



BESIX SUSTAINABILITY & CITIZENSHIP REPORT

2017 – 2018

Communication Progress report

United National Global Compact

25th of March 2019

1 About this report

This report is a prequel to the full 2017-2018 BESIX sustainability report and serves as the Communication on Progress (CoP) as signatory to the UN Global Compact.

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2 Foreword of our Senior Executives

'Excel in creating sustainable solutions for a better world' became our redefined mission and noble purpose in 2017. We take in that year as a turning point, with the launch of the BESIX Forward program, which becomes the new springboard of our vision and mission, as an answer to an ever-increasing volatile world (VUCA - Volatile, Uncertain, Complex and Ambiguous).

This new mission anchors Citizenship and Sustainability as a central part, in what we aim for and describes how we want to take part positively in the society.

It guides our business across our six strategic drivers: our ability to innovate, to maintain a high level of quality, to face the competition, to meet financial requirements, to diversify and to become an active actor of social and environmental progress, and to improve the quality of life of people, everywhere we invest.

We have the ambition to meet the needs of the market in terms of construction 4.0, circular economy and sustainability in general. We are convinced that innovation, big data and artificial intelligence are part of the e-evolution of the construction sector. We have launched our own innovation program, 'Unleash', and our start-up accelerator. We strongly believe in co-creation. For this reason, we decided to join forces and skills with Proximus, to improve energy performance via smart buildings. Our BESIX Nederland headquarters is a concrete example of what we do already today.

Our stakeholders help us to improve on our path to sustainability. We are increasingly asked to demonstrate our approach towards the major issues facing today's society: ethical construction, safeguarding the planet, well-being at work, safe workplace and social impact, especially at the operational project level.

To find the right guidance, BESIX Group has decided to become an active member of the United Nations Global Compact, since 2017 and supports the 17 Sustainable Development Goals (SDG's) of the United Nations. Our codes of conduct (General and Procurement) have been launched to formalize our steps in this direction and guide both, our employees and our subcontractors to understand, adhere to and apply our standards. The Group has also established the Group Rules to measure risks and follow an ethical course of action when choosing a project.

We are also proud that BESIX Group signed an International Framework Agreement on Fair Labour Standards with Building & Wood Workers' International (BWI) and the European Works Council (EWC) of BESIX Group in 2017. This worldwide agreement's purpose is to promote and protect the well-being of all the employees and workers employed by the BESIX Group. It applies to all the BESIX Group entities worldwide, as well as to all of its subcontractors and suppliers, a provision which was already contained in the BESIX Group Code of Conduct. It firmly illustrates the Group's interest for fair labour standards of its employees and workers.

Our ambition is to offer our colleagues, a great place to work where they can co-create every day in an attractive work atmosphere and where diversity reinforces team spirit and common passion.

On one hand, major steps have been taken over the last 2 years and on the other hand, we are eagerly looking forward towards the coming years. We engage to take steps forward in all the topics defined in this current report, working closer with stakeholders, developing new actions and making our mission true *“Excel in creating sustainable solutions for a better world”*.

Even if this report cover years of 2017 and 2018, we cannot resist to announce that in 2019, we will share with all our stakeholders the 10 years of existence of the BESIX Foundation. Our Foundation plays an important role in three sectors: education, construction and environment, helping the communities we work in with the active support of our employees. It is the concrete example of our willingness to support eligible projects launched in countries where we operate, always with the idea of pursuing the daily mission of these associations. Even though the foundation supports each year more than 30 projects, its own projects - KiddyBuild and Right2Learn, demonstrates the involvement of our staff on a voluntary basis.

Frédéric de Schrevel

Group CSR Officer

Secretary General

Rik Vandenberghe

Chief Executive Officer

About BESIX Group

Key Figures

General figures of BESIX Group & and highlight (key) figures on CSR.

- Turnover 2017 = EUR 2.3 billion
- Net income 2017 = EUR 102.6 million
- Total employees 2018= +15,000 (Rise of 4.8%)
- Active in 25 countries in 5 continents

2.1 Vision, Mission & Values

Our new redefined mission puts Sustainability in the core of what we aim to be “excel in creating sustainable solutions for a better world”. As a multi-services Group active in 25 countries and operating in construction, concessions and real estate development, we are well positioned to assist clients and communities worldwide. We are designing, financing, developing, building and/or operating a wide variety of projects: from high rise buildings to marine infrastructures, from bridges to water treatment plants, from apartments to offices, from shopping malls to hospitals, etc. We consider our role in society as supporting economic, social and environmental progress, and aiming for a better quality of life for people.

However, like many industries, ours is constantly challenged. Innovation brings disruption in some areas of our sector. There are quite some challenges ahead.

To remain relevant we need a clear purpose that sets us apart from the competition and a well thought-out strategy drawing on our strengths. That is why in the fall of 2017, we have co-created our new purpose and strategy, supported by the 50 members of the Strategy Circle. We have challenged ourselves in rethinking who we are, why we are here and what we stand for. We called it "BESIX Forward".

2.1.1 Vision

"As BESIX Group we develop multiple services to create value for our clients, whilst incorporating the evolving expectations of the end users and building on strong partnership with all stakeholders".

2.1.2 Mission

"Excel in creating sustainable solutions for a better world"

Every word in our purpose holds value:

- Excel: always strive to improve. We want to make a difference, stand out and achieve excellence.
- Creating: we are more than “builders” and “developers”. We need to develop creativity and co-create with our customers, so as to be innovative, evolve and stay in the driver’s seat.
- Sustainable: both financially and environmentally. While we need to make profit and plan for regular income sources for the future, we also want to assume social responsibility in a world of sharing and circular economies.
- Solutions: customers are not looking for products or services, what they’re really wanting are solutions. To make sure our solutions meet their needs, we need to listen even better to our customers.
- Better world: BESIX is keen to play a pivotal role in innovating to protect our planet’s shared resources. Given BESIX’s projects and its presence worldwide, our impact can be significant.

Strategic drivers

To incorporate this purpose into our actual business, and to live this purpose in all we do, we have defined 6 strategic drivers:

- Leveraging on our customer centricity
- Promoting a great place to work
- Developing a "one-stop-shop" solution
- Being a leader in open innovation
- Synergizing our ways of working
- Promoting openness towards new ventures & activities for business

2.1.3 Values

To put these strategic drivers into practice, we draw on the Group's 5 core values:

- Unity: as the proverb goes: "alone we are smart, together we are brilliant". Despite the size of our company, there is an attitude where colleagues stand up for each other and are ready to lend an extra hand to help others succeed.
- Passion: we are all passionate about our jobs.
- Respect: respect is treating others as you want to be treated. Respect is all about attitude. It is vital to create an atmosphere of comfort and trust for everyone.
- Co-creation: we need to demonstrate this every day, by pooling our minds and skills, and advancing forward.
- Excellence: this takes us straight back to our corporate purpose and trademark: to always excel in what we do.

2.2 BESIX around the world

BESIX Group is a leading Belgian industrial company, headquartered in Brussels, which operates in 25 countries and on 5 continents: Australia, Bahrein, Belgium, Cameroon, Canada, Denmark, Egypt, Equatorial Guinea, France, Ivory Coast, Italy, Luxembourg, Montenegro, Morocco, Oman, Poland, Portugal, Qatar, Saudi Arabia, Spain, Sri Lanka, Switzerland, The Netherlands, UAE, United Kingdom.

NV BESIX SA, its largest subsidiary, offers services in the different stages of construction projects. In addition to NV BESIX SA and its other subsidiaries, BESIX Infra, Cobelba, Jacques Delens, Socogetra, Van den Berg, Vanhout, Wust, Franki Foundations, BESIX RED, Lux TP in the Benelux and in France, BESIX Group operates in Eastern Europe, North and Central Africa and the Middle East through its subsidiary Six Construct, as well as in Canada and Watpac in Australia.

Note on Watpac Acquisition

Our activities have grown considerably through the acquisition of Watpac Limited (“Watpac”). BESIX and Watpac have started building a trusting relationship in 2013 when BESIX acquired a minority stake in the company. From the outset, our ambition was to give BESIX a firm foothold in Australia.

Upon completion of the transaction which started December 2018, BESIX will hold 91.85 percent of Watpac. In becoming its majority shareholder, BESIX gives Watpac full access to the group’s in-house skills and expertise, in the construction field but also in other BESIX core sectors such as marine works. That strategy puts us in position to pursue a long-term industrial strategy in Australia.

2.3 Awards and Accolades

The sustainability related awards BESIX received over the last 2 years are a fine recognition of BESIX' engagement to integrate sustainability in its operations.

