# HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION

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### 3.1 THE BOUYGUES GROUP'S CORPORATE SOCIAL RESPONSIBILITY POLICY

Chapter 3 of this Registration Document contains the Bouygues group's key CSR indicators and related information. Further information is available by visiting the Group's corporate website at bouygues.com. In addition, CSR reports by the Group's business segments can be downloaded from their respective websites<sup>a</sup>.

### 3.1.1 Group CSR policy

Delivering **high-performance**, **innovative solutions** for meeting sustainable development challenges, and therefore to foster progress for society as a whole, is a major avenue of growth for Bouygues. Corporate social responsibility, or CSR, at the Bouygues group also means **limiting and**, wherever possible, reducing the negative impacts from its activities on the environment and society by cushioning effects on ecosystems, better explaining its operations and taking the expectations of stakeholders into account.

Correspondingly, CSR is central to strategy at the Group, which is adapting business models so that customers can be offered solutions that make life better for everyone every day.

The best practices applied by each of the Bouygues group's business segments in the human resources, environmental and social spheres are more tangible proof of this commitment. All initiatives are implemented with the help of reliable indicators that are audited on a regular basis for purposes of compliance and continuous improvement.

Bouygues, in its business activities, takes into account **United Nations Sustainable Development Goals (SDGs)** and pledges to attain as many of these goals as possible by:

- reducing the negative impacts from its business activities;
- increasing their positive effects, mainly through internally developed solutions as well as best practices.

### 3.1.2 CSR oversight

Within the Bouygues group, human resources, environmental and social matters are handled separately by each business segment because they are closest to their own operations.

**Monitoring and overall coordination** of initiatives is provided at parentcompany level (Bouygues SA) by the Ethics, CSR and Patronage Committee, and by the Group Sustainable Development-Quality Safety Environment (QSE) department.

 Set up in 2001, the Ethics, CSR and Patronage Committee meets several times annually to review these three themes on behalf of the Board of Directors. The committee is currently chaired by Anne-Marie Idrac. In 2017, it gave a favourable opinion on the launch or continuation of various patronage initiatives of an educational, medical or humanitarian nature. It oversaw the updating of the four compliance programmes adopted in 2014 to define and develop the prevention of non-compliant practices in the spheres of competition, anti-corruption, financial information and Paying close attention to the impact of its activities on these issues, the Group focuses on SDGs linked to **urban environments, infrastructure, climate change and sustainable economic growth,** which dovetail with the objectives of its core businesses. The priority SDGs pinpointed by Bouygues are as follows:



This chapter outlines some of the emblematic initiatives conducted by the Group and its business segments in the fulfilment of SDGs.

In 2016, the Group conducted its second materiality assessment to update the ranking of its sustainable development challenges, the results of which can be consulted by visiting bouygues.com.

securities trading, and conflicts of interest. It also oversaw the drafting of a fifth compliance programme on embargoes and export restrictions and ensured that all compliance and business ethics programmes were transposed into Bouygues SA's internal regulations. The committee ascertained information and followed developments with regard to non-compliant practices within a foreign subsidiary of a Colas group entity. It also familiarised itself with the findings of the CSR reporting audit. Further information about this committee can be found under sections 5.3.4.1 and 5.3.7.4 of this Registration Document.

• The Sustainable Development Committee, chaired by Olivier Bouygues (Deputy CEO of the Bouygues group), has the Sustainable Development directors of the Group's five business segments as its members. It coordinates joint intra-Group policies and looks into ways in which underlying sustainable development trends can reshape business models and support innovation.

(a) www.bouygues-construction.com, www.bouygues-immobilier-corporate.com, www.colas.com, www.groupe-tfl.fr, www.corporate.bouyguestelecom.fr

- Comprising representatives from the five business segments, the Extra-Financial and CSR Reporting committee assists in the preparation of the Bouygues Registration Document by identifying major Group-wide issues relating to CSR, creating appropriate extra-financial indicators and collecting the relevant information. It also oversees and ensures the reliability of the data-collection process.
- At each Annual General Meeting, Martin Bouygues presents the most significant sustainable development actions and indicators of the previous year to Group shareholders.

