, it is important that each employee (employee, worker, temporary, subcontractor) follows a specific HSE welcome programme.

On that occasion, the HSE specialists carry out the welcome procedure as follows, with due consideration for the local specificities and regulations:

- HSE welcome for new employees, including transferred, temporary or consultants
- HSE welcome for newly hired workers
- HSE welcome at the project level (including subcontractors)

Global Safety Time-Out

BESIX Group has organized a safety time-out session on an annual basis (during 2 hours) since 2010 in all departments and project sites in Benelux and France but also abroad in the international companies, including the Middle East.

The aim is to increase awareness, collect opinions and recommendations at all levels of BESIX Group about safety with both in-house staff members and subcontractor’s personnel, get feedback on existing initiatives and suggest new campaigns and procedures for the promotion of safety within BESIX Group.

The results of the session are closely and centrally monitored and duly considered in the BESIX Group companies’ action plans.

During the session, the management starts an open dialogue with the workforce and staff in order to hear about key concerns regarding health and safety and to collect ideas that will further help improvement of BESIX Group’s safety performance.

In 2011, 75% of BESIX Group sites and departments all around the world observed the safety time-out session and sent in a report containing suggestions and recommendations.
Project: Tanger Med II
2011 Morocco

BESIX is building, with its partner Somagec, the 1st project phase in the Tanger Med II harbour in Morocco. It includes the construction of a quay wall for terminal 4 (1,230 m long); the dredging works of the harbour basin (1 million m³) and the reclamation works of the platform for containers (8 million m³). The breakwater is being built by the consortium partners (Bouygues, Bymaro & Saipem). In the optional second phase, terminal 3, a quay of 1,600 m long, an additional 7 million m³ of reclamation and 1 million m³ of dredging will be carried out.

The project team developed a new tool, “Lifting Clamp for quay blocks”, which places the quay wall concrete blocks in their right location under water in a sure and safe way. The advantage is that the risky handling and placing of blocks normally carried out by divers are minimized and block placing time is reduced during the lifting phase.
Electricity demand is constantly growing in Egypt. In this context, the Department of Energy has decided to build an additional 2 x 650 MW power plant at the seaside village of Ain El Sokhna, located on the Red Sea, 50 km south of Suez and 130 km east of Cairo. In July 2010, BESIX, in partnership, was awarded the contract for the marine works part of this project.

The thermal electricity generation plant is equipped with an intake and discharge system for the seawater used to cool the process. This consists of fibreglass pipelines of 3-metre diameter buried on average 5 m below the seabed.

The contract includes dredging, the supply and installation of pipes, backfill and the production of the reinforced concrete structure upstream of the water intake and downstream from the water discharge point.

For the installation of pipes at sea, and with the support of the Marine Department, the team developed the ‘Seahorse’ tool for lifting and positioning the pipes. This was manufactured and tested at Deal company in Italy, then transported by container and reassembled on site.

Once placed on the seabed, the machine is operated from a barge-mounted control cabin. The Seahorse should allow three 12-metre pipe segments to be installed in a single operation. The purpose of this tool is to reduce the number of underwater connections and to reduce diving activities as far as possible.
Excellent safety performance
Contractor of the Month

BESIX-Mourik consortium was named ‘Contractor of the Month’ on the Gate LNG Terminal project in Rotterdam (the Netherlands) for a second time in January 2011. The certificate is given in recognition of excellent safety performance by the consortium and their workers and staff while working on the project.

Flawless safety performance award

Vanhout was given an award by ExxonMobil Chemical in Meerhout for its high safety performance in 2008.

Certificate of achievement

Four million man-hours without lost time incident

Six Construct received a certificate of achievement from Qatar Petroleum for its safety performance on the Qatar National Convention centre extension (Doha) in December 2010.

Award function

Five million man-hours without any lost time injury

Six Construct received an award for this achievement on the Cleveland clinic project in February 2011. An emergency evacuation drill exercise was organized as part of the award presentation event.

A pictorial job-safety handbook

In 2011, a safety team from Six Construct in UAE made a pictorial job-safety handbook and developed a risk analysis that can be understood by foreign workers with little education by using standard symbols. The advantage is to increase employee involvement and communicate better during training.
Quality

Quality is part and parcel of BESIX Group companies activities. In this way, most of them have developed their own system to implement their safety, quality, respect for the environment, risk management and also good governance policies.

As an example, BESIX has developed an integrated management system (IMS).

This system makes it possible to control its activities, processes, responsibilities and procedures, as well as for the realization of projects. In addition, the activity or process may or may not be regulated by a norm or a standard or by a decision of BESIX management. In order to respond holistically and effectively to strategy and internal control as defined by the management, local legal requirements, requirements from other external sources (Standards ...)

The BESIX Group companies encourage the publication of “end-of-site” reports and the client satisfaction surveys are proving particularly valuable for pricing, preparing and carrying out similar projects. The information collected in this way will, in the long-term, increase efficiency by making it possible to benefit from the analysis, research and comments collected and avoid problems already encountered in similar circumstances.

These specific mechanisms and means go beyond the strict requirements of quality, safety and environment reference standards, they cover all management and control processes of the company in all disciplines.

In 2010 and 2011, BESIX Group implemented and deployed Enterprise Resources Planning (“ERP”) in Vanhout and BESIX. This constitutes the ICT platform consolidating and tracing all transactions and information in a common database. With a primary focus on good practices developed throughout the Group in recent decades, the ICT platform aims to harmonize, to the maximum extent, all processes and ways of working both in the companies where it is already deployed as well as in those where it will be implemented in the future.

The harmonization through the ERP contributes to the best practices that are embedded in IMS. All harmonized processes will gradually be reflected in the IMS in order to fully align the ways of working and the reference procedures of the BESIX Group company concerned.
Employing about **18,000 employees** worldwide, ranges **BESIX Group** among Belgium’s leading employers. BESIX Group is also looking to build up active, long-term *relationships* with its *employees*, based on personal *growth*, individual *development* potential and *mutual respect*.

### Diversity

Diversity is one of BESIX Group’s main pillars. Staff members come from every corner of the world. In Belgium, some BESIX Group companies, BESIX, Jacques Delens and Vanhout have officially signed the Diversity Charter, an initiative of the Brussels-Capital Region in Belgium.

By signing this document, these companies commit themselves:

- not to tolerate any form of discrimination relating to gender, ethnic origin, religious belief and/or philosophy, sexual orientation, age or handicap;
- to implement a Human Resources policy based on non-discrimination and diversity;
- to aspire to reflect diversity within their staff;
- to implement a general diversity policy.

While several companies in BESIX Group have signed the Diversity Charter, all BESIX Group companies are required to maintain diversity in their staff teams (employees and workmen).

*The search for diversity is inherent in a Human Resources policy based on quality, competence, skills, enthusiasm and mutual respect. We are convinced that diversity generates economic and social added value, and can offer a better response to our clients’ needs. Our long-term objective is to profile ourselves as a harmonious and open enterprise.*

---

**Geert Aelbrecht, Group Human Resources Director, BESIX Group**

<table>
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<tr>
<th>TOTAL</th>
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<th>Dec 2011</th>
</tr>
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<td>Workers BESIX Group</td>
<td>12,386</td>
<td>11,514</td>
</tr>
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</table>
Gender

Gender has an important place in the company’s priorities. The composition of staff teams is determined by the main activity of BESIX Group, being the construction industry.

A report about gender is published every two years within BESIX Group. The present report covers the years 2010-2011. As a result, the percentage of female employees at BESIX Group is rather limited, particularly in project-based jobs on site. Most of the female workers are active as employees in support services.

One of the main reasons explaining the weak representation of female workers is the fact that most of the engineering students are young men. Figures from the CREF (Conseil des Recteurs des Universités Francophones de la Belgique) show for instance that for the 2010-2011 academic years, a total of 5,928 students registered in engineering studies in the French-speaking universities, comprising 4,837 young men and 1,091 young women.

BESIX Group is convinced that, even if the construction sector is traditionally a male environment, opportunities exist to equalize gender representation.

In the recruitment process, the BESIX Group governance is nevertheless clear that gender is not to be taken into account.

BESIX Group is aware of the limited representation of women in senior positions. Progressively filling the gap, particularly by the recruitment of young female engineers, is definitively one of BESIX Group HR and CSR objectives for the coming years.

Joining BESIX Group

Every year, new colleagues join BESIX Group

At BESIX in 2011, 167 new colleagues were recruited compared to 111 in 2010 which means an increase of 51%, including:

- 72 recruited for Benefra
- 95 recruited for International

Between 6,000 and 7,000 applications were received and dealt with during the same year and over 800 interviews scheduled. BESIX Group intends to recruit at least 30 young graduates each year.

167 new employees were recruited at BESIX in 2011

BESIX Group companies organize welcome processes for new staff members. Newcomers get a coach to help them integrate better. A welcome day is organized on a quarterly basis, with considerable input by BESIX Group and management of Group companies.

TOP Employer

BESIX was one of the winners of the 2010-2011 award for top Belgian employers. The award is presented by the Corporate Research Foundation (associated with the Hay Group) and the selection is based on five criteria: primary and secondary employment conditions, training courses, internal promotion opportunities, work atmosphere, corporate culture.

In 2011, a detailed survey confirmed BESIX Group’s positive image and good reputation in the employment market.
Career management and promotion of employability

Core competences

Core competences are of the highest importance for a successful long-term strategy. They provide the key references for all staff members. When core competences are implemented in day-to-day communications and activities, they ensure the strong and successful performance of the entire organization.

In the first semester of 2009, the BESIX Group Human Resources department initiated a global survey of 150 employees of middle and top management. They were asked to select, out of a list of 28, the 5 competences that they considered most important for the realization of BESIX Group’s long-term strategy and the preparation of BESIX Group’s global organization for the second century of successful building experience.

BESIX Group has selected the following 5 strategic core competences: Entrepreneurship, Flexibility, Innovation, Result-Oriented, Teamwork.

Based on those, an innovative integrated job grading system has been developed since 2010 to guarantee a transparent working method and to encourage clear information and direct communication with all employees. It fosters a BESIX Group common culture.

BESIX Group employs mainly employees with technical, bachelor and master diplomas.

As advanced technical skills are of crucial importance for the development and expansion of new technologies and innovative solutions, they constitute a key element in the competence grid.

<table>
<thead>
<tr>
<th></th>
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</tr>
</tbody>
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¹ including ‘Licence’,
² including ‘Graduat’ (A1),
³ including Secondary – general, technical (A2)

(Statistics of diplomas in 2011 for the following construction companies within the Group)

BESIX Group, BESIX SA, BESIX France, BESIX Nederland, BESIX Italy, BESIX RED, BESIX Sanotec, BESIX Schweiz
Cobelba, Jacques Delens, Fratel Foundations, Lux TP, Socogreta, Wust, Six International, Sanotec Sharjah branch, Six Construct (expats and senior staff members)
Training

In order to achieve its objectives, BESIX Group uses coaching which contributes to the development of skills and competences.

BESIX Group management strongly believes that the Group can only grow if its employees grow too.

Internal training programmes, with in-house specialists in various fields, are organized on a regular basis. BESIX Group emphasizes the importance of knowledge sharing and co-operation. Training courses are organized for all staff members (workmen and employees). Needs or requests for training are defined in consultation with line managers and/or during the yearly evaluation process.

A calendar of training courses for the entire Group is published every year on the intranet and communicated via internal memos and newsletters.

Technical & functional training sessions are delivered by internal BESIX Group experts. A number of courses are mandatory for all new members who joined less than 3 years earlier: Soil Mechanics, Formwork & Scaffolding, Planning & Productivity, Concrete Technology & Reinforcement, Equipment & Logistics, Legal, Contract Management & Insurance, IMS on Quality, Safety & Environment.

These mandatory courses must be completed within a 3-year period with a maximum of 4 courses per year.

Language and IT courses are also organized. Health & Safety training courses are also at the heart of the BESIX Group training programmes.

**Soft skills and technical & functional skills organized by BESIX Group**

During 2011, on a targeted population, 1,546 staff members were trained. Soft ‘behavioural’ Skills (23%) and Technical & Functional Skills (40%) were the most popular topics in the 2011 training sessions.

BESIX Group offers “Soft Skills” courses in order to encourage the development of the strategic core competences of its employees.

A total of 3,300 technical & functional training hours were given. 70% of training courses were organized in Brussels and 30% in the UAE. It represents 40.2% of the total training courses delivered.

**Special training courses for sustainable construction**

Training courses in sustainable building have belonged to the CSR objectives since 2011, as a number of the project managers and engineers are already PEB advisors (*Performance Energétique des Bâtiments* in Belgium). More and more of them will need to follow training courses on sustainability and a specific certification process (BREEAM, PEB, …).

BESIX Group has already begun by sending a number of engineers to external training courses (ULB, IPAVUB, Cefora, Espace Formation PME, …) about PEB and sustainable construction.
Salary policy

In 2010, BESIX Group gradually introduced a new grading system into its companies since Group core competences had been defined. That Group initiative contributes to an objective and personalized follow-up of the employees and staff that very much belongs to the CSR objectives of a group where human resources constitute the key capital for growth.

That competency model aims to allow employees to understand management’s priorities and provide them with a better understanding of their position in a growing group.

The new grading system aims to further contribute to the overall salary policy and to the career management of each employee, independent of years of service, gender, ... and with more focus on real competencies and performance.

BESIX Group also recognizes the place of advanced technical skills in developing and expanding new technologies and innovative solutions. To ensure this, two equivalent career paths are provided for, the one to recognize managerial contributions and the other to recognize technical contributions.

Once they make progress within their competence level, employees are eligible for promotion to a higher level, subject to a business need or opportunity. Nevertheless, employees do not need to commit to a specific career path and can move from one path to another as their personal goals and interests might change over the years.
Internal communication

Promoting interaction and encouraging dialogue

BESIX Group is convinced that efficient internal communication should not only generate involvement and team spirit, but also increase well-being at work.

BESIX Group strives for open, consistent and transparent internal communication. An information network, group enterprise portal and the intranet are used to inform employees of BESIX Group activities.

A quarterly internal newsletter, The BESIX Group Magazine, reports on any news at group level. It is sent to all staff members, either at home or on site.

In addition, some BESIX Group companies have developed their own newsletters such as Together at Six Construct. This is a bi-monthly newsletter which is published in English and in Hindi. This contributes to optimizing sharing of local information.

News flashes are also used to promote internal communication.

The BESIX Group website and intranet also offer all staff the opportunity of sharing their views and contribute to the CSR involvement of BESIX Group.

The BESIX Group communication department is accordingly monitoring the CSR achievements and plans through a direct line with all levels of the BESIX Group organization.

On top of this, site visits, non-profit team incentives, sporting events, etc. offer the opportunity for employees to reinforce their collegiality. BESIX Group companies or regional organizations hold events for staff members of specific companies or departments, or those involved in various projects.

BESIX Group sets up at least two BESIX Group internal events during the year. In addition, cocktails once a month in the BESIX Group headquarters in Brussels, New Year’s receptions are organized in almost all companies. The Solidarity Days promoted by BESIX Foundation encourage volunteer and social work in all Group companies and have been presented with an award by the Red Cross in Belgium for being one of the most effective and innovative initiatives in Belgium in 2011.
BESIX Young Community

At the end of 2009 BESIX Group decided to create the BESIX Young Community (BYC), a group social network enabling young professionals worldwide to get in contact with each other in an informal way.

The objectives of this initiative are to enhance cross-knowledge in BESIX Group, encourage self-development, create synergies, facilitate social gatherings and connections among colleagues and to further encourage the growth of team spirit.

Even though activities for young professionals are organized on a regular basis in order to stimulate their networking, contacts with colleagues are also promoted via specific IT portals. Members can publish project-related information or even ask for technical support. Young employees working abroad may want to stay in touch with former colleagues or establish new contacts in the country they are based in. Colleagues may want to share experiences with others. The BYC portal makes it all possible.
BESIX Group all over the world

BESIX Group sends expatriate agents all over the world

Their safety and security remain a priority. A ‘welcome book’ by country is given to each expatriate. This contains all information concerning the history, culture, customs of the country and the way BESIX Group operates there.

BESIX Group closely monitors the political situation in countries where colleagues are active.

BESIX Group management is kept informed of the international situation thanks to local embassies and the online web alerts of RED24, a leading global security company.