- At the end of 2016, BESIX won the first prize in the contest "Getting to work without the car" organized by Brussels Mobility.
- BESIX Infra has been nominated five times for Aquafin's 'Minder Hinder' (less disruption) Awards in the last 11 years, including in 2016 and 2017. BESIX Infra reached the second position of this 2017 award edition. BESIX Infra received the same year an honourable mention because it pro-actively converted new safety procedures into specific work instructions for its own staff as well as creating internal support for this.
- Cobelba won the first place of the Green Solutions Awards 2017 in the 'Catégorie Grand Prix Construction Durable' for its eco-district 'Les jardins de Baseilles' .
- For 2017, BESIX carried off no less than three first prizes – including the BIM Award of the Year for the Beatrix Lock/ Lekkanaal, two Silver Awards and a Bronze Award, in 5 out of 6 categories!
- The BIM Awards 2018 ceremony, honouring the best BIM projects in the Benelux, was held in Brussels on 4 December. BESIX and Vanhout took three awards, two gold and one silver, in the three competition categories: Infrastructure, Public Projects and Tertiary Projects.
- Jacques Delens have been named laureate of BeCircular 2018, for the third year in a row with the Brederode project. BeCircular is the regional initiative in the Brussels Capital region on circular economy.
- The Princess Beatrix Lock, with the "Ruimtelijke Kwaliteitspluim" (Environmental Quality Feather), was held up as an example by the Dutch authorities for its attention to environmental and landscape aspects in 2018.
- Six Construct was awarded the "Corporate Social Responsibility" label of the Dubai Chamber of Commerce and Industry for the sixth consecutive year in 2018. This label is awarded to a limited number of companies, recognized for their good practices, outstanding efforts and commitment towards CSR & Sustainability practices in the UAE region.
- SAFI won the National 2018 MEED award for 'Water Project of the Year'. SAFI is our water treatment station in Ajman, the United Arab Emirates. Established in 2011, the facility is a true pioneer, being the first in the region to recycle water for commercial and industrial use.
- The certification body SGS has issued the ISO 9001, ISO 14001, OSHAS 18001 and VCA** certifications for BESIX Contracting.

3 Our CSR approach

True to our redefined mission 'Excel in creating sustainable solutions for a better world', we have reviewed our sustainability commitments and we are in the stage of finalizing a revised sustainability roadmap. This roadmap is based on 3 pillars:

1. Responsible business
2. Great Workplace
3. Sustainable Project Solutions

Each pillar has 2 commitments. Overall, 11 key material topics are defined. The roadmap provides a unique visual representation of how BESIX drives the integration of C&S in its operations.

More insights on our accomplishments in each of these commitments is briefed in the following chapters.

4 Our sustainability engagement

4.1 Responsible Business

- Responsible business means taking responsibility and creating positive impact in both our value chain and locally at our construction sites, leading our engagement on two main commitments:
 - **Ensuring good business behaviour**
 - **Contributing to local socio-economic development**

Through these two commitments we focus on four material topics within the Responsible Business pillar.

- Sustainable & Responsible Procurement
- Fair working conditions
- Social Economy
- Social Inclusion

4.1.1 Sustainable & Responsible Procurement

Our people come first. Their welfare is a key priority in everything we do including our procurement. BESIX ensures the integration of environmental and social considerations when procuring and sourcing with buyers, suppliers and (sub)contractors. The BESIX Group Sustainable and Responsible Procurement Code of Conduct is the foundation of our good business behaviour throughout the whole value chain.

The BESIX Group Sustainable and Responsible Procurement Code of Conduct, issued in 2013, endorses the Universal Declaration of Human Rights, the International Labor Organization Conventions on prevention of Forced Labor, Discrimination and Child Labor, ISO 9001, ISO 14001 and the Guidance Principles of ISO 26000. Hereby BESIX establishes an overall integration of sustainability considerations with regard to employee and worker conditions and environmental dimensions with our subcontractors reinforcing long-term partnerships and collaborations.

Partners in Frame Agreements with BESIX sign mandatory the Code of Conduct. Moreover we work as well with our strategic suppliers¹ in order to have their commitment to the BESIX Procurement Code of Conduct.

The number of strategic suppliers decreased to 840 (from 959 in 2016). The signatories to our Code of Conduct increased to 58%. Despite these positive results there is still room for improvement. We are working hard to progress together with our suppliers towards a more sustainable and responsible procurement. By contacting our subcontractors and supplier regularly we constantly learn from their feedback. At the same time we demonstrate the importance of our BESIX Procurement Code of Conduct to reach a sustainable supply chain.

Currently we are also in the process of reorganizing the procurement department towards a more central function, respecting on the one hand our core values and taking into account on the other hand the need to organize purchasing synergies between projects. This reorganisation will also

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contribute to a further integration of sustainability. The implementation will be phased gradually towards the end of 2020.

4.1.1.1 Best practice examples

<p>Encouraging circular purchasing</p> <p>The purchase department of BESIX is participating in the Flemish Green Deal Circular Purchase in Belgium. Circular purchasing is a new way of buying for companies, with an eye for people, planet and wallet. The projects stimulate us to 'buy change'.</p> <p>BESIX Infra is partnering with Xchange for a sharing platform</p> <p>BESIX Infra is partnering with XChange for the development of a smartphone app. This app will create a platform for sharing construction materials and machinery. All members of the Flemish Construction Confederation will be able to use the app. This will create a win-win as construction companies often do not use their construction equipment continuously and end up with surpluses of finishing materials.</p> <p>The result: less waste of residual material and less emissions and waste. Furthermore, the app helps to ensure optimum use of all operational resources at various construction sites which will result in significant savings.</p>	<p>Expo 2020 Dubai: Supporting subcontractors to meet sustainable contracting obligations</p> <p>For the Expo 2020 Dubai project, the UAE chose the theme "Connecting Minds, Creating the Future", with Sustainability as one of the 3 core themes. The 4.38 km² site is provided with irrigation and sewerage, pipes and cables, roads, electricity, water and telecom lines.</p> <p>For the construction of this project our client imposed a unique set of obligations including EPDs for our used construction materials.</p> <p>An Environmental Product Declaration (EPD) is a comprehensive report that includes a LCA developed to provide specific environmental information on a product in a common format. EPDs clarify the environmental benefits, the energy efficiency and other important aspects of a given product.</p> <p>Important to note is that EPDs are very rarely asked in the UAE region. Therefore none of our suppliers were familiar with EPDs. However thanks to the contracting obligation which we strongly support, we are able to raise awareness with our subcontractors.</p> <p>We supported our subcontractor, Emirates Precast - supplying concrete precast elements, to gain awareness on EPDs, understand the significance and benefits of having an EPD in the region. This resulted in a great success. Not only did they acquire EPDs for the products obligated for, but also they pushed it further than we expected and got their other major products covered under the EPD, to demonstrate their commitment to Sustainability. The same process is under development with other subcontractors.</p>
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4.1.2 Fair working conditions

At BESIX we commit to develop long-term relationships, safeguarding fair working conditions and promoting and protecting the well-being of all employees and workers. Moreover we guarantee good business ethics towards employees and other stakeholders through the BESIX Group General Code of Conduct and committing to the International Framework Agreement (IFA) on fair labour standards.

The **BESIX Group Code of Conduct** embodies Corporate Governance, Human Rights, Business Behavior, Safety, Environment and Human Resources and is included in most of the Group entities' prequalification and tendering documentation. The Code constitutes a framework that can be further developed by each Group entity to the extent necessary to align with the specificities of the concerned country or business sector. The Code also prescribes that violations of law, rules, regulations or the Code shall be reported to the Group's CSR Officer.

BESIX Group commits to contribute continuously to the improvement of its actions on Human Rights. Two major actions have been undertaken over the last years converting these intentions to actions. In 2016, BESIX Group joined the **Global Compact initiative of the United Nations** and its adherence has been confirmed by the United Nations in September 2017.

In 2017, BESIX Group signed an **International Framework Agreement on Fair Labour Standards** with Building & Wood Workers' International (BWI) and the European Works Council (EWC) of BESIX Group. These worldwide agreements purpose are to promote and protect the well-being of all employees and workers employed by BESIX Group. It is based on a wide range of international labour standards such as the ILO Fundamental Conventions and other human rights instruments². It applies to all BESIX Group entities worldwide, as well as to all of its subcontractors and suppliers, a provision which was already contained in the BESIX Group Code of Conduct of 2014.

In 2018, Six Construct initiated a **Guide on Worker Welfare**. This guide is about promoting welfare and protecting all our employees and workers in the Middle East. We have defined a set of 10 wellbeing rules, also anchored in internationally recognized standards. These principles are embraced from the Management to the staff members, their representatives, unions and health and safety representatives.