The Group Sustainable Development-Quality Safety Environment (QSE) department oversees general policy, in conjunction with support departments, and disseminates information about best practices. The above-mentioned Group-wide committees, as well as the seminars and conferences organised by this department, provide opportunities for developing practices able to meet sustainable development challenges. Olivier Bouygues, Deputy CEO of Bouygues, is responsible for Group-wide sustainable development initiatives. The Group Sustainable Development-Quality Safety Environment (QSE) department works close in conjunction with the Innovation department. One of their key joint achievements – since 2016 – has been the innovation drive focusing on sustainable urban environments and the circular economy. The parent company's Innovation unit has made sustainable innovation a strategic priority.

More broadly, all Group-wide thematic committees systematically consider sustainable development issues in the context of their own business segments. This includes sharing industry best practices and taking into consideration the economic challenges linked to sustainable development. It can therefore be said that CSR is factored in at all governance levels within the Group.

Within the Bouygues group's business segments, coordination of CSR themes is handled jointly by the Human Resources and Sustainable Development/ Environment departments of the business segments themselves. These departments report to:

### 3.1.3 CSR reporting methodology

CSR reporting is one of the preferred ways through which the Bouygues group monitors and coordinates its CSR policies.

Just as roll-out of these policies and initiatives is itself delegated to the individual business segments, so that they can deal with the distinctive issues they face, the Group's reporting policy is built on **decentralisation and accountability** when being implemented by each business segment.

To ensure the CSR reporting procedure and the qualitative and quantitative information published by the Group is both uniform and reliable, a reporting protocol covering the human resources, environmental and social components was compiled in 2013. It is updated annually in consultation with each business segment, and it incorporates the findings of the work carried out by the committees. A summary of this reporting protocol can be consulted by visiting bouygues.com.

The protocol specifies the methodology to be used when collecting data for the indicators of the three components, namely definition, scope, units, computation formula and contributors. It is the handbook used by all participants in the Group reporting procedure. The specific procedures to be applied for each business segment are provided in the annexes of this handbook.

- the Innovation and Sustainable Development department (Bouygues Construction);
- the Communication, Marketing and Sustainable Development department (Bouygues Immobilier);
- Senior management (Colas and TF1);
- and the Innovation department (Bouygues Telecom).

Each business segment furthermore coordinates a network of liaison officers that, for example, sit on company-wide committees, such as Bouygues Construction's Sustainable Development committee, which comprises representatives from operating units and support services. Every two years, Colas holds awareness-raising seminars for its network of Environment officers in France and abroad. The last such meeting took place in May 2016, in Lyon; the next is scheduled for 2018 in Montreal. Additionally, meetings in the field are used to share experiences and implement and monitor action plans.

The Sustainable Development department of Bouygues Immobilier holds a roadshow through which it aims to raise employee awareness about sustainable development goals and the occupational resources available for integrating themes such as the circular economy, nature in urban environments, low-carbon construction and resident's health into property development projects.

In the field, HR and QSE teams, as well as the whole network of operational liaison officers from the Sustainable Development teams of each business segment, spearhead the Group's CSR policies, with a focus on keeping risks under control.

In 2017, TF1 launched TF1 Initiatives, aimed at giving greater consistency and visibility to the societal initiatives embodied by its TV channels, the company itself and its corporate foundation. It organises its actions around three areas: community action, diversity and the sustainable society.

## Coverage rates of HR reporting indicators in 2017

To take into account the various challenges faced by the business segments as well as local constraints, human resources reporting currently has four different types of scope:

- Global, which covers 100% of the workforce. In 2017, 43% of indicators had this scope;
- France, which covers 58% of the workforce. In 2017, 39% of indicators had this scope, corresponding – besides France itself – to French overseas territories (French Polynesia, Saint Barthélemy, Saint Martin, Saint-Pierreet-Miquelon, and Wallis and Futuna) and French overseas departments (Guadeloupe, French Guiana, Martinique, Mayotte and Reunion Island). Clipperton Island, the French Southern and Antarctic Lands and New Caledonia are therefore excluded;
- Non-France companies with more than 300 employees, comprising 51 firms representing 36% of the Group headcount and 85.6% of the international workforce. In 2017, 7% of indicators had this scope;

• France companies and non-France companies with more than **300 employees,** comprising 94% of the workforce. In 2017, 11% of indicators had this scope.

This breakdown testifies to a continuous broadening in the degree of coverage of HR indicators and is the result of a proactive approach by an inter-business segment working group. Decided upon in 2013 by the Bouygues group, the extension of HR reporting worldwide continues mainly within Bouygues and Colas via the roll-out of their HR Information Systems (HRIS).