At BESIX Group level and in the respective companies, the HR, health & safety and insurance departments are able to obtain specific reports made available on the international or local situation at any moment. In case of critical political situations, expatriates and their families are immediately evacuated from the risk zone.

On all projects, and in accordance with the relevant ISO certifications, specific crisis management plans are set up and regularly tested in line with pre-determined emergency levels and division and allocation of all relevant tasks and responsibilities.

Crisis management plans also cover other potential risks such as illness of expatriates or one of their family members, or meteorological issues.

A BESIX Group reporting system and policy is in place in order that management be immediately informed and may align consistent and efficient internal and external communication.

Well-being at work and Sport

Integrating sport into professional life is part of BESIX Group’s corporate culture. The benefits for both employees and the company are obvious: lower absenteeism due to illness, employee satisfaction, lower personnel turnover, higher productivity and positive self-image.

BESIX Group encourages a healthy sports-based lifestyle for all staff members. The Group supported the participation of its staff members in several initiatives, such as:

- 20 km of Brussels
- Crealya ELA “Inter-Enterprise” jogging
- intra-group companies football competition
- climbing the Col du Galibier in France (Climbing for Life)

A fitness centre was opened at the BESIX Group HQ in Brussels in April 2011, and reinforces the general philosophy of well-being at work.
Our suppliers
Sustainable relationships

Procurement

Purchasing is based on various criteria (price, quality experience, lead time, technical specs, etc.). To create synergies and Group discounts, the purchases are more and more grouped within the companies with increasing care for environmental and social aspects.

The BESIX Group staff dealing with procurement activities is committed to sharing firm ethics, comparing all solutions and suppliers, sharing values and experience among the buyers of BESIX Group companies and developing awareness of the risks. The procurement process is conducted as transparently as possible and the procedure requires an accurate comparison process between the suppliers.

As a matter of CSR awareness, local suppliers are always requested to quote, when available, and their proximity to the site in question gives them several advantages.

In 2012, the main BESIX suppliers will, for the first time, be formally requested to document their safety, quality, environmental and other certifications, to provide their CSR policy, if any, and to answer a list of questions enabling BESIX to monitor their reliability. A procurement policy will be implemented throughout the Group as part of the CSR objectives for 2012. The goal is to make the related ethical, social and environmental practices applicable to the working practices of all staff working in procurement. The equipment purchased must comply totally with the relevant CE requirements and this rule is extended to a large extent to purchases that will be sent to a non-EU country. The CE requirements include various obligations related to safety and environment.
Within BESIX, the periodical reviews associated with VCA** 2008/5 certification and the approval of the HSE department is applicable to all equipment purchases, for countries and/or subsidiaries where VCA** is applicable or not. The Group intends to use the TCO (Total Cost of Ownership)-approach in the procurement department, in order to objectively measure the impact of its purchases in a CSR orientation.

As a first illustration, the renegotiation of the high tension electricity contract for the BESIX Group head office resulted in the supply of 100% electricity coming from renewable sources for the period from January 2012 to December 2015. In the same negotiation, an energy audit was performed by the supplier and resulted in practical opportunities for action.

Similarly, the new vendor in charge of facility management at head office will perform an audit in 2012 aiming to reduce consumption of all fluids and energy (gas, water, low tension electricity).

Finally, the waste management negotiations of Franki Foundations Belgium led to significant price reductions made possible by increased waste sorting. The recyclable portion has been drastically increased.

In addition, the cement supply for the Lanaye project in Belgium was arranged with a supplier located 3 km away from the site. Moreover, the arrangement makes possible the use of some factory roads thus reducing the access distance to the site and disturbance for neighbours.

Various efforts were made to improve purchases. Other elements such as consumption, waste collection or quantities, CO₂ footprint, recycling, …, are integrated into the procurement criteria.

At design level, there is a strong preference for selecting suppliers who supply less environmentally harmful chemicals.

Transportation distances are reduced to a maximum extent, and, for export, efficient groupings are organized.
The energy consumption of equipment is one of the selection criteria. Consumption and CO₂ emissions are part of the comparison for site vehicles. BESIX Group also plans to compare the CO₂ footprint of potential important suppliers.

For several projects, BESIX Group purchases with due respect for BREEAM or LEED environmental qualification (e.g. Cleveland Clinic in Abu Dhabi, Carpe Diem building in Paris ...).

Since procurement and subcontracting are strongly embedded in construction project management, BESIX decided to include them in its CSR permanent objectives, on the occasion of the aforementioned ERP (Enterprise Resources Planning) deployment, indicators and monitoring of the social and environmental performances of its main suppliers and subcontractors.

By the end of 2012, the supplier evaluations will be integrated into the ERP, offering better access to that information to all users working on the projects. The evaluation includes criteria related to the overall quality of the supply/service, the relationship on several typical occasions and health, safety and environmental reliability.

Since about 70% of its consolidated turnover is realized with and through subcontractors and procurement, BESIX Group recognizes its strong CSR duty to drive the social and environmental performances of its subcontractors and suppliers in the countries where the Group operates. Concrete and progressive actions in this respect form part of the Group CSR framework objectives 2012-2013.

For the whole Group, as from 2013, the ERP will largely contribute to building a framework and, where feasible, preferential collaboration with suppliers and subcontractors who also share similar values to those of BESIX Group.
Our clients
Emphasizing sustainability together

Pre-qualification
Pre-qualification is a way for investors to evaluate and select contractors and partners who are competent to perform a particular construction project. The selection is generally based on qualitative and quantitative criteria.

Liability, financial, technical and legal stability as well as ethics are crucial points for companies trying to become a preferred supplier. Experience is equally important, including innovative solutions.

Potential clients often request candidates to fill in a questionnaire and to provide specific and/or additional information on the company, its organization and its technical capabilities and references.

More and more audits and visits are performed by the clients and even by the potential partners.

BESIX Group noticed a clear increase in requests for information on and compliance with ethics and CSR.

Tendering
Social Responsibility with regard to tendering can be defined as “securing and stimulating CSR in the contractual and tendering processes”. Private clients calling for tenders can freely decide the main lines of the tendering process and can, therefore, anticipate the social criteria, amongst others, by deciding the contract type (D&B, EPC, BOOT, DB&M, ...).

The objective is to reduce the environmental impact of construction during the whole process, from the initial idea (by means of the Programme of Requirements (PoR)), through the execution and during the use and management (including renovation), up to and including demolition. For this reason, the tendering process also creates opportunities for the contractor to give a proper interpretation to, as well as integration and innovation of CSR.

BESIX Group aims to be compliant, including its clients’ criteria in relation to extended CSR. Extended criteria relate to energy, water, soil, air, environment, nature and landscape, waste products, dangerous products and resources.

When specific points of interest in the PoR are lacking, each BESIX Group company comments and applies its internal sustainability policy to manage the social and environmental impacts, to the invitation to tender as well as during the execution of the project. Even when not required, all possible options, in every discipline including CSR, shall be considered and promoted when it serves the interests of the project, also as a future technical and commercial reference in excellence for BESIX Group.

From July 2010 to June 2011, a majority of the large potential clients asked for an ethical commitment and for compliance with international standards regarding CSR, especially for certified projects and those projects in the Benelux-France area. For example, the last prequalification folders included ISO 14001 Environmental, VCA** BTR (“Branchegerichte Toelichting Railinfrabeheer Certificaat”), BIM, BREEAM, ...
In order to reach a correct but competitive cost price, the BESIX Group company evaluates the building project item by item in an attempt to correctly estimate every part. Quantities are measured, price inquiries sent out to suppliers and subcontractors and the most suitable materials are specified. Calculation includes the number of workers and foremen needed to get everything done on time with a permanent focus on potential variants and alternatives in an approach of TCO (Total Cost of Ownership).

Specifically, two major points are important to obtain the best offer: cost optimization and total energy used during and after construction.

Costs can be optimized through a lower need of maintenance of the finished project and through an optimal total life cycle of the project and its materials. Using higher insulation material means less exploitation costs and less maintenance costs in the long-term. The total energy consumption during the life cycle can be calculated by the tendering department (from production, operation, construction to demolition and recycling).

Other BESIX Group centres of competence are involved in the process, such as the planning & methods specialists for determining the optimal building method and the shortest execution time, the design teams to provide a design that is a step ahead of the competition. Also the equipment specialists advise on the most appropriate equipment, the legal & insurance officers on contractual issues and risk and the finance departments on the financial, funding and tax aspects.

Future tenders need to respond to the latest developments in energy or acoustic standards (passive buildings, HQE (F), …). They need to be examined on a “system engineering” basis, involving various analyses (risk analyses, business plans, method statements, sustainability concepts, maintenance …).

Price is no longer the main element, at least in the primary negotiation stages: BESIX Group companies’ understanding of the project, its project management and its multidisciplinary, flexible and creative way of approaching, aim to make the difference in terms of sustainability in a more and more aggressive and competitive market.

Alternative contracting, as in PPP, D&B, DB&M, DBF&M and DBFO&M, Bouwteam, own developments and the like, creates the opportunity to promote something other than simple price in straight competitive bidding. These kinds of contracts make it possible to carry out the TCO approach by assuring construction quality while taking investment and its impact on future generations into account.

The QHSE and sustainable solutions’ centres of competence provide advice and support on the technical solutions or options included in the tenders.
CSR in relation to corporate citizenship
Environment
Minimizing impacts and preserving

BESIX Group has been concerned for many years about the environmental aspects and impacts of its activities. It therefore decided in the early 2000s to develop and apply an Environmental Management System (EMS) meeting the requirements of the ISO 14001 standard.

Since then and as a multinational concern, BESIX Group has striven for implementation of the EMS by all its companies.

In 2005 Six Construct in the UAE, and in 2010, BESIX and Entreprises Jacques Delens, obtained their ISO 14001:2004 certification in Belgium. Further propagation within the Group resulted in certifications for Vanhout and Wust in 2011.

The ISO 14001 certified EMS proved to be a solid backbone for the environmental management, policy and objectives. Since 2000, the medium-term objective remains of bringing EMS into all Group companies.

Since environment is also a question of mindset, the BESIX Group invited its staff members to participate to the Earth Hour action on March 26th, 2011. Just like hundreds of millions of people all around the world, BESIX Group wanted to support this environmental world action inspired by WWF.

Environmental Management Programme: a step forward in the CSR action plan

In the context of ISO 14001, but also based on other certifications, such as the CO₂ Performance ladder in the Netherlands, BREEAM in Belgium, LEED and ESTIDAMA in the Middle East, each subsidiary formulates specific environmental objectives, supported by the management every year. In this way, environmental management ensures the application and continuity of the Group environmental policy and the associated objectives. The medium-term CSR philosophy in this area is to persuade all Group companies to progressively adopt this approach.
Capitalizing on its realizations in 2010 and 2011, BESIX Group’s environmental focus from 2012 onwards will be on:

- raising awareness and training of staff members on environmental aspects;
- reduction of CO\textsubscript{2} emissions;
- increasing the use of renewable energy;
- reduction of paper and ink consumption;
- raising awareness on projects – respect for and innovative approach to environment;
- further increase of solar panels’ energy production;
- integration of the need for environmental performance assessment methods insisted on by more and more clients.

In order to enable clients to achieve top environmental performance in their projects, BESIX Group companies participate in and facilitate increasingly in obtaining a series of standards by gaining the required credits linked to various standards such as:

- BREEAM (Building Research Establishment Environmental Assessment)
- LEED (Leadership in Energy and Environmental Design)
- HQE (Haute Qualité Environnementale)
- ESTIDAMA
- VALIDEO (Voluntary Sustainable Construction certification system).

These standards assess the performance of a building with respect to energy consumption, health, well-being, pollution, transport, land use, biodiversity, materials and water, … Credits are awarded for each of these aspects depending on the performance level achieved. A weighting system allows grades to be aggregated to an overall grade, which is then awarded in the form of a certificate.

Those standards do not only relate to the building or infrastructure performance but also to the construction process. Accordingly, the BESIX Group company includes the construction related needs of those standards in its project-related environmental management programme.
With due consideration for its own activities, for the client’s requirements and for the geographical context in which it operates, each BESIX Group company is invited to provide a multi-year environmental action plan that includes the above Group objectives and local initiatives. The first consolidation of these action plans started in early 2012 with the objective of ensuring and monitoring overall progress and performance.

In 2010, BESIX Group finally decided to adopt a «BESIX Group Best Practice» approach when promoting the ISO:14001 certification process among its companies.

While aiming to bring together all best environmental practices found within the Group, the aim is to gain optimal control over environmental impact and subsequent measures.

As a matter of CSR philosophy, such an approach also aims to align environmental objectives on the best practices available on the market, area or business concerned and, as far as possible, to surpass such best practices and differentiate the BESIX Group company as the best in the class.

The BESIX Best Practice approach is best applied and most efficient in emerging countries, where control of environmental management might be more difficult owing to less developed regulatory standards, infrastructure or supply chains.

Energy Management Programme:
CSR relating to energy

An Energy Management Programme for 2012 was drawn up at BESIX, as part of its Environmental Management Programme (EMP). The EMP is endorsed by the management and is drawn up for a period of five years and the programme is reviewed on a yearly basis during the BESIX management review as per ISO requirements and approved for the following year.

This first initiative suggests that the other BESIX Group companies should initiate a similar proactive programme that will contribute to the BESIX Group’s overall contribution to energy savings and optimization.

CSR on sites:
segregation of waste

The segregation of waste is a daily practice on site projects and in the offices. Staff members and subcontractors are made conscious of its relevance. Waste segregation by type or category is mandatory, as required by the ISO 14001 certified Environmental Management System.

Some sites go even further, thanks to specific agreements with specialist companies. Franki Foundations has for instance installed compacting machines.
CSR in paper management and savings

All BESIX documents are printed on recycled, chlorine-free paper, a decision that is part of BESIX’s environmental policy. Since 2004, BESIX with the support of the Brussels Environment Management Institute (IBGE) has been measuring the paper consumption of various internal departments. Administrative employees were invited to pay attention to paper savings.

Following this earlier initiative, BESIX in Brussels launched a renewed awareness campaign on paper use and printing in 2012. Paper use will be registered for the BESIX Head Office and several major projects in Belgium.

In early 2012 and in that context, BESIX Group decided to arrange for all head-office printers to deliver double-face and black and white copies by default in order to increase paper savings in Brussels and in the BESIX branches and locations.

Six Construct created a recycling centre in its headquarters in Dubai. In 2009, efforts made by employees to separate waste (started July 2009) helped to recycle 5 tons of paper. In 2010, 6 tons of paper were diverted from landfill and sent for recycling and in 2011, 9 tons. Objectives are an increased awareness amongst employees at source, training for office cleaners in waste separation (including the use of coloured garbage bags), and having dedicated employees near the recycling centre to maintain the segregation downstream.
CO₂ emissions as CSR indicator

Corporate Social Responsibility has over the past decades risen high up both the political and the business agenda. Right now the challenges for BESIX Group (apart from economic endeavour, providing value for money and client satisfaction) lie in its ability and determination to achieve environmental performance and respect elementary social rights and (inter)national standards during its innovative and forward-thrusting development.

When it comes to environmental performance, CO₂ Performance ladder in the Netherlands is a perfect fit.

Environment, and especially CO₂ reductions, has been selected by BESIX Group to be the preferred domain to monitor the 2012 objectives and measures in a report complying with the GRI-based constraints for the ISO-14001 certified BESIX Group companies in 2013 while including the whole BESIX Group in that format within the next CSR and Sustainability second report early 2014.

The introduction of its Energy Management Programme has enabled BESIX to identify high consuming energy equipment or activities and to determine the actions needed to obtain significant savings since 2011. The CO₂ Performance Ladder has clearly established that, in the Netherlands, the following energy flows account for 80% of the total BESIX carbon footprint:

- Electricity use in permanent office facilities;
- Fuel consumption for equipment and heating;
- Mobility/Personal transport (use of leased and private cars for commuter traffic and business related traffic).

Improvement and reduction measures are therefore being focused primarily by BESIX on these three elements, in Belgium, the Netherlands and the Middle East.