Below are some examples how workers welfare enhanced in the Middle East in 2018:

- Election of the Workers' Representatives and identification of full time Welfare Officers.
- Improvement of the accommodation standards.
- Food catering (healthy food taking into consideration the working conditions and different types of cuisines of the workers)
- Transportation (vehicles with A/Cs, seat belts, speed limiter, & safety equipment inside the vehicles)

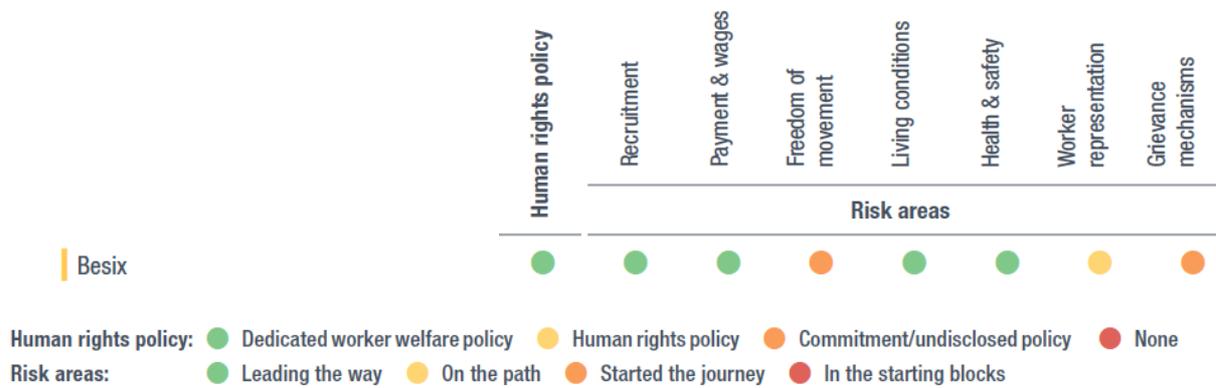


² Such as the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises, the ILO Tripartite Declaration of Principles on Multinational Enterprises and Social Policy, and the ILO fundamental rights at work Declaration.

- Collaboration with the Art of Living team in UAE to provide sessions on the Breath-Water - Sound (BWS) Program in order to reduce and eliminate stress and strengthen individual empowerment.

Our objectives for 2019 are, in addition to the continuation of the improvement of the working and living standards, the implementation of the BWI commitments and to develop a mechanism to ensure the third party compliance to our Standards and Principles.

In 2018 the Business & Human Rights Resource Centre published an assessment report on migrant workers' rights in Qatar & UAE construction. BESIX participated as one of 49 surveyed companies. Overall results are positive as displayed below. Still special attention is required on freedom of movement, worker representation and grievance mechanisms. We are strongly committed to further improve on all aspects of fair working conditions.



4.1.2.1 Best practice examples

Accommodation and Construction Site Welfare Inspections in Qatar

In December 2018 we received an inspection by the Joint Working Group (JWG) at the Al Wakrah project in Qatar. The joint inspection was carried out by the Building and Wood Workers' International (BWI), the Six Construct and the Site Management Team. During this inspection observations are made on general safety, leisure possibilities, housing facilities, emergency procedures and food. The report was overall positive :

- The kitchen, as per Six Construct, is the best in Qatar.
- All green areas are well maintained and accessible to all workers.
- Monthly emergency drill exercise and first aid trainings are carried out.
- The housing facilities are as should be and include modern commodities like Wi-Fi.

A few minor comments for improvement were made.

Since 2015, BWI visits related World Cup accommodations every six months.

Six Construct Village Accommodation Audit

Six Construct Village is audited on a quarterly basis, by Six Construct Welfare – HSE colleagues. Our ranking score is between 88 to 98 since 3 years. The last one of 98, made in Q1, 2019, is our best one.

The audits follow a specific inspection checklist : food and drinking water standards, infrastructure, medical care, facilities hygiene, transportation, safety, ...

Six Construct Qatar Workers Welfare Election

Six Construct has its own workers' welfare standard and audits which are quite high.

One of the Sixco Workers' welfare forum/Workers Welfare Election conducted with BWI in Oct 17 and broadcasted by the Six Construct:

<https://www.sc.qa/en/opportunities/workers-welfare/our-workers/workers-voice>

New Workers Welfare Election has been conducted in Deb 18:

- Out of 1,660 workers, 1,264 Workers voted in WWR Election;
- 6 representatives elected

4.1.3 Social Economy

The BESIX Group is heavily connected to local economies and labour forces considering its global character and worldwide operations. At BESIX we consider each project as a unique occasion to repeatedly create new possibilities and opportunities for local socio-economic development. BESIX supports local communities through the inclusion of local workers, contractors and suppliers in our projects. This is strengthened by the projects supported by the BESIX Foundation.

BESIX Group has a proactive approach towards local and social inclusion exceeding almost always local laws and baseline expectations in Belgium and Europe. In the Middle East we mostly work with migrant workers as there are no local workforces available to the extent we need. Though it is more difficult to include local workers, we still try to include a maximum of local workers in our projects. This is more often the case in our African projects.

We also stimulate local social economy through our projects within the BESIX Foundation. Since 2009, the BESIX Foundation supports projects financially and materially but also delivers skills-based sponsorship which helps organizations to achieve their goals. Supported projects are related to Education, Construction and Environment. For example, sheltered workshops and centers for the professional and social integration of disabled people or for people who have difficulties entering the labor market. About 1 mio Euro was given as financial support over 2017 and 2018 to 100 different projects.

	2017	2018
Projects supported by BESIX Foundation	Environment: 9 Construction: 22 Education: 20	Environment: 6 Construction: 20 Education: 13
Total BESIX staff involved	448	343
Projects supported regarding social economy	6	4
Total funding	€ 923 806	
Yearly increase of the international financial support abroad	+ 16%	+ 4%

Beyond BESIX Foundation initiatives, the operating entities of our Group are also committed to support social economy. Therefore we developed a social economy suppliers list of over 40 companies in Belgium as a first step. Partnerships between our entities and social economy organizations are in this way encouraged. We stimulate all BESIX entities, the BESIX Group's buyers and other stakeholders to consult and cooperate with these organizations as soon as specific needs arise within the work field of social economy.

4.1.3.1 Best practice examples

“De Groene Kans” a social enterprise offering employment opportunities

De Groene Kans is a social enterprise in the Westhoek (Belgium) which employs more than hundred people that have difficulty finding a job.

In partnership with De Groene Kans, BESIX offers opportunities to work on our sites. It enables people to gain new experience while being offered guidance and support by BESIX and De Groene Kans.

This is one of plenty examples we are working on. More examples are available on our BESIX Foundation website.

4.1.4 Social Inclusion

We believe in personal value creation for our employees. Through guidance, support and training we enable our workers to continuously learn and evolve. We pay specific attention to include underprivileged people with a distance to the labour market. Doing so we aim to promote their personal development and enhance their professional skills.

BESIX Group wants to promote local social inclusion in Africa through the circular migration program. This exchange program has shown to be a great success. For BESIX, this is a win-win activity in many ways: in addition to acquiring new skills, locally trained persons become familiar to our colleagues, our working methods and our values. Participants to the circular migration program are enabled to train fellow colleagues in their native country in our corporate processes and culture reducing learning time of local staff. As they might take on other job opportunities within the Group, they also reduce expatriation costs.

We are constantly educating and training our local workers. These trainings are considered very valuable by the local workers, as they are not only job oriented but create opportunities to participate in English or IT courses.

4.1.4.1 Best practice examples

<p>The Nachtigal dam in Cameroon</p> <p>The Nachtigal amount hydropower project is one of the very few public-private partnership hydro-electric projects in sub-Saharan Africa. This project will accelerate the achievement of Cameroon's development goals, including access to electricity. The dam will increase the country's electricity generating capacity by 30%.</p> <p>This renewable energy project contributes to the development of social, local and economic development in Cameroon. The local staff is integrated in the site team of the Nachtigal project as much as possible. Local recruitment will focus on candidates who are directly impacted by this project and on residents of villages nearby the project .</p> <p>BESIX in Cameroon</p> <p>We have been present in the country for 35 years. In order to keep our activities active, we mainly recruit local people together with FNE (Fonds National pour l'Emploi). This local staff is composed of trained and qualified white and blue collars :</p> <ul style="list-style-type: none"> • +90% of local people (160 employed out of 172) • +1,500 direct jobs (2/3 coming from <65km from site) 	<p>Right 2 Learn</p> <p>Launched in 2011, Right 2 Learn is a unique educational program initiated by BESIX Foundation to coach its unskilled workers with basic computer and internet skills, to explore the vast world of internet. BESIX Staff volunteer to coach and teach those who had never used a computer before.</p> <p>The lessons cover the basics of computers skills, including Microsoft Word, internet browsing, Gmail account creation and the management of email accounts.</p> <p>Although these skills are not necessary on the job, learning to operate a computer or a smartphone in this digital age, enables them to communicate better with their families back home through emails, instils them with confidence and aids them for their personal development. Since 2017, Wi-Fi is being installed at all our Worker accommodations.</p> <p>Since 2012, 782 workers have received the training.</p> <p>In 2018, through a partnership with the SmartLife Foundation, a Dubai based non- profit organisation, we also launched Basic English</p>
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	<p>speaking and reading classes for our Blue Collar workers.</p> <p>The five-month Basic English speaking and reading classes helps unskilled workers read and speak Basic English. The content includes English passages, short motivational stories, daily life activities and inspiring tales, customized based on the student’s current English proficiency.</p> <p>As such, 55 students attended the exam and cleared it successfully. The third batch of the Basic English classes is now ongoing with 105 students on-board and is scheduled to be completed in June 2019.</p> <p>Due to huge demand, we expect to expand these courses in the years to come.</p>
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Be part of the ‘Circular migration’ program

BESIX has been participating to the building of a waste water treatment plant in Abidjan, Ivory Coast for 2018.