### Coverage rates of environmental and social reporting indicators in 2017

Two types of indicator comprise the Group's environmental and social reporting:

- indicators for which information is consolidated at Group level, namely indicators that can apply to all the Group's business segments, for which all, or the majority of, business segments provide their own quantitative data;
- indicators specific to a business segment, which are indicators that apply solely to a business segment or to a line of business therein.

#### Indicator coverage rate for Bouygues Construction

In 2017, the coverage rate of Bouygues Construction's reporting is 95%. The remaining 5% is due to the following exemptions:

- Companies in which the equity interest is below 50% and companies accounted for by the equity method are not included;
- At Bouygues Bâtiment International, structures where the headcount is less than 10 and/or without a production activity are not included;
- At Bouygues Energies & Services, structures whose sales are less than €10 million are not included, unless the sum of the sales figures of the excluded structures exceeds 5% of the total sales figure for Bouygues Energies & Services;
- The Concessions division is not included (to be consistent with financial reporting).

#### Indicator coverage rate for Colas

Concerning the social, environmental and hazardous chemical areas, Colas indicators use a comprehensive global scope that includes companies and joint ventures indiscriminately, even in cases where Colas only holds a minority stake (except for TPCO, listed on the Bangkok stock exchange). This scope also includes materials production firms with sales below €2 million even though they are not included in the financial consolidation. The only exceptions are companies acquired in the year under review, whose sales amount to less than 1% of Colas' total.

#### Indicator coverage rate for Bouygues Immobilier

Environmental and social indicators cover the full scope of Bouygues Immobilier in France and abroad.

In 2017, at Bouygues Immobilier, the reporting coverage rate as a proportion of sales is 94.8% when overseas subsidiaries (Belgium, Morocco and Poland) are excluded. This rate drops to 89.1% when the French subsidiaries (Loticis, Ossabois, Nextdoor, Patrignani, SLC and Urbis) are also excluded.

#### Changes to the Group's carbon reporting

To comply with the changes in carbon-reporting obligations arising from France's Energy Transition for Green Growth law, published in the Official gazette of the French Republic on 18 August 2015, the business segments of the Bouygues group are adapting their practices for measuring  $CO_2$  emissions to take into account the concept of "significance" of the reported emissions sources and the widening of the data-collection scope to include the entire value chain.

The various initiatives in 2017 consisted in:

- broadening the measurement of CO<sub>2</sub> emissions generated by the use of goods and services produced for the Group as a whole, where such sources are both significant and relevant;
- rebasing carbon reporting within the Group, for which data are currently collected by scope, on the concept of significant emissions sources. This new format for presenting the carbon footprint can be consulted under section 3.3.4.1 "Measuring greenhouse gas emissions and material impacts of business activities and products on climate change".

### 3.2 HUMAN RESOURCES INFORMATION

### 3.2.1 People, the Group's most important resource

#### 3.2.1.1 Dynamic organisation in France and abroad

"At Bouygues, people are our most important resource. Since their motivation and competence are key to our success and progress, the quality of human interaction is fundamental..." (Extract from the Group's Human Resources Charter).

The Bouygues group operates in nearly 90 countries. At 31 December 2017, it employed 115,530 people, spanning a wide range of business activities and expertise.

#### Headcount by region at 31 December 2017

| Scope <sup>®</sup> : Global  | Holding<br>company <sup>b</sup><br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas  | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|------------------------------|--|--------------------------|------------------------|--------|-------|---------------------|---------------------|---------------------|
| France                       | 352  | 20,788                   | 1,850                  | 33,683 | 2,936 | 7,395               | 67,004              | 66,054              |
| Europe (excl. France)        | 28   | 7,980                    | 108                    | 8,971  | 118   | 0                   | 17,205              | 17,216              |
| Africa and Middle East       | 107  | 6,357                    | 14                     | 6,563  | 1     | 0                   | 13,042              | 14,893              |
| North America                | 3  | 976                      | 1                      | 4,900  | 2     | 3                   | 5,885               | 5,567               |
| Central and South<br>America | 62   | 547                      |                        | 347    |       |                     | 956                 | 1,154               |
| Asia-Pacific                 | 17   | 10,706                   |                        | 715    |       |                     | 11,438              | 13,113              |
| International                | 217  | 26,566                   | 123                    | 21,496 | 121   | 3                   | 48,526              | 51,943              |
| France + International       | 569  | 47,354                   | 1,973                  | 55,179 | 3,057 | 7,398               | 115,530             | 117,997             |