Actions are taken accordingly in terms of energy audits resulting in reduction of fuel consumption for equipment and heating, purchase of renewable energy, mobility plans, car and travel policy, eco-driving training courses, …

BESIX Group subsidiaries make a specific effort to reduce their environmental impact related to energy use. Some of them, such as Vanhout, West Construct and the steel plants of Cobelba and BESIX have installed solar panels (photovoltaic panels or PV panels) on some of their buildings. These installations are amongst the largest investments of BESIX Group in 2010 and 2011 in its effort to achieve its CO₂ reduction objectives.

A study in the head-office in Dubai – also made in 2011 – to determine if it would be lucrative to install solar panels on the roof of the Dubai premises for the local installations in and around the head office. A corresponding action plan will be considered in 2012.
Preserving water resources

Water is a scarce natural resource and needs to be conserved. Water management is a major issue in the sustainable development of our planet.

BESIX Group is contributing to this sustainable development in several ways.

First of all, it pays attention to its own water consumption and treatment. Secondly, as a co-investor, it promotes the building of wastewater treatment plants, drainage systems and realization of sea water desalination plants.

In addition, it does so, not only as civil works contractor through its local companies, but also through its affiliate BESIX Sanotec, which acts as a process designer and EPC contractor for water treatment plants. Last but not least, via special purpose companies, set-up as owners of plants built by BESIX Group companies, it treats effluent for public and private use.

In-house efforts

Water is a precious commodity on all sites, but particularly in drier areas such as Africa or the Middle East. Local projects try to re-use the water used on site. Work sites in the Middle East, for example, re-use water for concrete curing, wherever possible. Concrete is cured with Hessian cloths and covered with polythene sheets to reduce evaporation and the need for excessive watering.

Employees are made aware of the importance of natural resources and do their best to re-use water whenever possible. Signs posted near washroom and drinking water facilities remind everyone of the importance and scarcity of water.

As an illustration, the BESIX Environmental Management System requires all construction sites to provide settling ponds for processing wastewater from concrete batching plants or mixer trucks. Wastewater is treated to meet legal standards prior to being re-used or disposed of.
At another level, on sites and in some of the offices, teams are starting to look for alternatives to using drinking water, for ways to re-use rain water and for ways of separating used water.

As another example, in Qatar, Six Construct invested in a reverse osmosis plant to treat the ground water extracted from deep wells for use in the Six Construct Labour Village and in a sewage treatment plant to treat all sewage water.

**Expertise in water treatment**

Environment-related activities have been industrialized in recent years as a result of the higher standards of water treatment required by local legislation and the necessary reliability of the systems installed. New concerns, linked to health and protection of the environment are emerging, accentuating demand for high quality solutions in this market.

As a result of constantly increasing population, governments or municipalities want to ensure that wastewater treatment plants and sewage plants are built and managed in order to guarantee the required environmental quality for citizens.

Reliability, technology, local awareness ... BESIX Group companies tackle them all.

**BESIX Sanotec acts as a process specialist**

Mainly with major world players, it engineers and designs plants, realizes them in collaboration with local BESIX Group companies, taking the mechanical and electrical parts and leaving the civil works to its local BESIX Group colleagues.

Originally created as a subsidiary of Vanhout, with several references in both Flanders and Wallonia, it now also has an established activity in the Gulf Region and may claim to have a long standing expertise in environmental engineering and to be considered as a local player, both in its original and GCC markets.

It is to be noted that BESIX Sanotec is also active in the field of middle and large-scale treatment plants. It develops specific techniques in order to build efficient wastewater treatment plants, desalination plants, sewage treatment plants and sludge treatment installations. The company also provides solutions for drinking water using a variety of techniques, depending on the required level of purity, the size of the complex and local conditions.

In order to ensure the long-term efficiency of its equipment, it has set up an operation and maintenance activity, helping its clients to obtain maximal use of their assets over the expected lifetime of the plant, and perhaps beyond.

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**Wastewater treatment plants** at Al Wathba (300,000 m³/day) and Al Ain (130,000 m³/day) (UAE) near Abu Dhabi, which will be completed in 2012

It was designed by Six Construct, which also built the civil works, while BESIX Sanotec was responsible for the engineering work, equipping and started-up stages. For the process, mechanical and electrical parts BESIX Sanotec worked with a partner. These facilities will tackle the growing sewage stream, which is the consequence of Abu Dhabi’s population increase, as well as the need for desalinated water. The plants are expected not only to reduce the pressure on the emirate’s sole existing Mafraq facility, but also on the current desalination plants by providing treated effluent suitable for landscaping and agriculture and by producing sludge suitable as a fertilizer. The treatment process will make use of methane from digested sludge. The plants will contribute to substantial carbon emission reduction (as desalinated water is produced with such emissions) and fertilization of desert areas.
A PPP in Ajman

BESIX Group was able to set up a PPP, investing in sewage collectors and treatment capacity, operating them, financing them and invoicing service fees to the Ajman tenants on behalf of the Emirate of Ajman. Encouraged by the success of the operation, BESIX was invited by the Emirate to take a 75% share in a "water polishing" membrane plant (7,500 m³/day) at Safi, aiming at commercializing treated effluent water suitable for industrial use.

Sewage by Socogétra as well

Six Construct is not the only BESIX Group company to have sewage or water treatment plant building experience. Leaving aside BESIX Group’s historical track record, responding to Belgium’s Walloon Region current sewage plan needs, Socogétra has organized itself to construct cost effective, small and middle-scale sewage treatment plants, in collaboration with BESIX Sanotec and some of its partners while becoming itself one of the region’s most reliable wastewater and drainage collector builders.

Socogétra has several decades of experience in the areas of collection and treatment of domestic sewage with realization of collectors, weirs and water basins, pumping stations, pumping units and sewage treatment plants. These activities include small and middle-size facilities (1,000 to tens of thousands of inhabitant equivalents).

Soil pollution and Biodiversity

Prevention and control of local pollution are processes required by ISO 14001. In case of a pollution risk, specific measures are taken, a comprehensive report is issued and information is widely communicated in order to prevent the occurrence of an accident.

Six Construct has implemented comprehensive requirements for compliance on sites. All marine work projects are strictly controlled to avoid water pollution.

Other measures include drip trays under mobile equipment, bunds for storage of hazardous liquids or availability of spill kits.

Today, nature preservation is essential. Fauna and flora have to be preserved when projects are being realized.

As an illustration, projects in marine environments require special attention and care. Consulting specialists have been employed to ensure that biodiversity is not endangered and even maintained while conducting the operations, as was the case on the Tanger Med II project in Morocco and the South Hook project in Wales as highlighted further in this report.
Project: LNG jetty
South Hook, United Kingdom
Preserving sea life with the Pembrokeshire County Council

Marine works is one of BESIX Group’s core activities. Building LNG jetties, extending harbours, building breakwaters, dredging, etc. may have a serious impact on sea life. The company always tries to minimize this impact with its various work methods. BESIX Group does not just execute a project; it integrates the location and its biodiversity in the most harmonious possible way in liaison with external stakeholders.

In 2009, in a joint venture with British company Kier, BESIX completed the contract to build the LNG jetty at South Hook. This unique and complex project included both the renovation and the demolition and reconstruction of existing structures. The jetty can host the world’s largest LNG methane tankers, bringing in gas from under the sea around Qatar. The teams were required to respect strict environmental standards aimed at protecting the seabed, as the project was carried out in a Special Area of Conservation.

Environmental risk assessments were carried out as part of the design process, as well as underwater noise survey to ensure that sea mammals were not disturbed during the piling works.

The project had to be developed in challenging weather conditions. The team worked closely with the County Council in order to ensure that the local community was as little disturbed as possible. Marine transportation was emphasized to reduce traffic on local roads. The joint venture opted to crush the removed concrete elements on a floating barge thus minimizing the effects of the demolition works on the local community (noise and truck movements). These recycled “crushed” materials were used as aggregates. Significant amounts of steel from the old jetty were recycled. Waste was collected and transported by local merchants.
In order to strengthen its concern for the society in which it operates, BESIX Group created the BESIX Foundation in 2009 on the occasion of its hundredth anniversary. The Foundation targets projects in Education, Construction and/or Environment. It gives financial support to charities but also sponsorship and promotion to help associations achieve their goals. The Foundation strongly encourages voluntary work among BESIX Group colleagues and has dedicated over three years more than 1.1 million Euros to support projects and initiatives that are in harmony with its themes and objectives.

The strengths and continuous challenges of BESIX Foundation are:

- The strong commitment of the senior management to embed BESIX Group values throughout the Group, as well as the enthusiasm of Group employees.
- A direct and indirect involvement of hundreds of professionals.
- A real ambition anchored in financial commitments.
- An evident pride of the players in their achievements.
- A fruitful and complementary symbiosis of knowledge, experience and collective goodwill
- A commitment from BESIX Group to maintain the current pace of work.

BESIX Foundation focuses on actions in which the Group competences may show their added value. These are construction of course, as well as water treatment and vocational training. The Foundation supports various non-profit organizations in their activities and objectives, either financially or with the help of BESIX Group’s staff members who voluntarily give up some of their free time.

The involvement in local communities maximizes synergies, knowledge and complementary skills. The support is dedicated to long-term projects to ensure the sustainable development of local communities.

In a period of three years, BESIX Foundation has supported 66 projects, including 40 put forward by staff members.
Some educational projects

- Recycling of computers
  The Foundation collected old computers from BESIX Group headquarters for the ISPAT association in 2010. It also gave financial support. This association, located in the centre of Brussels, offers training courses for new immigrants (cleaners, guard, ...) in order to help them find a job and integrate into the city.

- St Anthony’s school
  Oeuvre des Pains started the construction of a school in the rural area of Moradabad District in Uttar Pradesh, India in 2003. Today the school has 18 classrooms and more than 615 students, from nursery to secondary 2nd grade. The non-profit organization has built new school premises to accommodate 900 new children and the completion of their education up to 12th grade with BESIX Foundation’s contribution. This building is also used for adult education, women’s training programmes and a small dispensary.

- Right 2 Learn
  BESIX Foundation set up IT training sessions to teach the more unqualified workers of BESIX and Six Construct in the UAE how to use a computer. The priority was intentionally given to those who would never have the chance to learn computer skills. The trainees are now able to exchange e-mails, pictures, or even speak directly to their families in India...free of charge instead of spending money on phone bills. The first session started in September 2011 in Dubai. Six Construct provided the space and equipment needed and volunteer colleagues are teaching the workers. Other sessions have been organized in Dubai and Abu Dhabi in the meantime and two workers camps are now provided with computer rooms, ‘Cyber cafe’ allowing the workers to contact their families.

Some environmental projects

- “It is our earth”
  BESIX Foundation supports this important exhibition, organized to make a wider public aware of the environmental issues of today, and showing how everybody can contribute towards saving the planet.

- Recycling paper for charity
  Together with ‘Volunteers in Dubai’, Six Construct was involved in a recycling project for the collection of waste paper that was made into calendars for the year 2010. In a period of 5 weeks, Six Construct donated 1,330 kg of recycled paper, which put Six Construct at the top of the Recycled Paper Donors list, followed by Hyder Consulting who collected and donated 790 kg in 10 weeks. The profit was given to the Senses Residential Centre for children. Most of the Dubai and Abu Dhabi sites were involved as well as the BESIX head-office in Dubai.

- WaSH
  This huge project, developed by UNICEF, brought drinking water to local communities in Mali and made possible education about sanitation. This partnership helped BESIX Group to think globally. It’s no use bringing drinking water to the local people if they are not taught how to keep it clean, how to maintain the facilities and how to support sanitation education.
Some building projects

– **“Convivial”**
  In 2007, BESIX Foundation helped the association ‘Convivial’ in acquiring additional housing units for the accommodation of refugees during their settling-in period in Belgium.

– **Education Sans Frontières**
  BESIX Foundation financed the building of 2 classrooms in Burkina Faso suggesting that the association should build them using Nubian vaults. “We would never have dared apply this building method without being certain that we could fall back on BESIX Group’s technical expertise if we ran into problems.” S. Thiry, ESF’s director. Today ESF has already built 2 more classrooms with this technique that appears to be extremely easy to use.

– **Copainpark**
  This association houses 15 underprivileged children in Brussels. BESIX Foundation financed the installation of solar panels to reduce their monthly costs.

Environmental, building and educational drivers merging in one project supported

Most of the projects fit into several themes, and so does AVN. This association supports the revival of an ancient Egyptian construction technique, using vaults and mud-bricks.

The technique has important economic, ecological and qualitative advantages. Economic, because it makes cheap housing available to the poorest and, using only local resources, it reinforces the local economy. Ecological, as it is an alternative to wooden or corrugated iron roofs which are a burden on local economies and ecosystems. Qualitative, since it guarantees superior heat and sound insulation.

By supporting this project BESIX Group also supported education and employability since the aim of the project is the training of masons who may themselves become entrepreneurs.

In 3 years, BESIX Foundation received 325 requests for support, among these 109 from staff members. More than € 1.1 million has been spent on the 66 projects the Foundation supported and other smaller initiatives.

In the period 2009-2011 BESIX Foundation gave the following practical support:

In 2 years, 218 requests for support.
Among these 86 were from staff members.
46 were approved (33 from staff members).

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>€ 565,528</td>
</tr>
<tr>
<td>Middle East</td>
<td>€ 28,276</td>
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<tr>
<td>Africa</td>
<td>€ 254,488</td>
</tr>
<tr>
<td>India</td>
<td>€ 94,255</td>
</tr>
</tbody>
</table>

Categories of people who have benefitted from the work of BESIX Foundation are shown above.

*: “Underprivileged” mainly represents children placed foster families or young adults with low education and income.
Sponsorship and volunteering

In a traditional organization, colleagues give individual help to various projects.

With BESIX Foundation, BESIX Group employees enjoy the opportunity to request financial or volunteer support for the association or cause of their choice.

In the case of the Garderia Infantile, a school in a remote area of Equatorial Guinea, the entire project team (study, finance and building) was involved. And in the UAE, for Manzil, our workers did the renovation work needed for this association that cares for handicapped children. For Force Douce again, a colleague organized a day on a boat to enable them to demonstrate their work with diabetic or underprivileged children during a worldwide congress.

In Belgium too, initiatives where colleagues are involved have been supported. For Jest Farilu, a colleague advised the association during the building of its bakery for handicapped young adults and gathered external support through his own contacts with subcontractors. For Basisschool De Triangel, a colleague contacted Ghent University to study the school’s acoustic insulation problem and provided them with a feasible technical solution. For Amarrage, a colleague studied the renovation plans and suggested sustainable alternatives in one of its houses for underprivileged children. For Levenslust, another colleague studied the renovation works that needed to be done, organized an energy study and tendering and helped the association, which houses more than 120 underprivileged children, to make its wish come true.

A specific challenge has been finally met by BESIX Foundation in Brussels around SolidarCité: at first a colleague helped the association with the acquisition of real estate but also, each year, BESIX Group colleagues organize 3 days of technical training in the Sint-Pieters-Leeuw plant and warehouse as well as on site for the young adults starting a training year with SolidarCité.

“They were three nice days. Personally, I thought it was great to share our experience with a younger generation. Moreover, we were a dynamic group guiding young people who were very interested and who wanted to learn. There are only positive points that emerge from this training course.”

Patrick Derome, Bricklayer at BESIX Group and trainer during a SolidarCité day

“If the starting point of our work consisted of financial support for our social action work, we quickly developed other forms of partnerships. As such, the skills-based sponsorship demonstrates a willingness of partners to extend the collaboration beyond financial support. It is necessary to build sustainable links with the partner company.

The benefits of this kind of experience are multiple: strengthening links between all actors (business and associations), understanding our missions, giving our beneficiaries the opportunity to train with and meet professionals, making our action visible to staff members, making it possible to save money on our training budget without reducing the quality of training.

It is also a way to have the support of people on more technical issues such as our research on buildings and renovation,” explains Benoît de Decker, director of SolidarCité.
In only 3 years, more than 600 volunteers have helped several voluntary associations.

The Solidarity Days offer an opportunity for colleagues to spend a day helping a non-profit association, either with or without their families. They may wish to work on wildlife regeneration projects, work on an educational farm, prepare and serve meals for the homeless, etc. BESIX Foundation organizes solidarity days and nights every year in different cities in Belgium (Genk, Brussels, Liège, ...) and abroad.