We decided to participate for the first time to the Circular migration programme, set up by the Ministry of Economic Affairs. This is the result of a reflection on our long-term impact on sustainable development and North-South exchanges, particularly in the field of education.

We were looking to anticipate and improve the training of our future local partners. We targeted African countries with good university networks and where BESIX has interests (past or future). A young Ivorian civil engineering graduate in Ivory Coast was selected for a 8-month training at our headquarters in Brussels, with the Marine Works Engineering team. This activity field is an important topic in Ivory Coast.

He learned to apply advanced technologies and business processes which he can then put back into practice in Ivory Coast.

The engineer trainee was recruited at the end of his training on our Waste water treatment plant project in Abidjan.

BESIX intends to pursue this win-win experience in the coming years. In addition to the exchange of skills, the locally trained person already knows our teams, our working methods, our values. He will be able to train his fellow colleagues in his native country in our corporate processes and culture. This transmission is therefore useful for a company investing in Africa by reducing the learning time of the local staff and encouraging local recruitment.

4.2 Sustainable Project Solutions

This pillar concerns the sustainability ambition of our core operations as expressed in our mission: Excel in creating sustainable solutions for a better world. Through this pillar we are addressing sustainability throughout the entire lifecycle of projects. This consists of the design phase, environmental performance of materials, sustainability integration during the construction phase and the sustainability performance of the buildings or infrastructures. We wish to excel in sustainability by designing consciously, choosing for sustainable materials, minimizing operational impacts and shaping the future landscapes with a clear mission towards a better world. Innovation plays a key role and can be considered as the engine of BESIX driving all projects towards more sustainability.

As a main guidance for this pillar we engage on two commitments:

- **Innovating and committing to sustainable project solutions**
- **Working towards a low carbon and low waste society**

Through these two commitments we focus on four material topics which are structured along the lifecycle of a project:

- a) sustainable innovation
- b) sustainable materials
- c) environmental construction operations
- d) sustainable buildings and infrastructure

4.2.1 Sustainable Innovation

In a rapidly changing world BESIX is conscious that sustainable innovation is a necessity to anticipate to future societal changes and environmental needs. We aim at developing new solutions in sustainable design, sustainable materials, efficient manufacturing processes, smart building approaches and sustainable construction operations to reduce societal and environmental impacts of our buildings and infrastructures.

In order to foster innovation, the Unleash Program was launched and is since then the main driver for Sustainable Innovation at BESIX. More than 300 ideas were introduced by BESIX colleagues, nearly 80% of which concerned sustainability in general or more specifically waste management and water treatment and HSE. This outcome is a clear sign of the involvement of our employees on this topic and will only accelerate the development of sustainable project solutions.

BESIX Start-Ups Accelerator

BESIX Group is well aware that innovation, especially open innovation, is now a strategic issue. By creating its Accelerator, the Belgian Group has taken a new step towards greater openness and diversification, both upstream and downstream of the construction process itself.

With this in mind, the BESIX Start-Ups Accelerator was launched in June 2018. BESIX Start-Ups Accelerator is a global accelerator aimed mainly at mature start-ups in the 'Construction Technology' (ConTech) and 'Property Technology' (PropTech) industries seeking sales opportunities and faster growth. With the accelerator program, we are targeting mature start-ups operating in a variety of sectors such as the circular economy and sustainability, construction 4.0, Digital Transformation, energy and treatment (air, waste, water), mobility and infrastructure, new construction materials, real estate, spatial planning, and well-being & safety at work."

BESIX Start-ups Accelerator has a duration of 12 months and it is totally free, 100% tailor made in order to answer the respective needs and ambitions of each start-up.

In October 2018, the 5 first start-ups joined our program:

- Peas&Love (Belgium): Urban Farming
- Cad42 (France): Security of workers on construction site
- Smart Cast (France): Pre-printed/cut panels of concrete slabs including networks
- KEWAZO (Germany): Robots in scaffolding
- Propergate (Poland): Platform to coordinate deliveries on construction sites

The objective is to have on average 10 start-ups per year in our accelerator.

Being aimed at both the ConTech and PropTech industries, the BESIX Start-Ups Accelerator is the first of its kind in Belgium, one of only a handful in the rest of the world.

4.2.1.1 Best practice examples

<p>Greenprint Division</p> <p>3D concrete printing arrives in the construction sector. At BESIX, we are among the front runners, with several projects in the pipeline, particularly in Dubai. We have great ambitions in this niche of the future.</p> <p>Dutch cyclists can now ride across a concrete bridge printed in 3D inaugurated at the end of October 2018 in Gemert, some 100 kilometres from Amsterdam. This is a first for cyclists. A concrete footbridge had already been cast in 3D a few months before in a park north of Madrid, Spain.</p> <p>3D printing made it possible to use less concrete and in doing so reduced the structure's ecological footprint, with a more complex shape than traditional manufacturing methods would have permitted.</p> <p>3D printing requires further research as it is seen as a potentially disruptive technology. A 'Greenprint' division was created in June 2018 as part of the Unleash program.</p> <p>Partnerships have been established to develop various concrete projects related in particular to Expo 2020 in Dubai. Research programmes have also been initiated with universities. One of the most advanced projects under development is a pedestrian bridge that will be the largest ever built: 3 times longer and 4 to 5 times wider than the one at Gemert in the Netherlands.</p> <ul style="list-style-type: none"> • 3D printing of breakwater units <p>In the swiftly evolving area of 3D concrete printing, a new research project is set up by Ghent University, BESIX, the start-up ResourceFull and engineering company Witteveen+Bos. The research will focus on developing sustainable concrete mixtures suitable for the printing of breakwater units. The combined expertise of the project partners will result in new, innovative and more sustainable solutions in hydraulic engineering.</p>	<p>Green Concrete</p> <p>The green concrete project is an applied research project to reduce the carbon footprint and reuse waste of concrete. The main focus is on</p> <ul style="list-style-type: none"> - Recycled aggregates (reuse waste) - Low carbon binder (cement or equivalent) - Reduce quantities of concrete and steel through value engineering <p>BESIX created a cell in the Engineering Department dedicated to develop sustainable concrete for its projects. BESIX also joined 'Circular.Concrete', a research project supported by the Flemish Government (VLAIO). The project aims to create a bridge between innovation providers and potential users of circular concrete. This will be achieved by:</p> <ul style="list-style-type: none"> • Making an overview of the various available technologies; • Validate material technological innovations in lab and implement them on sites; • And by creating a clear reference framework for recycled concrete. <p>BESIX identified several companies in the Netherlands which perform an advanced type of crushing. Their process generates a high quality recycled aggregate that can be used in high percentages in new concrete mixtures.</p> <p>Further steps to be deployed in 2019 involve going beyond the norms in terms of using a higher percentage of recycled aggregate for a specific concrete mix on one of BESIX's projects, and testing the high quality recycled aggregates from the Netherlands and study their application in Belgium.</p>
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4.2.2 Sustainable Buildings & Infrastructure

Sustainability is not just a tick in the box, but is embedded right into our core purpose, we strive to deliver sustainable solutions guided by our values, integrating sustainability in all the phases of our projects, to deliver a sustainable project and benefit the stakeholders in the wider community and the environment in which we live in.

With buildings and infrastructures being the end product of BESIX the importance of this topic is self-evident. BESIX integrates sustainability in all the phases of a project, starting from proposing sustainable solutions benefiting to the local community through its Concessions and assets team, delivering sustainable solutions during the tender phase, embedding sustainable design features, assisting the client achieve his sustainability goals through Green rating certifications (LEED, BREEAM, GSAS, etc.), assisting efficient planning in design and construction through use of BIM up to facilitating efficient facility management through Smart Buildings. We believe that very life phase of a project must be considered in order to offer the best sustainable projects solutions to our clients.

▪ **Delivering Sustainable solutions**

BESIX devises tailor-made sustainable solutions to better serve the local community, through BESIX Concessions and Assets. Different projects contribute directly to carbon footprint reduction such as The Dubai 'Waste to Energy', Umm Al Quwain 'refuse derived fuel' projects & Future Ajman Sludge to Energy investments. BESIX Sanotec on the other hand provides integrated solutions for water and energy related challenges in Europe, the Middle East, Asia and Africa. Through BE Wind, BESIX offers a one-stop-shop solution for the foundations of on-land wind turbines. BESIX actively shares its specialized know-how related to onshore wind farms across Europe, from study over planning to completion.

Other Sustainable Projects are delivered through our PPP model. The Nachtigal hydropower project increasing Cameroon's electricity generating capacity by 30% is a recent example.

▪ **Sustainability in Design**

The concept of minimizing negative environmental impact through skillful design is integrated in every project of BESIX.

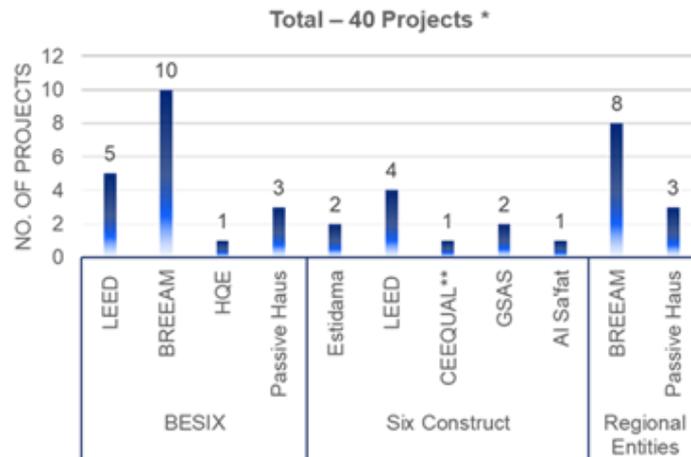
- BIM plays herein an increasing role. BESIX works on efficiency and transparency in design through integration of Building Information Modelling (BIM) and applying advanced techniques like BIM based material passports. Our progress in this field has been rewarded. Over 2017 and 2018, BESIX won 9 awards at Benelux BIM Awards ceremonies.
- Part of the design challenge is responding to the climate challenge by means of Engineering and constructing Energy neutral and zero carbon projects such as the first carbon neutral highway in the Netherlands 'De Groene Boog'.

▪ **Green rated projects**

Built environments have a substantial impact on the health and wellbeing of people and the planet. As the built environment accounts for more than two-thirds of all the greenhouse gas emissions, green building has a significant potential.

Green rated projects are projects rated as per the green rating system, on how green the built environment is. LEED, BREEAM, Estidama, GSAS, CEEQUAL, Passive House, HQE, Green Star etc. are the green rating systems currently applied within the BESIX Group

Until this date, the Group has been active on about 40 "Green Rated System Projects".



In order to further integrate this throughout BESIX, a competence Centre for the Green Projects rating system has been established within the Group.

4.2.2.1 Best practice

Khalifa International Stadium achieves 4-star GSAS sustainability certifications.

In September 2018, Khalifa International Stadium – the first completed tournament venue for the 2022 FIFA World Cup Qatar™ – received a GSAS 4 Star sustainability certification and has become the first in the world to be awarded a four-star rating from the Global Sustainability Assessment System (GSAS).

Built by Six Construct, Qatar’s national stadium – Khalifa International Stadium underwent extensive redevelopment; the external shell of the building was completely redone, a 44,000-m2 membrane roofing structure was added, and 11,496 new seats were installed.

Global Sustainability Assessment System (GSAS), administered by Qatar-based Gulf Organisation for Research & Development (GORD), is a green building rating system (similar to LEED, BREEAM, etc.), originally developed for the State of Qatar but later expanded for the Gulf Cooperation Council countries.

The GSAS rating system is currently being practiced majorly in Qatar and recently, has been adopted at some projects in Kuwait and Kingdom of Saudi Arabia.

BESIX in a consortium of 6 companies designing and build the world’s first energy neutral tunnel - A16 in Rotterdam.

A combination of BESIX, Dura Vermeer, Van Oord, John Laing, Rebel and TBI, named ‘De Groene Boog’ is designing, building and pre-financing the new ring road of northern Rotterdam – A16.

The combination honours its name (De Groene Boog means as much as The Green Turn) by providing a road which will not only fit its surroundings seamlessly, but also be energy neutral.

The project combines the newest views concerning quality of life and sustainability. The road will be incorporated into the landscape as effectively as possible. Noise pollution will be prevented by using extra noise-reducing asphalt on the A16 road surface (dual-layer fine porous asphalt, ZOAB) as well as noise barriers and earth embankments. Adjoining areas, such as Terbregseveld, Vlinderstrik and Lage Bergse Bos, will be re-landscaped and connected by cycling and walking paths.

The project achieved GSAS 4 star rating under two of its certification types, as targeted by the Client,

- “Design & Build” Certification: evaluates the sustainability of newly constructed or majorly renovated buildings, districts and infrastructures, in terms of its design, construction and operation to minimise a building’s ecological footprint.
- “Construction Management” Certification: GSAS Construction Management certification is intended to assess the environmental impact of the construction process for any type of projects. GSAS Construction Management framework aims to evaluate the aspects of the construction practices that have sustainability impacts and to perform measurements related to environmental parameters.

The major sustainability highlight of the stadium is its innovative and energy-efficient cooling technology. Khalifa International Stadium’s cooling technology uses an energy recovery system in order to reduce energy consumption.

Other Sustainability highlights are as below,

- 23.5% reduction achieved in Energy used, from the benchmark set, through implementation of various energy efficiency measures like apt design, Energy efficient lighting systems, innovative and energy-efficient cooling technology, etc.
- Efficient plumbing fixtures.

100% recovery of the condensate water and used for landscaping needs.

4.2.3 Environmental Construction Operations

Construction being our core business, we are vigorously committed to reduce the environmental impacts during the construction operations of our projects. By measurement, reporting and evaluation of waste, water, energy and carbon-data, as well as by opting for efficient construction practices, we gradually minimize on-site group-wide environmental impacts.

Through its ISO 14001 certified Environmental Management System, BESIX is committed to reducing the Environmental impact of its operations, by continuously monitoring its activities and innovating to find sustainable solutions in partnership with its Clients, targeting the reduction of such impact further.

The Environmental Management system, a part of integrated management system of Six Construct and BESIX (BESIX Europe and International) has been merged into one single Integrated Management system “BESIX Contracting (BCO)” to ensure adherence to the Local and International standards, and to provide its Clients, the assurance to have the same approach across every Business Unit of BESIX.

The adherence of the Environmental Management system with the ISO 14001 standard is audited regularly by the 3rd party auditor SGS and after the recent multi certification audit, the BESIX Contracting (BCO) was certified with ISO14001:2015.

BESIX recently revealed its new smart head office in the Netherlands, which can be considered as a European reference in the field. The building generates its own electricity, and is installed with an energy management system to maximise efficient consumption. Artificial intelligence (AI) algorithms have been deployed to monitor the balance between energy production, consumption, and storage. Solar energy is used to power the building, while an internal battery is used to manage surplus energy and serve the building's parking lot. A first successful result of our partnership with Proximus about smart buildings.

In order to reduce the impact of home-work mobility, BESIX has recently made revisions in its Mobility Pack and Company Car policy , to provide its employees an option to opt for greener vehicles like electric cars, e bike etc. and also to encourage its employees to use public transport. BESIX also launched a Homeworking Policy to allow its employees to work from home, one day a week, to reduce commuting and thus environmental footprint. In addition to the above, several other initiatives have been taken like driver training at the Netherlands to reduce fuel consumption and to increase driving safety, Fuel consumption monitoring of company vehicles, encouraging maximum usage of the Teleconference meetings policy in order to avoid flights, and the development of regional offices in Antwerp and Ghent to reduce commuting.

- **At Six Construct**

Dedicated Environmental management plans and waste management plans are developed for every projects and fixed production facilities, to minimize the environmental impacts caused due to the construction activities. Regular Environmental Performance review audits (E – PRT) are conducted for all projects and fixed facilities, every 6 months, to ensure their conformance to the Environmental Management Plan and Local Legal requirements.

2017

- No. of sites audited: 27
- Avg. Score achieved: 84% - Good Level of Compliance

2018

- No. of sites audited: 23
- Avg. Score achieved: 86% - Good Level of Compliance

The energy consumption (i.e., Fuel & Electricity), Potable water consumption and waste generated data are recorded and monitored regularly to take necessary actions, if needed. By this intensive monitoring and follow-up, about 57% of waste has been recycled over 2017 and 2018.

▪ CO2 Management at BESIX Nederland

Although we acknowledge we still need to take important steps in this field, BESIX Group keeps making progress in its efforts to reduce CO2 emissions. This approach has been demonstrated by BESIX within the Netherlands by being certified at the highest level (level 5) of the CO2 performance ladder.

This not only takes into account the CO2 emissions of its construction activities in the Netherlands, but also the bending center in Sint-Pieters-Leeuw, the material service in Saintes and the sister company Franki Grondtechnieken BV.

To realize the target, a CO2 plan is drawn up each year with actions for the current and coming year. The current target is to reduce our footprint (includes scope 1 and 2 emissions, expanded with scope 3 emissions from commuting), by 10% by the end of 2019 and as compared to 2014.

BESIX calculates and reports its CO2 emissions of scope 1, 2 & 3 related CO2 emissions at least twice a year and this related to turnover. The progress is checked against the CO2 emission data of the reference year (2014).