Also in sporting projects, BESIX Foundation led BESIX Group colleagues’ spirit of solidarity on the occasion of the traditional annual 20 km of Brussels. Every year BESIX Group runners are proud to show their team t-shirts! By participating they are supporting a sports charity selected each year by BESIX Foundation. Just like the Solidarity Days, the 20 km of Brussels offers an opportunity for participants from the various subsidiaries to extend their networks.
01 Right 2 Learn, Dubai, UAE

02 Extension of the St. Anthony School, Asmoli, India

03 Building of a dispensary in POPE centre, Tamil Nadu, India
An independent organization

BESIX Foundation is an independent organization founded and funded by BESIX Group. The Foundation is managed by a Board of Directors. There are 7 directors, three of whom are external, contributing on a voluntary basis to the development, objectives and achievements of the Foundation: Roland Vaxelaire, Michel Vermaecke and Jean Mossoux are well-known personalities in the academic and business worlds in Belgium.

BESIX Foundation selects and assesses the projects and initiatives eligible for support through a selection committee composed of representatives from all BESIX Group companies.

Support, coordination and control are the responsibility of the company representative while a wide range of volunteers from all BESIX Group companies are involved in the projects.

BESIX Foundation has its own website where all relevant information can be consulted on all initiatives that have been supported so far. The website also indicates how requests for support can be made.

Best Practice Award and Solidaritest 2011

On 25 May, 2011, BESIX Group was one of four Belgian companies to be granted the Red Cross and FEB-VBO* Solidaritest Award as well as a Best Practice Award for its efforts in terms of corporate solidarity.

The Solidaritest Award is granted to companies for their CSR initiatives. Since 2010, the Red Cross has also recognized innovative projects in terms of social solidarity by presenting a Best Practice Award. Once again, BESIX Group was among the four winners.

It is mainly thanks to BESIX Foundation’s financial support of various social projects in Belgium and abroad that they won the Solidaritest. In addition, it is thanks to the organization of Solidarity Days and the involvement of its personnel that BESIX won the Best Practice Award.

Twenty-five companies submitted bids. BESIX Group was the only company to win both awards.

*Fédération des Entreprises Belges-Verbond van Belgische Ondernemingen
CSR on sites
CSR on sites
To illustrate the “CSR Roots within the Group”, practical initiatives have been selected. They are either innovative technical solutions or site initiatives, all in line with sustainable construction and consequently with CSR impact.

The growing attention to CSR aspects is quickly changing the approach of the construction industry. As a leader and innovative pioneer, BESIX Group is adapting itself to the more and more stringent requirements for an efficient CSR approach.

BESIX Group is not just changing its own approach or methodology to bring it into line with such requirements. It also helps to realize other parties’ programmes; these parties are either involved in CSR or show an interest in using the principles of CSR in their own construction projects.

Thanks to a wide experience with innovative construction methods, BESIX Group is able to advise its clients or partners on alternative design, building methods, materials, etc. in order to upgrade the value of a project through sustainable construction.

Over the past few years, BESIX Group has been involved in several projects which show, in one way or another, the practical added value of the Group with respect to embedding CSR principles into the construction industry, in several business areas and countries all over the world.

Since BESIX Group performance is substantially driven by the projects and sites, CSR is only viable at project level. In this context, CSR, but also care and innovation for sustainable construction are promoted and monitored.

Accordingly, and for the purposes of this report, significant examples of innovative solutions have been consolidated into two sections, the one focusing on Benelux-France and the other on the Middle East and International markets where BESIX Group is active.
Future prospects
Future prospects

The trend for **CSR** and **sustainable construction** is irreversible and will drive the **construction sector** all over the world more and more . . .

BESIX Group is not watching this trend from yesterday but is part of the trend.

When a “Green Board” was set up within the ADEB (“Association Belge des Entrepreneurs Belges de Grands Travaux”) in Belgium, founding members were BESIX Group companies, BESIX, Cobelba, Franki Foundations, Jacques Delens, Vanhout, West Construct and Wust. The aim is to identify best practice in environmental management on building sites, to gain consensus on ways of managing these issues and to implement practical solutions on all ADEB member sites.

When an initiative is launched on its market, each BESIX Group company is expected to take advantage of it and contribute in a proactive way. For example, Vanhout signed a provincial environment chart including 7 principles and a list of practical objectives (*Environmental Chart of the Province of Antwerp in Belgium*).

It is BESIX Group’s ambition to further grow in sustainable building solutions.

Taking again Vanhout’s example, the company Batech Construct was acquired by Vanhout in 1999. In 1980 Batech developed the *Etap-K30*-concept, a modular building system for low-energy houses. Vanhout was also co-founder of the *Passive House Platform* in 2002. In 2007 they created a Working Group on Sustainable Construction (*WeDuBo*) centralizing, managing and promoting knowledge on

“The main objective of this new department is to provide our clients with solutions that use less energy, not only during the construction period of projects, but especially throughout the entire lifespan of their buildings. This basic principle will be developed via an action plan on all our projects. This approach of ‘Sustainable Construction’ fits naturally into the global approach of CSR, which aims to make the whole BESIX Group a responsible group strongly involved in tackling the environmental and social challenges of our society.”

*Geoffroy Bekkers*,
Project Manager, BESIX
We already have CSR initiatives and we intend to implement CSR as a way of life in our Group. The creation of BESIX Foundation was a concrete starting point; this first CSR report is a logical follow-up to our sustainability objectives. Mirroring our pioneer spirit in business, we have been looking for innovative solutions to further develop sustainable aspects of social, environmental and economic requirements. We want to be among the current actors that create sustainable growth which is responsible but also profitable, for present and future generations.

Muriel Sacré,
Communication Officer,
CSR Coordinator

BESIX created its Sustainable Construction Competence Team at the end of 2011 in order to create new innovative building solutions and create a BESIX Group network to re-think the construction of tomorrow. In contact with colleagues, partners and other parties, the team is expected to increase internal knowledge in special techniques, to inform and support the BESIX Group companies and sites. More direct objectives include case studies, quality control by testing air tightness (blower door) and thermography (infrared camera). Convincing real estate developers of the importance of sustainability as a medium-term cost-effective alternative to more traditional design and completion is clearly one of their objectives.

The world’s interests are changing … and so are those of our Group.
Under pressure from CSR performance requirements and indicators

Business sustainability
Sustainability Performance

Healthy Stakeholders
Social Performance

Nature
Environmental Performance

CSR excellence on sites
Under pressure from CSR performance requirements and indicators

Activities are developed through BESIX in Benelux-France and by regional contractors Vanhout, Wust, Jacques Delens, Cobeiba and West Construct in Belgium and Lux TP in Luxembourg.

Franki Foundations Belgium, Socogetà and BESIX Sanotec provide specialist support in activities in the specific areas of foundations and piling, road infrastructure and environment.

BESIX Real Estate Development and BESIX Park operate in infrastructure and building development.

CSR actions are developed by each of these companies in line with the BESIX Group vision with considerable emphasis on the growing market focus on environmental consciousness and performance, in addition to the continuous attention to human resources, health and safety and corporate governance.

European regulations, mainly in public procurement, largely contribute to the market trend when public investors are given an incentive to include social and environmental parameters in the selection criteria for major investments in services, works and procurement.

The Netherlands especially has been driving environment awareness since Pro Rail, one of the largest investor in the country, included the CO₂ “performance ladder” in its selection criteria thus making it possible for candidates that comply to be awarded bonus points in the selection ranking.

BESIX therefore began the certification process and successfully passed with level 3 and later level 5 on the “performance ladder” in the Netherlands.

In France, large buildings are designed with due reference to standards that are becoming more widely known, such as LEED or HQE. These require the contractor to comply with stringent project management rules.

Furthermore, BESIX and most of the regional contractors have ISO 14001 certification, and this takes a similar view of selection and environment awareness. Since 2011, they have worked to environment and energy management objectives in line with such certification.
Business sustainability
Sustainability Performance

In addition to developing their Management Systems, BESIX Group companies pay great attention to their local or market stakeholders.

Involved in various committees

BESIX engineers are involved in the development of the National Annexes to Eurocode 2 (Design of Concrete Structures), 7 (Geotechnical Design) and 8 (Seismic Design).

They are also members of technical and scientific committees or organizations, including:

- Technical Committee for Structural Design
- Ultra-high Performance Concrete Committee of the BBRI (Belgian Scientific and Technical Centre for the Construction Industry)
- BBRI/UG’s Self-compacting Concrete Commission
- Working Commission 3, Concrete Structures of the IABSE (International Association for Bridge and Structural Engineering)

The BESIX Engineering department maintains close relations with the academic world to keep abreast of contemporary research. Thus, Engineering can continue giving considerable support to the construction process and thus provide clients with better solutions.

Five engineers from the Engineering Department lecture at Belgian universities, demonstrating the pioneering role of BESIX in the building industry.

BESIX Group is also active at the ADEB, “Association des Entrepreneurs Belges de Grands Travaux” (ADEB-VBA), via its Belgian regional contractors (BESIX, Cobelba, Franki Foundations, Vanhout, Jacques Delens, West Construct, Wust). They participate in general meetings, and some of them specifically in the Green Board and the Safety Board.

Vanhout has signed a CSR charter and has been audited in this way by VOKA, the Flanders’ Chamber of Commerce and Industry.
In order to make progress in its CSR approach for procurement, BESIX has joined the ABCAL (“Association Belge des Cadres d’Achats et Logistiques”), VIB (“Vereniging voor Inkoop en Bedrijfssllogistik”) and MANIFEST (“Maatschappelijk Verantwoord Inkopen en Ondernemen”).

BESIX Group is monitoring the participation of all its agents in the sector committees and associations in all countries where the Group operates.

BESIX Group’s participation in building sector associations and federations in the countries where it is operating, constitutes the key driver and channel for actively contributing to the sector’s relations with governments and local authorities.

As a major player in the international public sector, BESIX appreciates its role and the sector’s key contributors to the objective and daring integration of CSR and sustainable construction requirements into future projects, as well as the CSR triple bottom-line approach “prosperity, people and planet”.

Close collaboration with architects, consultants and clients in the early stages of any project is essential. When government supports such an approach, for instance for “public-private partnership”, governments, contractors and all participants really create the best opportunity to drive the project with higher respect for CSR parameters.
Healthy Stakeholders
Social Performance

Focus on our Staff

Nationality

BESIX Group in Belgium and the Netherlands represent a cross-section of society in general. For instance BESIX, BESIX Nederland BV, BESIX RED, BESIX Sanotec, BESIX Group, CCB, Vanhout, Vanhout Projects, HBS and Cobelba, alone employed 18 different nationalities in 2011.

Age Pyramid

The typical age pyramid within BESIX Group in 2011 is shown in following diagrams relating to BESIX, the major Group operating company.

Nationalities in Belgium & Netherlands

*Others: Moroccan, Argentinian, Chilean, British, Greek, Latvian, Luxembourgish, Polish, Russian, Turkish, Togolese, Nigerian, American, Ukrainian, Ethiopian
The BESIX general management strives for a healthy balance in the age pyramid. Quota for the inflow of young employees and workers are defined each year in order to assure the future. Even though the management encourages the recruitment of young people with potential (both employees and workers), it is aware of the crucial importance of the expertise of senior staff members.

Staff members
Year of service/number of staff members 2011
Employees and workmen from BESIX, BESIX Sanotec, BESIX RED, BESIX Group, Vanhout, HBS, Vanhout Projects, Cobelba

In the Group, BESIX is a significant example. Among the staff, young employees between 25 and 30 years are well represented and many of them hold a university degree. The age cohorts which are numerically most represented in the BESIX workforce are those of 30-35 and 35-40 years of age, as well as that of 40-45 years years of age.

Manual workers figure largely in the cohorts of 40-45 and 50-55 years of age. Just as for the white-collar employees, the 50-55 cohort remains large. Most of these people spend the whole of their careers within the Group.

Training courses
Special training for talents of tomorrow
The General Management Training (“GMT”) course aims at integrating the knowledge and skills required to perform at managerial level. It is complementary to the general training path.

The GMT objective is development on the one hand and networking on the other.

The training course is organized and monitored by BESIX Group and delivered by the UAMS (Universiteit Antwerpen Management School). It consists of 5 modules, partly tailor-made, as the content is adapted to the BESIX Group business and model.

Well-being at work
Sport, a way of life
Integrating sport into professional life is part of the corporate culture. Benefits for both workers and the company are obvious: lower absenteeism due to illness; employee satisfaction; lower personnel turnover; higher productivity and a positive self-image.

BESIX Group encourages a healthy sports-based lifestyle for all staff members. The Group supported the participation of its staff members in several initiatives, such as:
- 20 km of Brussels
- Crealys ELA “Inter-Enterprise” jogging
- intra-group companies football competition
- climbing the Col du Galibier in France (“Climbing for Life”)

A fitness centre opened at BESIX HQ in April 2011, and this reinforces the general philosophy of well-being at work.
Bonus approach

Common effort, sharing success

A system of collective bonuses and an individual bonus is to reward, within a single reward strategy, the performance of the individual and the company, subject to relevant local legal constraints and conditions.

- The Discretionary Individual Bonus aims to reward staff members on the basis of their contribution and attitude, and the evaluation which is made during the job appraisal session at the end of each year.

- The Collective Bonus in Belgium aims at rewarding all staff members for the good results of two of the company’s value creators measured against predetermined objectives.

The Collective Bonus is decided according to clearly defined objectives: reaching the targeted EBITDA (“earnings before interest, tax, depreciation and amortization”), reducing DSO (“days sales outstanding”), limiting AF (“accident frequency”), bringing in the necessary profitable NOS (“new orders signed”).

Eco vouchers

Ecological purchasing should become part of every consumer’s thinking. As a consequence, BESIX has decided to offer eco vouchers to its employees in Belgium. With these vouchers, employees will be able to purchase products or services of an ecological character, with the European ecological label.

Eco vouchers are a welcome financial perk.

Quality, Health & Safety

QHSE skills and related training courses

Some 138 BESIX employees and 182 BESIX manual workers, both active in the Benelux-France area, attended HQSE courses during 2011, and this represents 3,544 hours.

Some 37 employees and 40 workmen followed a VCA** training course.

The first aid training course was organized for 15 staff members and 37 staff members followed a recycling course and that is twice as many as is legally required in Belgium.

Further, some 31 employees had their awareness raised by a day’s training course called “Evacuation & extinguishers”.

QHSE 2011 Training – Employees
Each year since 2010, for the communities in which BESIX Group operates, BESIX, in collaboration with BESIX Foundation, has organized a three-day technical training course in its warehouse close to Brussels and on site; the training course is intended for young, sometimes underprivileged, adults who want to start their professional life in the construction sector. In this context also, our HSE specialists provide them with a ½ day of HSE training.

Internal communication

Social Dialogue and European Work Council

Most of the companies of the Group have their trade unions, who meet on a regular basis with members of the general management. Current and future activities are explained, as well as a social report discussed. In exceptional circumstances, extraordinary meetings can be organized to tackle specific topics at the shortest notice.

Even before companies were legally obliged to do so, BESIX Group decided to establish a European Works Council. With its proactive approach, the Group encourages social dialogue at European level. Its members meet once a year with representatives of the management in order to exchange information on the Group’s objectives and activities in Europe.

Smart breakfasts

Every third Thursday of the month, breakfast is organized at BESIX headquarters. Colleagues present specific topics at these breakfasts and participants have the opportunity to learn from experts within the company and to enlarge their networks.

The last topics in November 2011 and January 2012 related to sustainable construction within BESIX Group and to projects supported by BESIX Foundation.

BESIX communication on CO₂

BESIX launched its yearly action plan. BESIX communicates in a structural manner, both internally and externally, about the CO₂ footprint and the quantitative reduction of its carbon emissions.

A CO₂ newsletter, focusing on the Group’s efforts to reduce its CO₂ footprint, was first published in September 2011. One of the permanent CSR objectives is to further communicate on this topic on a regular basis.
BESIX Group decided to initiate and promote setting up Environment Management Programmes in the Group companies.

In line with its ISO 14001-certification progress, BESIX issued in 2011 its first Environment Management Programme.

It concentrated its objectives on reduction of CO₂ emissions, behavioural change management, awareness and training, and environmentally friendly applications on construction sites.