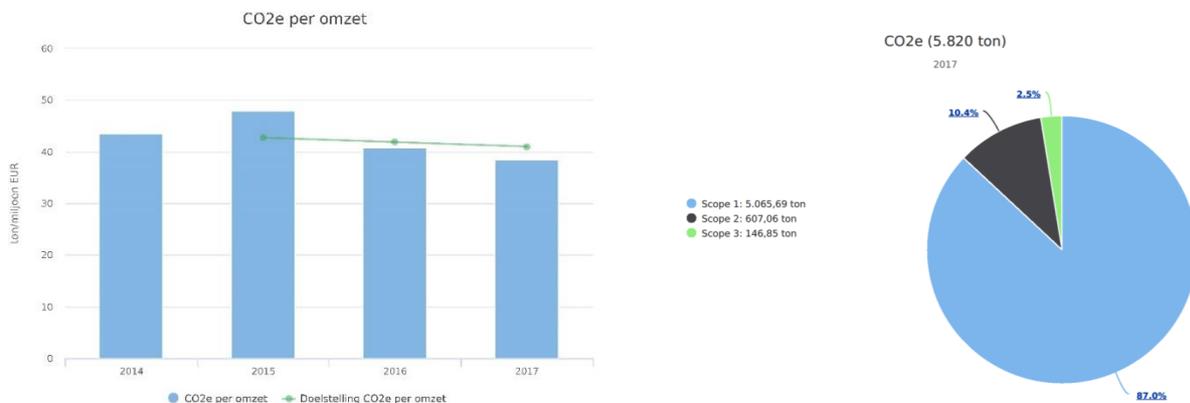


Figure 1: Carbon Footprint for 2017

▪ Memberships & Participations

BESIX has been a member/participant of various workgroups to inspire or drive the change towards a more sustainable future.

- BESIX Nederland is a member of the “Green Deal Duurzaam GWW 2.0” to reduce CO2 emissions within the Ground-, water- en wegenbouw sector. More information can be availed from <https://www.duurzaamgww.nl/>
- BESIX is a member of the steering committee for the development of a CO2 prestatieladder certification in Belgium, similar to the certification standard in the Netherlands. An initiative of the sector initiative ADEB VBA, in which BESIX played a leading role. The Other members of

the steering committee being CO2 Logic, SKAO (owner of the CO2 prestatieladder standard in the Netherlands), regional authorities (SPW, AWAC, Brusselse Overheid-Mobiliteit, VL-Department Kanselarij en Bestuur, Agentschap Wegen en Verkeer, MWO, FIDO...), Infrabel.

- Participation in Green Deal Circular bouwen, with the aim to promote Circular Construction.
- BESIX participates in the project BOUWHUBS of VIL (Vlaams Instituut voor de Logistiek) and WTCB to develop BOUWhubs with the aim to reduce logistic/transportation costs and thus have a positive impact on the environment.
- Part of Think tank Flemish bouwmeester around climate – materials reuse-recycle; zero energy buildings; innovation for environment certificates; construction waste management.

4.2.3.1 Best practice examples

<p>BESIM – BESIX Site Installation Management</p> <p>BESim – BESIX site installation management – was introduced in 2017 during the first wave of Unleash, the BESIX Group innovation program.</p> <p>The idea, to standardize and improve BESIX’s site installation, became one of the final three selected ideas by the Unleash Board and our CEO Rik Vandenberghe.</p> <p>BESIX’s focus with BESim:</p> <ul style="list-style-type: none"> • Standardise the site installation within Six Construct and BESIX Group, encouraging maximum reuse of offices and site setups. • Lower our carbon footprint and become more sustainable, in line with the BESIX Group purpose. • Integrate Sustainable solutions like renewable energy sources, energy efficient lighting and equipment, etc. • Be a single point of contact for projects to manage the full site installation • Improve the coordination required to set up a site installation and by doing so ensure a quicker mobilisation and completion of the project • Improve comfort for the employees working in the site offices and/or on site itself 	<p>Bio diversity conservation at Natura 2000 zone in Denmark</p> <p>The Fjord Link Frederikssund project at Denmark, in joint venture with Italian Rizzani de Eccher and Spanish Acciona Infraestructuras, consists of the construction of a new 4-lane dual carriageway over a distance of 8.2 km, linking Frederikssund and Skibbyvej.</p> <p>The infrastructural project includes a 1.4 km tolled high bridge over the fjord and 11 smaller civil structures (bridges, fauna passages, cycle lane passages). The new crossing will replace an existing bascule bridge built in 1935 and is supposed to relieve severe traffic congestion on the current bridge.</p> <p>The environmental and social aspects of the Project has been a primary concern for all the stakeholders.</p> <p>The route for the expressway and bridge passed areas of different protection classes, including a EU Natura 2000 zone. These zones are a network of protected areas offering a haven to Europe’s most valuable and threatened species. It is imperative to safeguard the natural landscape and habitats and to preserve the beauty of the fjord and the countryside the expressway will run through.</p> <p>The fjord area is rich in wildlife. It is home to a protected aquatic plant, eelgrass, and it’s an important refuge for waterfowl.</p> <p>While longer-term effects on the protected nature area are of paramount concern, BESIX</p>
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<ul style="list-style-type: none"> • Improve durability: move away from short term solutions and invest in long term possibilities • Lower the overall cost of site installation, even though additional initial investments are required • Increase Six Construct and BESIX Group visibility and enhance our image towards clients, partners and the general public. <p>In May 2018, the first mock-up of BEsim was developed at the Mohamed bin Rashid Library Quay Wall project (DCS) in the UAE.</p>	<p>also needed to ensure that bridge- and road construction activities don't have undesirable impacts on the local community.</p> <p>The location of residential areas very near to the construction site and difficult access possibilities for marine and land pose additional challenges with regards to logistics, dust, noise and traffic management.</p> <p>Several environmental inspections are conducted on a daily basis, where both the natural environment and the construction activities are monitored and inspected, to ensure that precautionary measures are being taken to best safeguard the protected plants and animals that make this Natura 2000 area so special. For example, BESIX routinely monitored construction activities to ensure that we avoid any direct or indirect impacts from construction, such as the possibility of erosion from earthworks spilling into waterways.</p> <p>Works are scheduled to keep noise within certain limits during nesting seasons. The noisiest activities are scheduled for periods when migratory birds are not present in the fjord. Many other actions are taken in order to preserve the aquatic environment, such as monitoring sediment spill and treating process-waters from piling and casting activities to build the bridge foundations.</p> <p>Regular inspections are carried out to monitor plants and animals, such as snorkeling surveys to check the eelgrass and checking the water levels of ponds and lakes within the construction areas to ensure the safety of protected amphibians.</p>
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4.2.4 Sustainable materials

Buildings are responsible for 40% of the world material resource consumption (UNEP, 2017). By using sustainable resources and materials BESIX is able to contribute substantially in working towards a low carbon and low waste society. During projects we oversee the total amount of materials used as well as its provenance (recycled, certified or reused). BESIX continuously innovates and explores new material possibilities in order to improve capabilities and reduce material use.

In recent years we have been strongly committed to move forward on the topic of sustainable materials. Jointly with our Unleash program we focus specifically on the topic of “Sustainable Materials”. As such we developed several new sustainable construction materials and methods which use less, or more sustainable, raw materials. The Green Concrete project which is described in the sustainable innovation chapter is a good example of our innovation on more sustainable materials.

Our initiatives on BIM (Building Information Modeling) contribute to using less materials. While BIM has many advantages on efficiency and quality, it decreases material use and generates opportunities for improved monitoring of overall environmental performance. On several projects a quantity overshoot analysis was performed which entails that we develop a more accurate view on the material quantities used. This allows us to significantly reduce waste during construction.

In addition, we have developed the first digital material passports for our buildings which enables post construction revalorisation of used materials. We are further exploring fabrication processes of our materials to better map the current and future impacts on the environment. Future plans would be to include these data in the 3D model, through BIM, to facilitate the use of the data.

Also we are member of the think tank “Flemish Bouwmeester”. This group of experts reflects around different environmental topics related to buildings such as climate, materials reuse and recycling, zero energy buildings, innovation for environment certificates and construction waste management.