For 2012, BESIX’s environmental focus will be on:

- awareness and training of staff members on environmental aspects
- reduction of CO₂ emissions
- increasing the use of renewable energy
- reduction of paper and ink consumption
- increasing awareness of projects so as to be respectful of the environment
- rise in solar panels produced: from 1,224 kW (2011) to 1,559 kW (2012).

Since the greater part of the BESIX annual objectives concerns reduction of CO₂ emissions related to energy use, an Energy Management Programme for 2012 was drawn up, as part of the Environmental Management Programme (EMP).

The EMP is endorsed by the management and is drawn up for a period of five years, but the programme will be reviewed on a yearly basis during the management review as per ISO requirement and approved for the following year.

The BESIX EMP inspired BESIX Group in the setting of some of the CSR Group objectives in relation to energy use and management.

Reduction of CO₂ emissions

In the context of the Kyoto protocol, the European Union has obliged Member States to cut back their greenhouse gas emissions.

BESIX Group is convinced of the necessity of managing its own CO₂ footprint and of implementing the necessary measures in order to reduce emissions.

Energy consumption will therefore be reviewed in future years and the means of reaching this goal will be assessed. Each BESIX Group Company, especially in Europe, is aware of this and makes daily efforts to reach a target set at company level.
The CO₂ Performance Ladder

In 2009, as a reaction to Dutch legislation on the purchase of sustainable resources, ProRail (the task organization in charge of maintenance and extension of the Dutch national railway network infrastructure) developed the CO₂ Performance Ladder. In March 2011 ownership was transferred to an independent ‘Foundation for Climate-Friendly Procurement and Business’ (SKAO).

For ProRail tender procedures this can give the tendering company a preferential discount of 10% on the tender price.

Recently, the Dutch Roads and Waterways Authority (Rijkswaterstaat) also introduced the Performance Ladder with a 3% discount factor.

As part of Belgium’s largest construction group, in 2009, BESIX started monitoring its carbon footprint in the Netherlands. After an initial level 3 certification, in March 2010 (4% discount) and an intermediate assessment in early April 2011, BESIX made the move to level 5 (10% discount) in just over half a year (October 2011).

Since the execution of the construction works in the Netherlands depends largely on assets based in Belgium (equipment, knowledge and support), the selected Organizational Boundary is enlarged to:

- BESIX Nederland Branch;
- BESIX Nederland BV;
- Franki Grondtechnieken BV;
- BESIX Group, Brussels Headquarters;
- BESIX Auxiliary Centre, Sint-Pieters-Leeuw.

“Building a healthy environment means understanding the environmental impact of our activities and introducing preventive measures to control and improve them. The CO₂ Performance Ladder is an excellent resource and management tool for this purpose. It also enables us, and other companies in the sector, to express a much greater sense of social responsibility.”

Johan Beerlandt, Chief Executive Officer, BESIX Group

“The CO₂ Performance Ladder is a procurement tool to encourage companies to be aware of their CO₂ emissions (and those of their suppliers), and to be permanently on the lookout for new ways to save energy, use materials efficiently, and to use renewable energy.”

(source: SKAO)
CO₂ reduction measures

The introduction of an Energy Management Programme enables BESIX to identify energy-gobbling equipment or activities and decide on actions that produce significant savings.

The CO₂ Performance Ladder has clearly identified the following energy flows that account for 80% of the total BESIX carbon footprint:

- Electricity use in permanent office facilities;
- Fuel consumption for equipment and heating;
- Mobility/Personal transport (use of lease and private cars for commuter traffic and business related traffic).

Improvement and reduction measures are therefore being focused primarily on these three elements, both in the Netherlands and in Belgium.

Solar panels

BESIX Group companies make an effort to reduce their own environmental impact related to energy use.

Some of them, like Vanhout, West Construct and the steel reinforcement Cut & Bend facilities of Cobelba as well as BESIX have installed solar panels (photovoltaic panels or PV panels) on some of their buildings.

These installations are amongst the largest investments of BESIX Group in its effort to achieve its CO₂ reduction objectives.
In December 2010 a PV-installation of 877 panels (1.6 m² each) was placed on the roofs of the steel plant in Sint-Pieters-Leeuw (Belgium). In 2011, the installation generated an output of 199,626 kWh, equal to one third of the annual electricity needs of the entire site and 14.7% above the predicted theoretical capacity of 174,100 kWh/yr. The surplus in electricity is returned to the electricity network.

As a result, the annual electricity use has dropped dramatically compared to previous years:

The campaign turned out to be a success:

– 17 BESIX employees have individually decided to avail themselves of this opportunity;
– Locations are in all regions of Belgium:
  – Brussels: 2 PV systems;
  – Flanders: 3 PV systems;
  – Wallonia: 12 PV systems.
– The total installed capacity is 92.84 kW/yr.

**Energy audits**

In 2011 energy audits were performed in several BESIX offices in Belgium and the Netherlands, including the steel plant in Sint-Pieters-Leeuw. The audits showed a significant potential for energy use reduction in all companies.

For 2012 further audits are planned for offices in Belgium, with subsequent improvement measures to be integrated into the CSR objectives and action plans.

**Fuel consumption for equipment and heating**

The above-mentioned energy audits also provided information on potential reductions on gas improvements related to HVAC adjustments in head office in Brussels.

**Purchase of renewable energy**

BESIX decided to purchase renewable energy (from Scandinavian hydroelectric power stations) for the construction site offices for the years 2010 and 2011. With the certificates of origin as evidence, BESIX reduced CO₂ emissions for this parameter by 301 tonnes.

**Mobility and personal transport**

As the BESIX carbon footprint shows, one of the most significant producers of CO₂ is traffic related to personal transport. Therefore, intensive efforts are being made to improve performance and to tackle harmful car emissions.
As one of the objectives for energy management in 2011, BESIX decided to draw up Company Mobility Plans for its head offices in Brussels (Belgium) and Barendrecht (the Netherlands).

In order to gather the latest information on mobility, including personal input, from employees about experiences with mobility, commuter travel and business trips, an internal survey was launched within the company. With a response of 60%, it was possible to gather a great deal of useful information.

Following a mobility poll at BESIX in 2008, results showed that many staff members working in the same office live in the same area. As a result, carpooling has been encouraged since then.

BESIX Group companies organize carpooling for workmen going to sites on a daily basis. Rotations of buses are then limited. Environmental impacts are monitored in BESIX Group companies with diesel and petrol consumption recorded for each year and regular reporting on this will be included in the CSR objectives for future years.

Car policy

Again BESIX as largest Belgian construction company operating in Belgium has been invited to act as a laboratory for car management and related CO$_2$ emissions.

In order to lower the average value per gram CO$_2$/km, BESIX sets the target of decreasing the average value of 150 g CO$_2$/km (2009) to 120 g CO$_2$/km by the end of 2014. The aim is to lease more and more energy-efficient cars: whenever a company vehicle is to be replaced, BESIX recommends the choice of a less polluting type.

This resulted in a 7% reduction in CO$_2$ emissions for the Dutch lease fleet in 2010 compared to 2009. In 2011 the average CO$_2$ value per lease car fell even further.

In order to consolidate this objective, BESIX introduced a new car policy in 2011, now also including social aspects such as environmental impact, alternative forms of home-work itinerary and cost management. The main focus will be on CO$_2$ reduction, but on the basis of the internal survey other means of transport (modal shift) will be considered as well.

Procedure for air travel policy

In order to enhance cost conscious behaviour and to reduce overall impact, BESIX Group management has decided to implement a Group procedure with
regard to “Requests for Air Travel”. One of the objectives is to avoid ‘less productive’ travelling and a significant drop in \( \text{CO}_2 \) emissions as a result.

**Eco-driving, an energy-efficient or ‘new’ driving style**

Since 2006, BESIX has been encouraging its employees to drive in a more energy-efficient way, in both company and private cars. The New Driving Style, delivered via training, has resulted in a less stressful way of driving with lower fuel consumption, less exhaust emissions and accidents.

**Engagement to a \( \text{CO}_2 \) reduction programme**

In conformity with the requirements of the \( \text{CO}_2 \) Performance Ladder, BESIX has committed itself to a \( \text{CO}_2 \) reduction programme. BESIX reports its \( \text{CO}_2 \) data on a yearly basis online to the Carbon Disclosure Project (CDP) (www.cdproject.net). Thousands of companies worldwide register their carbon footprint on this site, next to their action plan on how they will try to reduce these emissions. In this way, CDP has the largest register on climate change in the world.

In line with the objective for \( \text{CO}_2 \) reduction, but also for cost saving and raising environmental awareness, BESIX has included the following objectives in its Environmental Management Programme:

**Segregation of waste**

The BESIX OVT Utrecht project in the Netherlands applies a strict waste separation system. In order to reach a 10% reduction, stringent measures are taken: more and larger containers per transfer, more separation of different waste products, adding concrete debris as granulated material to concrete instead of road foundations.

With these measures in place a \( \text{CO}_2 \) reduction of 18.7% was realized. The commitment with regard to waste separation appears to have succeeded: 91% of the waste is separated, which means that only 9% of the total waste is disposed of as construction or demolition waste. The rest is either recycled or re-used.

**Paper savings**

All BESIX documents are printed on recycled, chlorine-free paper; a decision that is part of BESIX Group’s environmental policy. Since 2004, BESIX, for instance, with the support of the Brussels Environment Management Institute (IBGE), has been measuring the paper consumption of various internal departments. Administrative employees are invited to pay attention to paper savings.

Ten tips were presented, the most relevant of which are printing only when absolutely necessary, double-sided printing, printing several pages on a single sheet, using scrap paper, sorting waste paper, etc.

A further step in the reduction of paper consumption was the stimulation of digital communication and the use of a virtual platform for document management.

Following this earlier initiative, BESIX will launch a renewed awareness campaign on paper use and printing in 2012. Paper use in the BESIX Head Office and on several major projects in Belgium will be registered.

**Looking towards the future**

Reaching the top of the \( \text{CO}_2 \) Performance ladder is not the end of the road for BESIX. Additional efforts will be made in the coming years to achieve emission reductions of 10% on the \( \text{CO}_2 \) Performance Ladder by 2015.

But BESIX has further ambitions. In 2011 work had already started mapping BESIX’s emissions worldwide, with the help of an external partner, based on the Bilan Carbone® principle.

If we compare \( \text{CO}_2 \) production results during the first semester of 2011 with the base year results of 2009, one can conclude that the objective of an annual reduction of 2% has been reached.

Moreover, in comparison with 2010, the use of lease cars was reduced by 1% and BESIX reduced its electricity use by 6% in 2011. A reduction of 0.2% of petrol used on sites in 2011 also needs to be underlined.
CSR excellence on sites
The RER (regional express) railway is a decisive project for future mobility. In 2010, BESIX Group received awards for some sections of the RER project: Boitsfort-Hoeilaart, Uccle-Bigarreaux and La Hulpe. This is a reference project for BESIX’s ISO 14001 qualification.

This major civil engineering project is located in the Forêt de Soignes, alongside the designated Natura 2000 zones in areas populated by protected bat species and infested by invasive Japanese knotweed which had to be removed. In collaboration with IBGE, the Brussels Environmental Management Agency, a whole series of specific measures have been taken to optimize construction methods with due attention to environmental constraints.

The Hoeilaart section is a beautiful example of caring for nature. The environmental constraints are particularly challenging, especially the need not to disturb hibernating bats and nesting birds when felling trees, removing contaminated soil (to different standards according to the Walloon, Flemish or Brussels region of origin/destination) and the elimination of invasive plants.

The site is an open-air shop window of the various civil engineering techniques.

In order to preserve the fauna, new animal crossings, both big and small, (eco-bridge – 50 m long) in the forest and green protective walls were built, as a passage via which lost fauna can escape.

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In Brussels, Entreprises Jacques Delens built an impressive office complex that is the first building of this size to operate entirely using passive technologies.

In 2010, Entreprises Jacques Delens, in consortium, finalized the construction of an ecological building. The unique architecture and innovative technologies permitted considerable energy savings compared with standard office buildings. A boiler of only 140 kW is used for the entire building! The project incorporates effective, simple and flexible technologies, such as the installation of earth tubing, natural night ventilation with automatic window opening, and the remote control of the blinds depending on the amount of sunshine. The building’s wood-and-metal combination envelope, specially designed for maximum insulation ... All processes that avoid the use of energy-guzzling air conditioning or central heating.

Domotics is a further key innovative element in the success of this undertaking, permitting automated, integrated management of the building’s energy control systems.

A unique, innovative and sustainable project that was granted the IBGE (the Brussels Environmental Management Agency) award ‘Best Buildings’ competition in 2010.
Project: Lanaye Locks
2011
Belgium

The project consists of the construction of a fourth lock between the Albert Canal and the Meuse in Lanaye. The consumption of concrete will amount to approximately 200,000 m³.

The client requested that the contractor should use a concrete mixing plant on site in order to minimize the noise nuisance experienced by inhabitants and reduce material transport by lorries through the small surrounding villages. BESIX followed these rules, but went even further.

At the procurement stage, BESIX launched a study to see whether it was possible to re-use the excavated soil from the lock instead of gravel in the concrete.

After analysis of the cores obtained through soil investigation, the BESIX team found that the appropriate primer can be used for the production of concrete. Together with the environmental specialists, the team looked for an ecological way to excavate gravel and use it in the concrete. The planning department created a plan in order to indicate which excavation can be done and at what time. This was tested for the production of concrete, so that sufficient gravel was always available to make the structure. With some working float in the schedule, it was possible to procure sufficient raw material and to guarantee the production of concrete at all times throughout the execution of the lock.

This decision to make concrete was also made with the intention of reducing CO₂ and this innovative solution contributed towards a CO₂ reduction of approximately 55,000 tonnes.

Alternatives can also occur from a logistics point of view. For example in place of building a new road through the mountains as planned for the Tangier Med II project, the team decided to use existing roads for transportation of quarry materials to limit the impact of transportation through villages.

Preservation of surrounding nature

For a green building, the design, construction and operation have two main objectives:

- Reduced environmental impact – careful material selection, targeted reductions in water and energy consumption, and effective systems for protection of the environment during construction and operation.
- Healthier environment for the building’s occupants – improved thermal comfort, natural lighting and air quality for occupants during construction and operation.
Project: Carpe Diem
2010
Paris, France

HQE (very good) & LEED (Gold) certifications

BESIX, in association, is realizing the Carpe Diem tower project, designed by the Robert AM Stern Architects of New York and the French SRA Architects. The 163-metre tower will provide 44,000 m² of office space, together with an auditorium, restaurant areas, retail premises, a winter garden and a hanging garden accessible from the terraces.

It will also be the first project with double environmental certification. The project has been included in both of the following categories: HQE®- certificate (Haute Qualité Environnementale) and LEED® (Leadership in Energy & Environmental Design) certificate – core & shell 2.0 – at GOLD level, and this is a first in France.

Amongst other things, the pollution prevention plan limits the disturbance that is permitted to surrounding areas.

In order to reduce drinking water consumption, two methods are used. Firstly, collection of rainwater from roofs and façades for sprinkling green spaces. Secondly, re-use of grey water (from wash basins) for flushing toilets. This method, combined with the installation of economical washroom facilities, can reduce the consumption of drinking water by 40% in this building.

Energy needs are optimized thanks to various options: thermal performing façades selected, solar panels to provide hot water, heat pumps using phreatic strata, use of active chilled beams.

Thanks to these measures, the tower saves more than 35% energy, as defined by ASHRAE 90.1 appendix G, meaning the highest performance as defined by LEED®.

Air coolers were carefully selected to minimize their impact on the ozone layer and an increase in the greenhouse effect.

Technical and architectural solutions incorporated into this tower were undertaken to meet the requirements of both LEED® certification and THPE label ("Très Haute Performance Energétique"): Materials were mainly selected according to environmental criteria in order to reduce the use of virgin raw materials and CO₂ in production and transport (at least 20% of recycled construction products and materials and at least 20% of local products).
Although space is limited, 80% of demolition/construction waste has been segregated in specific containers (wood, metal, aerosols, dangerous waste). Some waste is also recycled (metal, carton, paper, glass, plastic).

Renewing air, transfer limitation on pollutants between spaces, control of thermic and visual comfort conditions are important points that have been taken into account.

Maintenance of the building includes ecological cleaning during the exploitation phase.

An environmental education programme explains to future users/inhabitants/tenants all the environmental and technologic improvements to this tower. BESIX played an extremely important role in the realization of this building as the company implemented these environmental standards and of the architectural and technical solutions during the construction phases.

All those involved directly or indirectly in this ambitious project (subcontractors, decorators, design department, contractor, …) are very proud to be associated with it. This tower will become an example for the European building market which is not yet totally ready for this type of project but which is positively moving in that direction …
Project: Limburg Locks
2011
the Netherlands

In Dutch Limburg, BESIX-Mourik JV is realizing large works on the lock complexes at Born, Maasbracht and Heel. BESIX is handling mainly the civil engineering works. Up to the end of 2012, BESIX will be mainly stabilizing the lock chamber walls, adapting the inhibitor and guidance systems and extending certain lock chambers. In each complex one lock chamber is being lengthened from 140 to 225 metres. This will make the Maas route accessible to larger convoys.

Working well below surface level, the proximity of water and the continuous shipping traffic create inevitable working risks. For this reason, the JV is acting very strictly in terms of people and site safety. Safety measures include stringent administrative requirements and a safety induction movie shown to everyone before they start work on the site, in order to create a safe environment and a high degree of safety awareness.

The project team went further by creating a method, “Measure = knowledge” to measure the project’s safety level, including the increased awareness of all stakeholders.

Project: Nursery
2010
Brussels, Belgium

Low energy development

BESIX Real Estate Development and Entreprises Jacques Delens realized a building to accommodate a nursery on 2 levels for 72 children. This nursery meets the requirements for sustainable buildings with the development, amongst others, of a very extensive built volume, a system of double insulation, heat pump, solar panels and a green roof.
Project: Bpost
2011
Verviers, Belgium

In Verviers, Bpost, the Belgian postal services, wanted a new ‘logistics hub and mail distribution’. This project also included a maintenance aspect and a guarantee relating to energy consumption for a period of 10 years. The Wust ‘Industrial project’ team presented the design of the building in 3 different versions, namely: a building meeting the PEB (‘Performance Energétique des Bâtiments’) requirements for its class, a ‘low energy’ building, or a ‘passive’ building.

Project: Nursery
2011
Spa, Belgium

At Spa, Wust built a city nursery that is a passive building. Wust used innovative technologies such as injecting a 36 cm-thick cellulose insulating layer into walls inside the building structure ... This project became virtually an ‘example’ for the company, as it made it possible to provide in-depth practical training of project staff in general, but also to make this training and know-how more widely available in the company.

A first for Wust:
The PEB* Certificate for the nursery in Spa

This classification can be gained by fulfilling the following criteria:
- coefficient $K \leq 15$ for the overall insulation of the building,
- a performance level of $E \leq 30$ corresponding to consumption inferior to 85% of a traditional type,
- a level of effective air-tightness ($\leq 0.6$ Volume/h).

*PEB : Performance Energétique des Bâtiments
Project: AMCA
London Tower
2010
Antwerp, Belgium

The London Tower is the final piece of the entire site ‘AMCA’ in Antwerp. By its position, use of materials and architectural design, it acts as a landmark at the end of the Slate. It also emphasizes the gateway to an island and the world port that lies beyond.

London Tower was built by Vanhout around a core which is split into an area for housing and a separate core area for offices. Five of the floors are occupied by fully-equipped offices, and the rest of the building consists of 119 apartments. The residential floors have no connection to the office floors. The London Tower annexe has two floors and will be used as a retail area.

The E-level achieved E-70 with a K-level 30*.

Project: VLABO apartments
2011
Niel, Belgium

Stimulated by Vlaanderen Bouwt, Vanhout started on a new housing project in 2011. The project is a group of nineteen individual but linked dwellings around a common courtyard. The construction volume consists of three layers and is divided into three wings. The concept includes both ground floor and mezzanine apartments. The living areas range from 85 to 140 m². All properties are key-in-the-door. The houses were designed with a K value of 30 and an E value (Energy) of 70*. They are built around a wooden frame.

*In Flanders (Belgium), all new homes have been required to conform to an E-number (Energy performance) of 80 or lower since 2010. There are also specific maximum values for insulation (the K-number) with a requirement of maximum K-value 45.
Project: Jardins de Baseilles
2010
Namur, Belgium

‘Eco-suburb’ reference

The ‘Jardins de Baseilles’ eco-quarter at Erpent near Namur (Belgium) was officially launched at the end of October 2010.

The Jardins de Baseilles scheme is the very first eco-quarter project in the Namur region. Built by Cobelba on a 2.30 ha site situated between the N4 and the old neighbourhoods of Erpent, this project now fits within the new development philosophy dictated by the Erpent Master Plan. This plan for high density of housing, a broad mix of activities, shared, multi-generational spaces, reduced motor vehicle traffic, and the application of ecological variables (from water treatment to energy savings).

Project: Synergie & Croissance
2010
Namur, Belgium

A new ‘passive’ building in the Namur region

The new ‘Synergie & Croissance’ (synergy and growth) Business Centre at Wierde, in the region of Namur, is qualified as a ‘passive’ building by virtue of both its design and construction.

This office building comprises four office floor plates in passive areas with an approximate area of 2,000 m², together with planted areas, communal halls and archive rooms in non-passive areas.

The building’s structure consists of wooden glulam beams and columns that are both lightweight and strong. The intermediate floors are made of concrete to store and then redistribute thermal energy.

The construction of this new ‘passive’ building contributes to the environment both through the choice and the use of materials as well as through more rational energy use.

For Cobelba, this project has served as a trial for the construction of a ‘passive’ office building, with certain elements, such as the wooden external wall panel assemblies, being manufactured in its workshops.
Project: Fortis Kanselarij
2006
Brussels, Belgium

Stringent requirements in insulation and energy consumption

The project, started in early 2006, consists of merging 5 separate buildings into a single, functionally and technically coherent structure, linked by a common atrium and able to function as independent units, ready for 3,000 bank employees. This BNP Paribas Fortis complex also contains a new Dealing Room for around 250 dealers, with fully equipped dealer desks. BESIX has to partially refurbish, partially construct these buildings with 70,000 m² in total, while at the same time paying particular attention to open spaces and sustainability.

A reference in the Brussels office market

The project responds to more stringent standards than those prescribed by the current legislation for insulation and energy consumption. The building will be especially equipped with a heat pump and thermo-recovery units.

Even before the start of the works, the project won the Bentley Empowered Award of Excellence for Sustainability in the category ‘BIM for Sustainable Design’ (sustainable design).

Fortis Facility Management, which directed the project, opted for partial renovation instead of full reconstruction as a part of the complex dates back to the 18th century and is subject to very strict conservation rules.

BESIX had then to take care of specific requirements to optimize the sustainability aspect of the office complex: optimizing direct sunlight and the quality of natural light, recycling rainwater, combining heat and power (CHP), geothermal energy, and cooling and heat-recovery ventilation.

Practical completion was reached in early 2012 for this key BESIX reference in Brussels.
Project: ‘Perspective’ complex
2010
Euralille, France

HQE Certification

The construction of the ‘Perspective’ complex at Euralille (France), a project developed by BESIX Real Estate Development and Nacarat, is being executed by a Joint Venture consisting of Rabot Dutilleul Construction (for the earthworks and structural work) and BESIX being responsible for the overall project management and finishing work, the façade and the electro-mechanical installations. The HQE-certified building, with its six floors of offices and shops, technical facilities and parking space on the ground floor, will have a total space of 14,000 m².

The HQE (High Environmental Quality) is an attempt to reduce the use of non-renewable and natural resources, reduce air, water and soil pollution, and avoid modifying ecosystems. In addition, it is intended to limit the disturbance experienced by local residents and colleagues on site, as well as to improve the comfort and health of the future occupants of the building.

Everything has been done to ensure that the ‘Perspective’ project benefits from the most advanced techniques and upgrades necessary to meet the standards of today’s and tomorrow’s comfort: an exceptional situation, the quality of used materials and built to save energy. Shutters will be integrated into the façades, ceilings will radiate heat to maintain a pleasant temperature, hygienic ventilation will retrieve 80% of lost energy, free cooling will be used at night during warm periods, and rainwater will be recovered for sanitation …

This project is not only an architectural innovation, but also anticipates the latest environmental requirements and standards.

Beyond 2012, the building is looking forward to BBC certification (Low Energy Consumption Building), with a principal reduction of 50% of primary energy consumption in order to achieve an optimal balance between comfort and energy economy.
Project: Shopping centre
2010
Nivelles, Belgium

BREEAM certification (‘very good’)
The joint venture proposed an ecological alternative for the building, by replacing the bitumen that is manufactured from oil by a PVC non-plastic plasticizer that 100% recyclable.

Light pollution, noise and water consumption are managed on site by strict procedures. Photovoltaic panels are used to lighten site panels. Energy consumption, CO₂ production, and possible complaints from local inhabitants are carefully managed by the project team. Paper printing has been minimized and recycled paper is usually used on a daily basis. Part of the materials were also recycled on site when slabs were broken up and used to make site roads and temporary work platforms.
Project: Tangier Med II
2010
Tangiers, Morocco
High Environmental Management

While located in North Africa, this project has been largely completed to Western standards within a consortium formed with major European players, being Bouygues and Saipem. It was thus possible to carry out CSR evaluation based on European parameters and criteria.

In that context, BESIX and its partner SOMAGEC have been awarded a design & build contract for the construction of the Tangier Med II harbour. The project’s 1st phase includes the construction of a quay wall for the terminal 4 (1,230 m long); the dredging works of the harbour basin (1 million m³) and the embankment works of the platform for containers (8 million m³). The breakwater has been built by the consortium partner (Bouygues & Saipem). In the optional second phase, terminal 3, which consists of a 1,600 m long quay, an additional 7 million m³ of embankment will be built and 1 million m³ of dredging will be carried out.

This project being one of the biggest in Morocco, is located in an environmentally sensitive area (Strait of Gibraltar), the client conducted an in-depth environmental impact analysis before awarding the project to the consortium.

Some of the measures to mitigate or prevent environmental impacts include actions to be taken by the contractors such as environmental impact studies for specific activities (dredging, reclamation, quarries exploitation, transport, …), air/noise/water quality measurement and analysis on and around the site, weekly inspections, external audits, …

Noise campaign
A noise campaign has been launched by the site team in order to consider the effect of noise on the working environment and particularly on the neighbourhood. A noise map was produced in order to identify the most critical noise areas on site and around. The Moroccan government’s tolerated limit on site is a maximum of 85 dB.

All measures taken in work areas (site access, railway, life base, temporary harbour) are summarized in a database.

In 95% of the areas the noise level was measured at less than 80dB. Four areas recorded a noise level, higher than 80dB. This excess is due to an external parameter, the presence of a main road and a motorway. In these 4 areas, the external car traffic adds to the noise.

The working environment is also subject to noise during some activities: welding, concrete mixers, lorries, generators, alarms at the concrete mixing plant.

A range of prevention measures has been taken to improve the situation for employees such as: ear plugs are available from permanent boxes fixed to walls close to noisy areas. Ear protection with a greater degree of comfort and a higher level of protection are given to workers in the workshops, for example.

Other apparatus to measure the air quality such as dust and the water quality have been mobilized to lead joint inspections and analysis with the consortium partner of the project.
Environmental Impact Study
BESIX and its partners have launched an Environmental Impact Study for the selection of the area at sea for dumping 1 to 2 million m$^3$ of dredged materials. This study has been awarded to Creocean which has conducted detailed seabed analysis with video, samples of phyloplanctons (base of the food chain) from 50 to 100 m depth, current analysis, fauna and flora inventory, public and fishery worker enquiry, fish behaviour analysis, leading to a detailed list of preventive measures.

Another Environmental Impact Study has been done to find the best solution for the transport of quarry materials via either the existing road (27 km) or construction of a new track through the mountains (13 km).

Environmental Award & Mentality
The site team has decided to encourage all its members to help in developing a better mind-set and reactions in relation to the environment by presenting an environmental award given in January 2011 to the best employee and best team. These employees were spontaneously applying precautionary measures in order to avoid oil spills on site. Many toolbox meetings, training courses, … have been given by the HSE site team or external specialists to increase the level of safety awareness of the employees such as miscellaneous spill kit use (onshore and offshore), segregation of wastes, tidiness on site, …

The Tangier Med II project was also nominated for the 2011 BESIX Chairman Award for its technically innovative lifting clamp for quay blocks.
International & Middle East

Aware of CSR
Aligned with the local trend

Business sustainability
Sustainability Performance

Healthy Stakeholders
Social Performance

Nature
Environmental Performance

CSR excellence on sites
Aware of CSR
Aligned with the local trend

**BESIX Group** pursues, mainly through its subsidiary Six Construct, its **CSR actions abroad**, especially in the Middle East where a real vision of sustainability has been developed. This region of the world is aware that preserving the environment and the well-being of future generations has to be part of their present way of living. The **Abu Dhabi’s Plan 2030** is a concrete example of their commitment such as the **ESTIDAMA programme** which has become a symbol for their future development. Other **Emirates and Kingdoms in the Middle East** are following this mindset.

**Six Construct at a glance**

In the Middle East, BESIX Group operates mainly through its subsidiary Six Construct which has been engaged in the construction field since 1965 with its main offices located at Sharjah, Abu Dhabi and Dubai in the UAE as well as in Qatar, in the Sultanate of Oman, in the Kingdom of Bahrain and in the Kingdom of Saudi Arabia, and has successfully executed numerous prestigious and landmark projects in the region.

The scope of projects undertaken by Six Construct is building, marine, environmental, industrial and infrastructure construction projects. Additional services are offered to clients such as design capability, project financing, operations and maintenance, facility management.

Six Construct seeks to embed the sustainability aspect into its operations. Services delivered contribute significant benefits to the community and provide employment for around 13,000 employees.
Trends and opportunities relevant to Six Construct

- Globalization and the rise of the Chinese and Indian economies impacting on the demand for building and infrastructure projects and other business opportunities;
- The availability and cost of raw materials and water as populations grow and it is anticipated that key natural resources will become scarce in arid regions. This impacts the way of managing waste, sourcing materials and conserving water resources while also presenting new commercial opportunities such as water and wastewater treatment technologies;
- Increasing costs of energy (for fossil fuels) and the price of carbon will encourage Six Construct and its clients to seek low-carbon opportunities to reduce costs and to increase security of supply;
- The availability of finance could determine investment priorities and hence the size and nature of future market opportunities;
- The attraction and retention of skilled workers will be influenced by their perception of which businesses respond effectively to their corporate responsibilities, including the possibility of making a real difference to society’s sustainability challenges.

Highlights in 2010 and 2011

- Entering new arenas
  As the construction world is moving towards Green Building construction requirements, the challenge is to focus on the significant opportunities in this particular construction sector. Few major projects have been signed and Six Construct adapted its construction methods to suit these new requirements.
- Informing the supply chain stakeholders
  In relation to this new method of construction, suppliers and subcontractors followed extensive training courses delivered at site level in order to inform and enforce Green Building requirements and sustainable procurement methods.
- Engaging employees on the sustainable path
  Sustainability courses have been organised for employees involved in sustainable projects to engage them in the general philosophy and required construction methods.
- Helping clients to make sustainable choices
  The design capability in all types of projects undertaken enables us to advise clients through value engineering of sustainable choices and possible savings at the design stage.
- Waste segregation and recycling
  Most projects now segregate their solid wastes and, wherever possible, depending on local arrangements, send these for recycling in order to avoid general disposal via landfill.
- Helping local communities experiencing environmental improvements
  In Ajman, the Six Construct waste treatment plant is designed to re-use treated water for agricultural and irrigation purposes.
Business sustainability
Sustainability performance

Six Construct is accomplishing sustained economic, environmental and social developments, building on its Management Systems.
Mid-term strategy, corporate governance, ethical management, risk management and environmental management are the key factors to sustainability management. While they comply with BESIX Group’s CSR vision and plans as reflected in the Corporate part of this report, focus considers the specific constraints and standards prevailing in the Gulf region.

The main CSR and sustainable management factors are:

- **Economic**: for more than 40 years the Group has been committed to building a successful and sustainable business;
- **Environment**: the Group is committed, with its suppliers and clients, to reducing unnecessary waste at order stage (bulk orders where possible), reducing and recycling in principle, reducing water and energy consumption and protecting biodiversity in the most practical way wherever possible;
- **Society**: the Group is committed to providing better prospects for colleagues and staff by offering opportunities for development and learning and to creating safe and healthy working conditions while supporting local communities and respecting their living traditions and environment whenever possible.