4.2.4.1 Best practice examples

<p>Werflink : A new material sharing platform</p> <p>The Flemish Construction Confederation recently launched the online sharing platform Werflink. This platform was developed in collaboration with BESIX, Vlaanderen Circular and FLOW2.</p> <p>The Werflink platform enables construction companies within Belgium to ‘advertise’ unused construction equipment, materials, resources and freight space with each other through the website: www.werflink.be. Since the launch in 2018 the platform had around 3,000 visitors. This is a promising start considering the fact that the app is still in pilot phase until mid 2019.</p> <p>At BESIX we believe purpose of construction is to make intelligent use of the available resources without losses. The platform enables us to minimise these losses on a local level</p>	<p>Biodegradable oil for concrete framework release</p> <p>We prolonged our contract with Demula, a company that makes Marginel, a biodegradable oil for concrete framework release. During negotiations with other suppliers we received several offers for products with the same functional efficiency and better price setting. Still we respect our core values of creating sustainable solutions for a better world. As such we prefer renewable and biodegradable products above others if possible. This way we keep our construction sites and infrastructures clean of any hazardous products.</p> <p>The Marginel product is listed “A” in the FIPAH classification table. This means best scoring for biodegradability and no danger for human health.</p>
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thanks to the matching characteristics of the platform. Doing this we prevent waste, material and resources loss and save costs while doing so. Moreover it limits the need for new materials to be purchased. At the moment it is used in the Flemish region by more than 210 companies. If all goes well we see potential for expansion.	
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Quatuor project : Focus on circular economy exercise before the construction phase

BESIX started to build 60,000 m² of passive offices in the North of Brussels mid-2018.

The BESIX project team faces a double challenge: the technically complex environment and the very high standards in terms of energy quality. This passive building will meet the needed criteria via geothermal energy, photovoltaic panels and triple glazing. As a result it will require for example 10 times less energy for heating compared to a standard building. Moreover the objective is to be awarded the label BREEAM Excellent/Outstanding.

Before starting the construction phase of Quatuor, the site team managed the demolition phase of the existing building 'Noordbuilding' dating from the late '80s. The BESIX in-house civil engineering department used its expertise in Building Information Modelling (BIM) to model all the data involved in the project.

During this very first phase, lots of elements and materials were successfully dismantled to start a new life in the value chain.

BESIX worked together with a local partners to organise the material environment and to efficiently manage reuse of building components.

- 1) Disassembly of reusable elements for re-use: + 40 tons
- 2) Demolition waste management - sorting carried out :
 - after sorting of construction and demolition waste, upgrading of waste: 64%
 - iron, steel and aluminum recycled / recovered: 100%
 - recovered cables: 10% off site and 90% recycled
 - concrete, recycled mold: 100%

The works of Quatuor will end in 2020 and will receive its first occupants in 2021. The office building is ideally located next to metro and railway station which reinforces the high environmental standards of the building. It is in line with the regional government's 2009 decision to fully embrace passive constructions. Brussels has also committed itself to reducing its greenhouse gas emissions by 30% by 2025.

4.3 Great Workplace

The Group's strategy, BESIX Forward consists of six strategic drivers, one of which is promoting a great place to work. It all starts with ensuring that steps are taken across the organization to support the health and safety of our employees and stakeholders (on- and off-site).

Likewise we aim at becoming a great workplace. We envision a place where our employees are fully engaged in their professional life and get true fulfillment from their jobs. In our opinion it is the only way to attract and retain the best talents and to guarantee to be the one-stop shop solution we are today.

As a main guidance for this pillar we engage on two commitments:

- **Supporting health and safety of our stakeholders**
- **Becoming a great workplace**

Through these two commitments we focus on three material topics within the Great Workplace pillar.

4.3.1 Safe Workplace

Building a safe workplace for our employees and stakeholders has the highest priority. The safety of everyone on-site as well as off-site is something we do not take lightly at BESIX. Also the surrounding impacts like sound nuisance, dust and light emissions, local mobility and road safety and respect for night time are equally important factors. Through open communication and mutual respect we endeavour to support the health and safety of our stakeholders.

BESIX Group integrates the assessment, management, control and reporting of risks at all levels of BESIX Group's organization. The BESIX Group Rules, issued by the BESIX Group Executive Committee, is a set of 20 rules defining the framework of an "Enterprise Risk Management". This framework enables us to do a full risk analysis for each project.

More specifically the Group Rule n°1 defines what High-Risk Projects ("HRP") are for BESIX Contracting, a Regional entity and "BESIX RED". As such we established a "Tender Risk Review Committee" along with a "Go/No Go" decision process. Moreover BESIX Contracting set up a "Risk Management Competence Centre" and developed a risk management approach over the project life cycle (from Tender to Operation & Maintenance) aligned with ISO 31 000.

We are maintaining our Safety Time Out sessions. During these sessions all activities are put on a two-hour hold. This creates the opportunity for our management teams to have open conversations with staff members about the main concerns and problems related to health and safety. We collect the ideas which help BESIX to perform even better in terms of safety.

While the number of participations increased to Safety Time Out, the related safety performance decreased over the same period to a LTIFR above 2 and a severity rate (SR) of 0,06 in 2018.

Participation on Safety Time Out (incl. subcontractors)

2016	2017	2018
21.403	22.299 (15185+7114 subcontractors)	23.723 (15597+ 8126 subcontractors)

Injury rate	2014	2015	2016	2017	2018
LTIFR (frequency rate= number of work accidents with lost time*1mio/worked hours) (Incl subcontractors)	1.67	1.50	1.69	2.30	2.09
SR (severity rate= number of lost days*1000/worked hours) (Incl subcontractors)	0.04	0.03	0.04	0.05	0.06

To uphold the health & safety standards, BESIX has developed 2 additional programs:

- Two high impact trainings: **Managing Safely** and **Working Safely**. IOSH and BESIX are currently co-creating the courses. They will be available for delivery by the beginning of 2020. For more information visit: <https://spark.adobe.com/page/TZmw5uAdbbE6K/>
- Design, develop and test the **BE SAFE Program**. The program allows the on-site personnel to take note of unsafe situations, objects or work methods. This is done through a set of internal safety guidelines named “the 10 life-saving rules”. The roll out started in 2018 and will continue in the coming years.

To further integrate and align our management systems, we merged the Integrated Management systems of Six Construct and BESIX (BU Europe and International) into one single Integrated Management system “BESIX Contracting (BCO)”.

It aligns the various management systems of the organization in order to develop a unique and tailor-made Integrated Management system (IMs) applicable to BESIX Contracting activities carried out in the Business Units Europe, International and Middle East. Beyond the process harmonization, the Integrated Management system had to meet the new requirements of the Quality- and Environment-related standards (ISO 9001/14001:2015) and of the Health & Safety- -related norms (OHSAS 18001:2007 and VCA** 2008/5.1). For this IM’s the certification body SGS issued the ISO 9001, ISO 14001, OSHAS 18001 and VCA** certifications to BESIX Contracting.

4.3.1.1 Best practice examples

The Royal Atlantis Resort & Residences celebrated 20 million man hours without Lost Time Incident.

The Royal Atlantis Resort & Residences is one of our most prestigious projects in the Emirates. The luxurious two-tower complex is set on one of the Palm Islands in Dubai and houses both hotel and residences. Six Construct is building it in joint venture with Ssangyong.

Recently we celebrated a major safety milestone: 20 million man hours LTI free. This means that since the works started, in 2016, no Lost-Time Incident (LTI) has been recorded.

This is really big, especially considering that working on a such a huge site and by times in extreme weather conditions is not without its risks. Moreover, they recently successfully completed one of the most challenging parts of the project.

The teams recently lifted the main sky-bridge, which spans over 50 meters between both central towers. The extensive operation involved raising 1300 tons several levels off the ground and was done by strand-jacking.

Monaragala-Buttala IWSP Client Satisfaction and Safety achievement

BESIX received client congratulations and a certificate for the realization of the Monaragala-Buttala integrated water supply project in Sri Lanka without any Lost Time Incident (in total 1,400,000 manhours).

The project consists of two river water intakes, one water treatment plant, 4 ground reservoirs and one water tower. All these sites are connected by six raw and clear water transmissions mains (30 km) as well as an extensive water distribution network (65 km).

BESIX organized + 600 hours of trainings and awareness campaigns for + 300 staff members. A monthly safety award was also implemented for teams who performed in the field of QHSE.

Furthermore, the client states, in its client report, that we outdid ourselves and far exceeded their expectations!

“In terms of QHSE, the high demand of BESIX helped everyone to get fully involved in this area and allowed everyone to acquire knowledge about security measures, something that was not a habitual practise in Sri Lanka. It is remarkable that BESIX and its subcontractors performed 1,400,000 hours without lost day’s accident.”

4.3.2 Engaged Employees

BESIX is convinced excellence, professionalism and performance can only be achieved through sincere respect and engagement towards our employees. We believe in our employees and their capabilities to excel. By offering them good work-life balance, fitness programs, flexible working hours, healthy food, volunteering possibilities and career coaching and development, etc. we are certain this enables unlimited possibilities of collaborative energy and engagement.

The strategic commitment for promoting a great place to work is part of the group's Forward strategy. By offering multiple career opportunities, actions for development and training or creating internal

communities we aim to raise employee engagement. As a measurement we held our third BESIX Engagement Survey with a participation rate of >76% for white collars worldwide and >24% for blue collars in Belgium.

The survey creates the opportunity for employees to communicate openly about their working environment. The results are then used by every department/Business Unit/company to identify the strengths, weaknesses and trends and devise an action plan accordingly.