In 2005, therefore, Six Construct’s management decided to develop and set up an Integrated Management System (IMS) to address issues with regard to the Quality, Occupational Health and Safety, and Environment aspects of their activities, to ensure optimal client satisfaction and to have a standardized operating system across their projects and overall operation.

IMS permits the activities to be controlled so as to respond holistically and effectively to the strategy defined by management, to the local regulations and to the requirements of other external sources.

“In the Gulf countries, environmental awareness has been rising in the construction industry for a decade now. Standards are set locally with reference to ISO 14001, with stringent legal requirements and with strong practical implementation at project level. Our contracting working environment is changing in the direction of Sustainable Development (with LEED and ESTIDAMA-Certified Projects), and Six Construct has taken initiatives to secure its position in this ever-changing market.”

*Patrice Thomas, BPS Manager, Six Construct*
Following certifications were granted in July 2010 and are valid until 17 July 2013:

- ISO 9001:2008 (Quality Management Systems)
- ISO 14001:2004 (Environment Management Systems)
- OHSAS 18001:2007 (Occupational Health & Safety Management Systems)

A specific challenge that could be realized in relation to those three systems was to achieve ‘Multi-Site Certification’ for Six Construct and affiliated Group companies, covering the UAE, Qatar, Oman and Bahrain.

As a result, BESIX Group Global Clients in the Middle East are guaranteed standardized working methods and product delivery even across country borders.

Excellence in 2010 and 2011 resulted in awards from engineers’ associations and public authorities.

First, the Burj Khalifa won the 2010 Icon Award, including Six Construct’s participation in innovation in planning, design and execution delivered by the Council for tall buildings and urban habitat.

On June 14, 2006, Six Construct obtained from the Hamriyah Free Zone authorities a certificate of appreciation for the Inner Harbour Phase 3 & 4 project and was nominated by the same authorities ‘Top 3 – 2011 contractor’ on 27 June 2011.

A panel of engineers’ associations in the UAE, Oman, Qatar and Bahrain designated Six Construct as the winner of the GCC Leisure & Tourism Project 2011 for the Ferrari Experience, Yas Island in Abu Dhabi and of the Cadillac Transport Project 2010 for the New Garhoud Bridge realized in 2010.

As part of its social and professional engagement, Six Construct is an active member of the UAE Contractors Association.
Diversity and Nationalities

Business in the Middle East results undoubtedly and necessarily in permanent care for diversity and respect for cultures and living traditions. As an example, the Six Construct magazine is published in Hindi as well.

The nationalities represented, the categories of employees and the age pyramid as in 2011 are reflected in the tables below:
Living conditions of workers

Six Construct maintains ten base camps in Abu Dhabi, seven in Dubai, seven in Sharjah, Ajman and Ras Al Kaimah, two in Qatar and one in Bahrain.

Some of these are owned by Six Construct, other are rented from public authorities.

Even before it came into force, Six Construct strictly complies with Cabinet Decision n° 13 of 17 March 2009 approving for the UAE the General Standards Manual for Group labour accommodation and related services.

That legislation stipulates that a licence must be obtained for any labour accommodation for 500 workers or more. This rather recent regulation is an addition to the Ministry of Labor Decision (n° 32) of 1982 laying down preventive measures for the protection of workers at work.

The related services mentioned above include the availability of grocery stores and first aid services.

Six Construct surpasses strict compliance with the prevailing regulations. For instance, Six Construct installed air conditioning facilities in workers’ accommodation as early as the 1990s.

Further, Six Construct set a new standard in the local construction industry by providing all workers with overalls and safety shoes instead of the everyday clothing that they were wearing at work.

Six Construct also takes care of the daily needs such as meals, specific additional food stuffs, shuttle services to the nearest city when the site or the base-camp is decentralized, shops with local products, catering, … Moreover, Six Construct makes the necessary arrangements for its workforce to perform traditional ceremonies (Indian New Year, Blessing of the Tools, …).

Training is also organized, in the Six Construct training centre in Abu Dhabi, and this makes it possible for workers to expand their knowledge.
Workers in the Middle East have to work in hot climatic conditions. Six Construct decided to provide workers with high performance sugarless re-hydration drinks. A total amount of 460 kilos of Aqualyte solution was provided to workmen during the summer of 2011.

### Six Construct Training Centre (STC)

<table>
<thead>
<tr>
<th>Description</th>
<th>Certified 2008</th>
<th>Certified 2009</th>
<th>Certified 2010</th>
<th>Certified 2011</th>
<th>Certified Cumulative</th>
<th>Inducted Cumulative</th>
<th>Percentage Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen/Foreman</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>65</td>
<td>67</td>
<td>107</td>
<td>63%</td>
</tr>
<tr>
<td>Foreman I</td>
<td>14</td>
<td>47</td>
<td>14</td>
<td>35</td>
<td>110</td>
<td>185</td>
<td>59%</td>
</tr>
<tr>
<td>Foreman II</td>
<td>38</td>
<td>88</td>
<td>38</td>
<td>28</td>
<td>192</td>
<td>355</td>
<td>54%</td>
</tr>
<tr>
<td>Gang Leaders</td>
<td>94</td>
<td>291</td>
<td>94</td>
<td>1</td>
<td>480</td>
<td>732</td>
<td>66%</td>
</tr>
<tr>
<td>Carpenters</td>
<td>589</td>
<td>1,053</td>
<td>577</td>
<td>407</td>
<td>2,626</td>
<td>2,925</td>
<td>90%</td>
</tr>
<tr>
<td>Steel Fixers</td>
<td>616</td>
<td>805</td>
<td>210</td>
<td>207</td>
<td>1,838</td>
<td>2,028</td>
<td>91%</td>
</tr>
<tr>
<td>Masons</td>
<td>541</td>
<td>854</td>
<td>299</td>
<td>322</td>
<td>2,016</td>
<td>2,146</td>
<td>94%</td>
</tr>
<tr>
<td>Plumbers</td>
<td>84</td>
<td>44</td>
<td>15</td>
<td>20</td>
<td>163</td>
<td>172</td>
<td>95%</td>
</tr>
<tr>
<td>Scaffolders</td>
<td>29</td>
<td>57</td>
<td>369</td>
<td>97</td>
<td>552</td>
<td>584</td>
<td>95%</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>25</td>
<td>64</td>
<td>4</td>
<td>93</td>
<td>126</td>
<td>74%</td>
</tr>
<tr>
<td>Total</td>
<td>2,005</td>
<td>3,266</td>
<td>1,680</td>
<td>1,186</td>
<td>8,137</td>
<td>9,360</td>
<td>87%</td>
</tr>
</tbody>
</table>
The HSE programme and performance

In the OSHAS 300 (for 200,000 hrs) system applicable to Six Construct, the objectives are:

<table>
<thead>
<tr>
<th>Targets</th>
<th>Frequency Rate</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0.658</td>
<td>End of 2011</td>
</tr>
<tr>
<td>2.</td>
<td>0.645</td>
<td>End of 2012</td>
</tr>
<tr>
<td>3.</td>
<td>0.638</td>
<td>End of 2013</td>
</tr>
</tbody>
</table>

At the end of 2011, the cumulative Frequency Rate of Six Construct has reached 0.404 and fulfills the above.

The diagram below shows the continuous progress of Six Construct from 2003 to 2011.

The improvement mentioned above is also the result of the significant effort with respect to training courses organized in the field of HSE.

The diagram below shows the skill areas in which HSE training courses have been organized on an annual basis and the number of each.

HSE Trainings                          | 2008 | 2009 | 2010 | 2011 |
---------------------------------------|------|------|------|------|
Scaffold Inspection & Scaffold Awareness | 13   | 73   | 88   | 128  |
Fire Fighting                          | 23   | 46   | 20   | 37   |
Safe Rigging and Slinging              | 76   | 145  | 45   | 55   |
Confined Space Entry                   | 53   | 99   | 22   | Nil  |
Training on Work Permit                | Nil  | 37   | 13   | Nil  |
HSE Awareness Training & Job Safety Analysis | 53   | 82   | 38   | 46   |
Power Tools                            | Nil  | Nil  | 60   | 18   |
## Training Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Senior Staff</th>
<th>Staff</th>
<th>Safety Staff</th>
<th>Labour</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>71</td>
<td>0</td>
<td>19</td>
<td>8</td>
<td>44</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>160</td>
<td>2</td>
<td>21</td>
<td>10</td>
<td>127</td>
<td>71</td>
</tr>
<tr>
<td>2003</td>
<td>157</td>
<td>6</td>
<td>36</td>
<td>6</td>
<td>109</td>
<td>25</td>
</tr>
<tr>
<td>2004</td>
<td>260</td>
<td>37</td>
<td>54</td>
<td>31</td>
<td>138</td>
<td>72</td>
</tr>
<tr>
<td>2005</td>
<td>288</td>
<td>63</td>
<td>59</td>
<td>28</td>
<td>138</td>
<td>34</td>
</tr>
<tr>
<td>2006</td>
<td>102</td>
<td>34</td>
<td>19</td>
<td>10</td>
<td>39</td>
<td>34</td>
</tr>
<tr>
<td>2007</td>
<td>139</td>
<td>32</td>
<td>33</td>
<td>47</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>2008</td>
<td>797</td>
<td>260</td>
<td>286</td>
<td>53</td>
<td>198</td>
<td>295</td>
</tr>
<tr>
<td>2009</td>
<td>861</td>
<td>288</td>
<td>126</td>
<td>82</td>
<td>365</td>
<td>347</td>
</tr>
<tr>
<td>2010</td>
<td>328</td>
<td>62</td>
<td>34</td>
<td>47</td>
<td>185</td>
<td>198</td>
</tr>
<tr>
<td>2011</td>
<td>565</td>
<td>174</td>
<td>33</td>
<td>31</td>
<td>327</td>
<td>215</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,163</td>
<td>958</td>
<td>720</td>
<td>353</td>
<td>1,697</td>
<td>1,331</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>Senior Staff</th>
<th>Staff</th>
<th>Safety Staff</th>
<th>Labour</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2%</td>
<td>0%</td>
<td>27%</td>
<td>11%</td>
<td>62%</td>
<td>11%</td>
</tr>
<tr>
<td>2002</td>
<td>5%</td>
<td>1%</td>
<td>13%</td>
<td>6%</td>
<td>79%</td>
<td>44%</td>
</tr>
<tr>
<td>2003</td>
<td>5%</td>
<td>4%</td>
<td>23%</td>
<td>4%</td>
<td>69%</td>
<td>16%</td>
</tr>
<tr>
<td>2004</td>
<td>8%</td>
<td>14%</td>
<td>21%</td>
<td>12%</td>
<td>53%</td>
<td>28%</td>
</tr>
<tr>
<td>2005</td>
<td>9%</td>
<td>22%</td>
<td>20%</td>
<td>10%</td>
<td>48%</td>
<td>12%</td>
</tr>
<tr>
<td>2006</td>
<td>3%</td>
<td>33%</td>
<td>19%</td>
<td>10%</td>
<td>38%</td>
<td>33%</td>
</tr>
<tr>
<td>2007</td>
<td>4%</td>
<td>23%</td>
<td>24%</td>
<td>34%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>2008</td>
<td>25%</td>
<td>33%</td>
<td>36%</td>
<td>7%</td>
<td>25%</td>
<td>37%</td>
</tr>
<tr>
<td>2009</td>
<td>27%</td>
<td>33%</td>
<td>15%</td>
<td>10%</td>
<td>42%</td>
<td>40%</td>
</tr>
<tr>
<td>2010</td>
<td>10%</td>
<td>19%</td>
<td>10%</td>
<td>14%</td>
<td>56%</td>
<td>60%</td>
</tr>
<tr>
<td>2011</td>
<td>18%</td>
<td>31%</td>
<td>6%</td>
<td>5%</td>
<td>58%</td>
<td>38%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>30%</td>
<td>23%</td>
<td>11%</td>
<td>54%</td>
<td>42%</td>
</tr>
</tbody>
</table>
Training at Six Construct: a large participation and new targets

Training has been mainly organized in 2011 partly with in-house specialists and sometimes with external consultants and specialists, in the skill areas shown in the diagram below.

Training Review for 2011

<table>
<thead>
<tr>
<th>Topic</th>
<th>Ext./Internal</th>
<th>No. Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training on Professional Indemnity Insurance</td>
<td>Internal</td>
<td>9</td>
</tr>
<tr>
<td>Working and Communicating Effectively with South-Korean People</td>
<td>External</td>
<td>31</td>
</tr>
<tr>
<td>Meeting Skills</td>
<td>External</td>
<td>20</td>
</tr>
<tr>
<td>From Expert to People Manager</td>
<td>External</td>
<td>32</td>
</tr>
<tr>
<td>High Rise Buildings</td>
<td>Internal</td>
<td>28</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>External</td>
<td>30</td>
</tr>
<tr>
<td>Equipment &amp; Logistics</td>
<td>Internal</td>
<td>13</td>
</tr>
<tr>
<td>Time Management (with integration of POM)</td>
<td>External</td>
<td>29</td>
</tr>
<tr>
<td>Financial Controlling, Reporting &amp; Budgeting</td>
<td>Internal</td>
<td>0</td>
</tr>
<tr>
<td>Presentation Skills</td>
<td>External</td>
<td>14</td>
</tr>
<tr>
<td>Legal, Contract Management and Insurance</td>
<td>External</td>
<td>16</td>
</tr>
<tr>
<td>Formwork &amp; Scaffolding</td>
<td>Internal</td>
<td>146</td>
</tr>
<tr>
<td>Planning &amp; Productivity</td>
<td>Internal</td>
<td>10</td>
</tr>
<tr>
<td>Concrete Technology &amp; Reinforcement</td>
<td>Internal</td>
<td>23</td>
</tr>
<tr>
<td>Soil Mechanics</td>
<td>Internal</td>
<td>14</td>
</tr>
<tr>
<td>HSE Awareness</td>
<td>Internal</td>
<td>11</td>
</tr>
<tr>
<td>Fire Fighting</td>
<td>Internal</td>
<td>38</td>
</tr>
<tr>
<td>Rigging/Slinging/Banksman</td>
<td>External</td>
<td>55</td>
</tr>
<tr>
<td>First Aiders</td>
<td>External</td>
<td>10</td>
</tr>
<tr>
<td>Job Safety Analysis, Pre-task briefings</td>
<td>Internal</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Six Construct Training Center (Training courses for workmen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenters</td>
</tr>
<tr>
<td>Steel Fixers</td>
</tr>
<tr>
<td>Masons</td>
</tr>
<tr>
<td>Plumbers</td>
</tr>
<tr>
<td>Scaffolders</td>
</tr>
</tbody>
</table>

In 2012, Six Construct proposes a slightly revised training programme to reinforce knowledge management and monitors and promotes the participation of its staff and workers.
Nature
Environmental Performance

CO₂ and waste

In the period 2010 and 2011, Six Construct closely monitored its environmental impacts, both in terms of CO₂ emissions and of waste management.

Environmental impacts 2010

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waste Generation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewage</td>
<td>98,339,235 IPG</td>
<td>447,050,162 Litres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>447,050 m³</td>
</tr>
<tr>
<td>Hazardous</td>
<td>184 Tonnes</td>
<td>577 m³</td>
</tr>
<tr>
<td>General Waste</td>
<td>131,067 Tonnes</td>
<td>409,584 m³</td>
</tr>
<tr>
<td><strong>Resource Consumption</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>175,313,935 IPG</td>
<td>796,977,149 Litres</td>
</tr>
<tr>
<td>Energy</td>
<td>13,498,579 Kwh</td>
<td>22,919,455 Litres</td>
</tr>
<tr>
<td>Diesel</td>
<td>5,041,675 IPG</td>
<td>22,919,455 Litres</td>
</tr>
<tr>
<td>Petrol</td>
<td>367,403 IPG</td>
<td>1,670,214 Litres</td>
</tr>
<tr>
<td><strong>Carbon Dioxide Emission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>13,498,579 kwh</td>
<td>5,804 Tonnes CO₂</td>
</tr>
<tr>
<td>Diesel</td>
<td>5,041,675 IPG</td>
<td>61,424 Tonnes CO₂</td>
</tr>
<tr>
<td>Petrol</td>
<td>367,403 IPG</td>
<td>3,858 Tonnes CO₂</td>
</tr>
</tbody>
</table>

Waste materials sent for recycling

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrap Metal</td>
<td>4,536</td>
<td>Tonnes</td>
</tr>
<tr>
<td>Waste Oil</td>
<td>179,200</td>
<td>Litres</td>
</tr>
<tr>
<td>Paper</td>
<td>6</td>
<td>Tonnes</td>
</tr>
</tbody>
</table>

Total CO₂ Emission

71,087 Tonnes
Environmental impacts 2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waste Generation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewage</td>
<td>93,812,068 IPG</td>
<td>426,469,661 Litres</td>
</tr>
<tr>
<td>Hazardous</td>
<td>242 Tonnes</td>
<td>756 m³</td>
</tr>
<tr>
<td>General Waste</td>
<td>118,781 Tonnes</td>
<td>371,191 m³</td>
</tr>
<tr>
<td><strong>Resource Consumption</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>117,361,653 IPG</td>
<td>533,526,075 Litres</td>
</tr>
<tr>
<td>Energy</td>
<td>9,971,518 Kwh</td>
<td></td>
</tr>
<tr>
<td>Diesel</td>
<td>6,609,049 IPG</td>
<td>30,044,737 Litres</td>
</tr>
<tr>
<td>Petrol</td>
<td>250,541 IPG</td>
<td>1,138,959 Litres</td>
</tr>
<tr>
<td><strong>Carbon Dioxide Emission</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>9,971,518 kwh</td>
<td>4,288 Ton CO₂</td>
</tr>
<tr>
<td>Diesel</td>
<td>6,609,049 IPG</td>
<td>80,520 Ton CO₂</td>
</tr>
<tr>
<td>Petrol</td>
<td>250,541 IPG</td>
<td>2,631 Ton CO₂</td>
</tr>
</tbody>
</table>

Waste materials sent for recycling

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrap Metal</td>
<td>692</td>
<td>Tonnes</td>
</tr>
<tr>
<td>Waste Oil</td>
<td>57,612</td>
<td>Litres</td>
</tr>
<tr>
<td>Paper</td>
<td>80</td>
<td>Tonnes</td>
</tr>
</tbody>
</table>

The performances are encouraging for all selected indicators except for diesel consumption that increased because of project needs and that resulted in a higher CO₂ emission in 2011 than in 2010.

Segregation of waste

Six Construct segregates at least 12% of recyclables produced in the head-office of Dubai and sends these materials for recycling. The company has the objective of implementing a waste management system on minimum 35% of its projects, including separation at source and a recycling process afterwards. This is only possible in countries where recycling is enforced by local authorities. Subject to this, at least 35% of Six Construct’s Projects and Departments are planning the implementation of a segregation and recycling programme, and subcontract to a recycling agency to collect recyclables on their premises.

Paper savings

Six Construct created a recycling centre in its headquarters in Dubai.

In 2009, efforts made by employees to separate waste (started July 2009) helped to recycle 5 tons of paper. In 2010, 6 tons of paper were diverted from landfill and sent for recycling and in 2011, 9 tons.

The objective is to increase awareness amongst employees at source, train office cleaners in waste separation (including the use of coloured garbage bags), and place inspectors near the recycling centre to maintain the separation downstream.
CSR excellence on sites

In the period 2010-2011, Six Construct went for challenges on sites, especially in collaboration with the authorities.
Project: Al Gurm Resort
2010
Abu Dhabi, UAE

The high requirements of the Environmental Agency of Abu Dhabi (EAD)

Six Construct realized a contract for 70 residential villas, infrastructure, elevated roads and bridges in Al Gurm, near Abu Dhabi for ALDAR Properties. This is a part of a mixed-use project containing these villas and a five-star resort. Works started in May 2006 and were completed early 2010. This project took place in and around a sensitive ecosystem, 11 reclaimed offshore islands were built along the mangrove-covered coastline.

The highest standards of care and eco-friendly construction were enforced to safeguard the successful approach implemented from the beginning of the development and in close coordination with the Environmental Agency of Abu Dhabi (EAD). By adhering strictly to the “wildlife first” policy, the development of 1.8 million m² of the built on area will feature only low-rise accommodation for the sole purpose of protecting both the wildlife and the natural flora.

It was crucial to consider environmental aspects before the start of the construction phase. Long-term preservation of the mangroves required specific working conditions and practices.

The client filed an Environmental Impact Assessment (EIA) for the site, and this involved a Construction Environmental Management Plan. Six Construct prepared this plan with a specialist M/s. Dome International for the approval of EAD.

Digging or the use of any tools could cut off the water flow to the mangrove species. Equipment had to prevent any possible fuel, solvent or chemical leaks. Due to dredging and changing environmental conditions in the surrounding channels, silt screens and geo-textile filters, which allowed only water to pass through, were placed around the construction perimeter to prevent contamination of any kind of the surrounding channels.

The works were completed to the great satisfaction of EAD.
Project: Cleveland clinic
2010, Abu Dhabi, UAE
LEED Gold certification

First green hospital in the Middle East

The Six Construct – Samsung Joint Venture is building the world class Cleveland Clinic in Abu Dhabi. Cleveland Clinic will bring a high-quality medical service to its patients in an environment equipped with state-of-the-art amenities.

This is a major challenge in terms of logistics and organization with overall delivery scheduled for May 2013.

Cleveland Clinic is aiming to be the first LEED (Leadership in Energy and Environmental Design) Gold Hospital in the GCC region, and the Joint Venture appointed Sustainability Advisory Group as their LEED project managers to assist them in meeting construction related LEED requirements for the hospital. The LEED project team consists of LEED experts and trained site personnel, all with the shared responsibility of applying the LEED procedure to the project and achieving LEED Gold certification.

“To start such a LEED project you have to be guided and supported by experienced specialists who point you in the right direction and how to implement the procedures efficiently. Considering the size of this site you have to find a way to mobilize all parties at all levels, including the 100 subcontractors (contractual obligation / training / motivation). The implementation on the field of basic tasks with a labour force that is not aware of such requirements (compared to developed countries) is a challenge which requires constant effort and a lot of patience. However the assistance of the Employer / Project Manager, with US background, was a real support” explains Didier Bosredon, Project Director, BESIX.
Energy savings
This means that the design must incorporate energy-saving solutions, that the materials used must be recyclable (wood from controlled sources, minimum of waste, etc.). In practice, this involves making an additional effort at the material procurement and sub-contractor selection stages, as well as in the normal running of the site (selective sorting, increased hygiene, pollution control, on-site wastewater treatment, and air quality in the building, etc.).

LEED stands for Leadership in Energy and Environmental Design and is a green building programme developed in North America. As such, applying LEED in the Middle East requires careful consideration of local climatic factors and the limited access to sustainable construction materials (e.g. access to concrete and steel with sufficient recycled content and access to sustainable timber).

As a green building, the design, construction and operation of Cleveland Clinic aims for two main objectives:

- Reduced environmental impact – careful material selection; targeted reductions in water and energy consumption; and effective systems for protection of the environment during construction and operation.
- Healthier environment for building occupants – improved thermal comfort, natural lighting and air quality for occupants during construction and operation.

The wider reaching benefits of building to LEED standards include:

- Elevating sustainable practices within the UAE construction industry by partnering with suppliers and 80 different subcontractors to source recycled, regionally available (within 800 km) and rapidly renewable materials (renewable within 10 years).
- Lifting the recovery of construction waste in UAE with targets of greater than 75% recycling of construction waste.
- Providing a better environment for the 11,900 construction workers through improved conditions on site (indoor air quality management).
- Delivering training to the 420 project personnel on the merits of green construction techniques.
- Creating buildings with significant operational savings through energy and water efficiency.
- Reducing carbon footprint both during construction and occupancy.
This project is governed by the new environmental standards recently introduced in Abu Dhabi. It had to gain ‘Gold’ certification as part of the American LEED accreditation, with an objective of recycling 75% of waste.”

Didier Bosredon
Project Director, BESIX

High waste management criteria
Cleveland Clinic has adopted LEED New Construction Version 2.2.

The waste and recycling transfer increased from 78.2% in May 2010 to 80.70% in December 2011.

As per requirements for LEED Gold, the project is targeting 75% construction material waste recovery and recycling. To meet this target, strict waste segregation plans and guidelines have been introduced and all subcontractors and project staff need to go through intensive training (combined number of trained staff on site: 11,900).

Most of the recovered waste goes back to various manufacturing processes in the UAE. Some construction waste such as wood or gypsum board is transported directly to a local manufacturing plant for recycling. 100% of the project’s gypsum waste is shipped to a local manufacturing plant to become part of their gypsum board manufacturing process at a rate of 5-10%. As far as we are aware, the project is the first construction site in UAE recycling its gypsum.

Mostly due to the fact that the recycling market in the region is still young, recycling of construction waste has meant some additional costs to the project. However, the processes have simplified waste management efforts on-site and have ensured that achieved diversion rates are very high in the regional context. The Joint Venture is convinced that its efforts have already had a positive impact on the further development of construction waste management efforts in the region.
GRI

BESIX Group
CSR framework objectives
for 2012-2013
Based on the ISO 26000 and GRI drivers in the building sector, BESIX Group fixed the framework, the indicators and the areas where each BESIX Group company is invited to subscribe specific CSR objectives for the period 2012-2013.
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<tr>
<th></th>
<th>SITUATION 2011</th>
<th>OBJECTIVES 2012-2013</th>
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<td><strong>ENVIRONMENT</strong></td>
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</table>
| Development of integrated environmental management systems | • Obtaining of ISO 14001 certifications for Group companies (or recertification)  
• Member of ADEB green Board in Belgium | • New ISO 14001 certifications  
• Performance indicators as to number of training hours on environment per employee  
• Integration of environment criteria and audit in procurement/subcontracting policy |
| Development of green solutions | • Applying new design innovations                                                     | • Development of BIM model for sustainability and monitoring  
• Research on concrete  
• Limiting use of raw material  
• Encouraging recycling of excavated or reused material  
• Performance indicators in waste management |
| Development of sustainable construction operations | • Increasing presence in sustainable construction  
• Associating partners (architects, design consultants, etc.) in CSR attitude | • Continuing to propose sustainable engineering solutions in tendering folders  
• Continuing support for students in their thesis work and research  
• Development of sustainable construction teams  
• Building more certified sustainable buildings |
| Energy consumption | • Limiting energy consumption during the construction process and after its completion | • Statistics on site about energy consumption in Belgium, the Netherlands, France and progressively in other countries for CO2 reduction programme |
| Paper | • Reducing paper consumption                                                        | • Communicating about how to reduce paper consumption  
• Diffusing information about recycled paper and eco printers |
| Transport | • Car & travel policy to reduce fuel consumption and carbon footprint               | • Comparison between statistics 2011 and 2012 for car & air travel |
| Biodiversity | • Minimizing our impact on nature and rehabilitate the natural environment         | • Concrete examples on site |

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<th><strong>HUMAN RESOURCES</strong></th>
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<td>Career management and promotion of employability</td>
<td>– Training planning</td>
<td>– Number of training hours per year, by kind of training and by function for full time employees</td>
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<tr>
<td></td>
<td>– Competency banding system</td>
<td>– Recruitment of new employees</td>
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<tr>
<td></td>
<td>– Recruitment of new employees</td>
<td>– Staff member statistics by diploma, kind of contract, years of service</td>
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<td></td>
<td>– Rising employee satisfaction</td>
<td>– Promoting intergenerational partnerships</td>
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<td>– Satisfaction survey among staff</td>
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<td>Health &amp; safety conditions (Well-being at work)</td>
<td>– H&amp;S campaign</td>
<td>– Absenteeism rate</td>
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<td></td>
<td>– HSE Chairman Awards</td>
<td>– 2nd edition number of cases introduced</td>
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<td></td>
<td>– Member of ADEB safety Board in Belgium</td>
<td>– Number of training hours per year</td>
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<td></td>
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<td>– Monitoring and control of subcontractors performances</td>
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<td>– Coordination QHSE between different companies</td>
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<td></td>
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<td>– Improvement of the participation rate for the Safety Time Out</td>
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<td>– Improvement of frequency and severity rate according to the group companies’ action plan</td>
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<tr>
<td>Non-discrimination issues</td>
<td>– Diversity charter in Belgium</td>
<td>– Performance indicators by gender, age, nationality, junior-senior, by region, by position</td>
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<tr>
<td></td>
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<td>– Anonymous system of CVs</td>
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<td>– Integration in procurement policy</td>
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<th><strong>HUMAN RIGHTS</strong></th>
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<tr>
<td>Support and respect of internationally proclaimed human rights Make sure not to be complicit in human rights abuse</td>
<td>– Self and ad-hoc analysis</td>
<td>– Integration into effective procurement and partnering policy</td>
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### BUSINESS BEHAVIOUR

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<th>Integration of environmental factors</th>
<th>Quality of remuneration systems</th>
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<tr>
<td>“Entreprise Resource Planning” includes social and environmental performances of its main suppliers and subcontractors</td>
<td>Salary policy based on a grading system based on competencies (competency banding system)</td>
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<tr>
<td>Associating partners in the supply chain</td>
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<tr>
<td>Member of procurement associations in Belgium</td>
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<tr>
<td>▫ Comparison of the CO₂ footprint of potential important suppliers</td>
<td>▫ Statistics of internal promotion of staff members</td>
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<tr>
<td>▫ Social and environmental performances of its subcontractors and suppliers respecting its CSR objectives</td>
<td>▫ Statistics about the yearly evaluation interview system</td>
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<tr>
<td>▫ Integrating social and environmental clauses in supplier and subcontractor contracts</td>
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<tr>
<td>▫ Development of a CSR procurement charter</td>
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### CORPORATE GOVERNANCE

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<th>Integration of CSR</th>
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<td>Awareness that CSR activity already exists in the Group</td>
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<td>Publication of Code of Conduct and of Procurement and Subcontracting Code of Conduct</td>
<td>Consolidation and review of CSR ongoing activity</td>
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<tr>
<td>Assessment on staff members</td>
<td>▫ Implementation of a CSR monitoring and promotion dynamic</td>
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<tr>
<td>Integrating the code of conduct for subcontractors and suppliers in pre-qualifications and tenders</td>
<td>▫ Determination of GRI reporting requirements</td>
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<tr>
<td>Informing clients, suppliers and subcontractors</td>
<td>▫ ISO 26000 review by external party</td>
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<td>Group support organization</td>
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<th>Board and committees</th>
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<td>Adoption of good governance rules</td>
<td>▫ Focus on risk management and internal control</td>
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<td></td>
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<tr>
<td>▫ Group Rules monitoring</td>
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## COMMUNITY INVOLVEMENT

<table>
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<tr>
<th>Promotion of social and economic development</th>
<th>Contribution to issues of general interest</th>
<th>Societal impact</th>
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</table>
| - Promote employment and training of local personnel  
- Give preference to local staff and suppliers  
- Support employment of socially disadvantaged populations. Via our business activities but also via education programmes of BESIX Foundation | - Support of local social and economic development via BESIX Foundation (local beneficiaries, staff members involved)  
- Comparison of projects supported by BESIX Foundation (statistics 2011 and 2012): numbers of local beneficiaries, number of Group staff involved, projects supported by region, by Foundation pillars  
- Promoting educational projects  
- Increase of international spread of the support  
- Collaboration with academic world for sustainable construction promotion | - Raising awareness of societal impact of construction via sustainable construction work group, engineering green solutions from Design team, projects supported by BESIX Foundation, internal event with BESIX Foundation to involve staff members  
- Promoting on markets awareness of CSR issues that results in incentives to the CSR promoters when competing with lower CSR performers  
- ISO 26000 as a certification method  
- Performance indicators for the Group’s sustainable construction teams in tendering and project completion |

- Maintaining these objectives and compare statistics 2011 and 2012  
- Integration of local supplier chain socially disadvantaged people in procurement policy  
- Education programmes via BESIX Foundation or sponsoring to the academic world
APPENDIX: GRI table of correspondence

Key contacts in CSR
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               Chairman of BESIX Foundation
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