EMPLOYEE ENGAGEMENT

Results of the third BESIX Engagement Survey

High pleasure at work	High engagement and commitment to the organization
91%	85%

Overall results are positive with some attention points. Engagement to BESIX is high and has increased compared to 2015 just as Satisfaction and Attractiveness. On the other hand, that improvement is required on the well-being of our employees. In comparison to the 2015 results we note a small decrease which may be influenced by the higher participation of blue collar workers, given the fact that there is higher well-being with white collar staff. Overall, BESIX employees are very likely to promote BESIX as an organization to work for, even slightly more than in 2015.

Different programs are deployed such as the BESIX Young Community (2009), or BESIX resilience program and BESIX Fit program (2018). These programs provide opportunities for employees to bond with peers, learn together and help each other, supporting a good well-being in the workplace. We find it equally important to preserve the family spirit of BESIX. A BESIX internal coaching program will also be launched in 2019 with a pilot project at BESIX SA. To further stimulate this we have an array of volunteering projects in which our employees can participate through the BESIX Foundation.

TRAINING

We strive to further develop our employees' professional skills through trainings. In 2018, every employee received on average

	2017	2018
Total training hours	16,460	19,355
Total number of participants	2,237	2,498
Ratio	7.36	7.75

Data are valid for BESIX SA and all entities directly related to BESIX SA (RED, Group, Six Construct, Ivory Coast, Morocco, Canada, etc.)

In addition we launched several new training and learning platforms. In 2017 we developed BESIXpedia, an online collaboration tool which allows all BESIX colleagues to share their real-life experiences with each other. This interactive platform aims to close the gap between internal know-how and our global presence. The questions we are aiming to answer relate to different domains. By assembling all answers in BESIXpedia, we anchor our internal knowledge and avoid the loss of it when colleagues retire or leave the company.

In 2018 we launched an e-learning platform for our employees. The available online courses are either developed by our internal experts, in collaboration with the training department, or from a catalog on the shelf accessible. Launched in the spring of 2018, the 17 e-Learning courses specific to BESIX attracted 305 people who attended a total of 2224 course modules.

Parallel to this we have recently initiated a new ERP project, called Symphony. Prior to using the software, people working on Symphony are invited to take online courses and take tests. 117 people from the Tendering departments of BESIX SA, Six Construct & Jacques Delens obtained a total of 173 Certifications from e-learning Symphony.

Our BePro online video trainings are running successfully since a number of years now. BePro is a trajectory in which employees get to know the BESIX way. In addition, there are also technical training courses provided from BESIX, ranging from the construction of a very high building to foundation techniques and earth-turning structures. In 2018 we added a new section dedicated to "Operations & Maintenance", while other videos have been updated. At the level of engineers, 110 people attended training courses in 2018.

To close we also offer specific **environmental awareness trainings** to our employees:

- General Environmental Awareness Trainings are provided to teams
- Project Specific or Activity specific Environmental trainings are provided at the level of projects
- Specific awareness communications regarding conservation of Energy and Water were made on World Energy Day, World Water Day, World Environment day, etc.

Complementing environmental awareness trainings we have a strong mobility policy not only promoting sustainable mobility but also making the link to encourage physical fitness. In combination with the BESIX Fit program we accumulated a great share of biking, swimming and walking kilometres. Combined with other measures like the promotion of teleworking, encouraging commuting by bike and an air travel request system we are significantly reducing the daily carbon footprint of our employees.

VOLUNTEERING WITH BESIX FOUNDATION

Over the last 10 years more than 3,400 volunteers helped to shape numerous projects around the world through the BESIX Foundation. Together we reached more than 60,000 beneficiaries, funded 242 projects and won 7 prizes doing so.

4.3.2.1 Best practice examples

KiddyBuild, allowing youngsters to discover your job

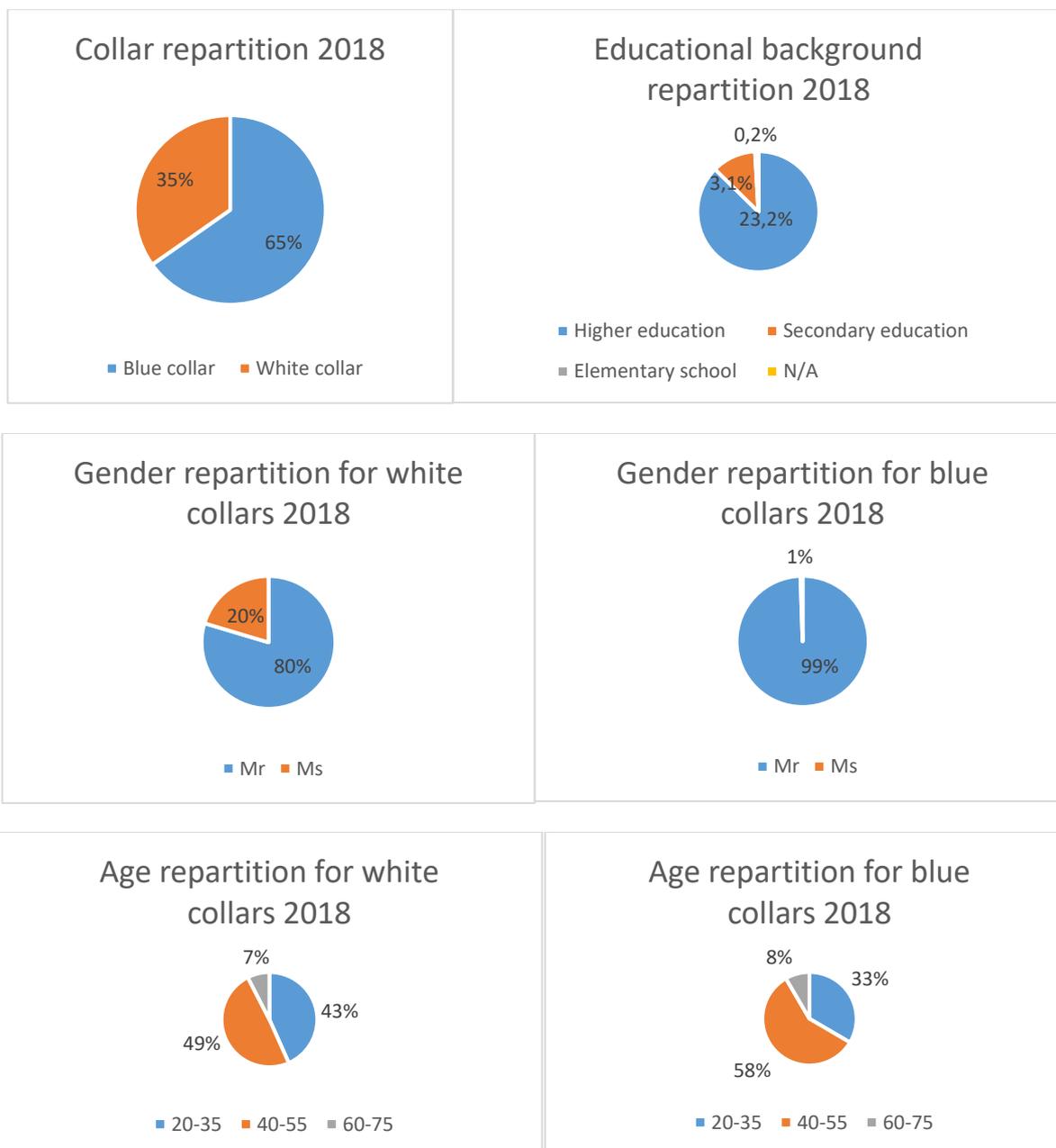
Since 2014 the KiddyBuild project has welcomed over 1,300 students from unprivileged backgrounds on our Belgian sites in Brussels, Antwerp, Ghent and Herent. BESIX partnered with "Atelier de l'Avenir" through the BESIX Foundation. The initiative offers a first insight in different jobs and aims to educate these young students.

Meanwhile it offers an opportunity for our employees to volunteer in a rewarding project. Together they help discover the strengths and desires of the young pupils. Our enthusiastic employees organize workshops and guide them through different jobs in the construction sector leaving them full of inspiration and eyeopeners for their future jobs.

4.3.3 Promoting Diversity

Within BESIX Group we are over 15,000 employees coming from 76 different backgrounds regardless of age, disability, gender, marriage and civil partnership, pregnancy and maternity, race, religion, political opinion or beliefs. It demonstrates we highly commit to one of our core values: Unity. At BESIX we consider diversity as being an opportunity for continuous co-creation, innovative teamwork and new idea's. By measuring gender, collar type, age, ethnicity, socio-economic background,... we aim for general equality between our employees.

The construction sector has never been an easy industry to excel in gender diversity. Most workers are men because of the heavy physical labour found in most construction jobs. The different repartitions are displayed in the graphs.



For 2018, all types of contracts combined, we have 908 new employees on group level of which 18% are women. The retention rate is 9% which is average for the construction industry ranging between 7% and 12%.