(a) Coverage: 100% of the Group's headcount

(b) O/w Holding company: 167

Indicators available at bouygues.com: Number of temporary and occasional workers as full-time equivalents (France), Headcount by type of contract (permanent and temporary – France), Headcount by job category (France)

Headcount fell at **Bouygues Construction** because of a decline in the building activity, chiefly affecting Africa and Asia, as many worksites were wound up (Morocco, Singapore, Qatar and Turkmenistan) while others were still awaiting to begin. In France, headcount increased sharply in tandem with the upturn in activity, most notably as worksites associated with the Grand Paris major infrastructure programme started up.

In 2017, property development headcount edged down in France following the sale of Ossabois, a **Bouygues Immobilier** subsidiary. However, the effect on its overall headcount was offset by market expansion in France and its diversification strategy to expand the range of products and services on offer.

Total headcount at **Colas** edged up by 0.6% relative to 31 December 2016. In France, the headcount rose in accordance with the gradual upturn in business activity, advancing by 1.4% relative to 31 December 2016 (up 5.9% in French overseas departments).

Outside France, the headcount decreased by 0.6%. However, the yearly trends varied by region, depending on the state of business activity. Headcounts dipped in Europe, Asia and South America but increased in North America.

#### Workforce by gender

| Scopeª: Global | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|----------------|---------------------------------|--------------------------|------------------------|-------|-------|---------------------|---------------------|---------------------|
| Women          | 23.6%                           | 20.6%                    | 50.9%                  | 10.4% | 52.2% | 41.4%               | 18.4%               | 17.8%               |
| Men            | 76.4%                           | 79.4%                    | 49.1%                  | 89.6% | 47.8% | 58.6%               | 81.6%               | 82.2%               |

(a) Coverage: 100% of the Group's headcount

The proportion of women working for Bouygues increased by 0.6 of a percentage point, representing a step forward towards the diversity target whereby 21% of the Group's employees by 2020 will be women.

#### Workforce by age range

| Scope ª: Global | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|-----------------|---------------------------------|--------------------------|------------------------|-------|-------|---------------------|---------------------|---------------------|
| Under 25        | 2.6%                            | 7.5%                     | 10.7%                  | 5.7%  | 6.5%  | 8.0%                | 6.7%                | 6.3%                |
| 25 - 34         | 22.9%                           | 28.8%                    | 32.1%                  | 22.0% | 24.8% | 34.6%               | 25.8%               | 26.7%               |
| 35 - 44         | 31.6%                           | 28.4%                    | 32.0%                  | 27.0% | 29.4% | 37.1%               | 28.4%               | 28.8%               |
| 45 - 54         | 27.1%                           | 23.6%                    | 18.8%                  | 29.4% | 29.0% | 17.7%               | 26.1%               | 26.0%               |
| 55 and over     | 15.8%                           | 11.7%                    | 6.4%                   | 15.9% | 10.3% | 2.6%                | 13.0%               | 12.2%               |

(a) Coverage: 100% of the Group's headcount

Indicators available at bouygues.com: Average age and seniority (France)

The breakdown was generally steady. The proportions increased in the under-25 and the 55-and-over age brackets. One reason for this tendency was increased hiring. Another was measures taken to keep older workers in employment (amongst which the so-called "generation" contracts)

#### 3.2.1.2 Proactive recruitment policy to support the growth and transformation of the business activities

Hiring new employees is a key issue for the Group, enabling it to support business growth. That is why it is essential to integrate tomorrow's talents and foster innovation in partnership with the academic world. As a result, the Bouygues group's business segments are active young graduate recruiters. Most of the Group's business segments have set up special talent acquisition units.

The unit set up by **Bouygues Immobilier** aims to support HR managers and other managerial employees in achieving their ambitious recruitment goals. To do this, it uses new digital resources such as business-oriented social media and recruitment platforms to make contact with experienced property development professionals. **Bouygues Telecom** has implemented a partially centralised structure to optimise sourcing and recruitment, both of which have become increasingly wide-ranging and complex, and to help recruit key skills sets.

#### Attracting and recruiting future talent

A premium higher-education partnership, signed with CentraleSupélec has forged a special bond with students at this institution, offering them career opportunities in the Group's various activities. For example, Bouygues Telecom sponsors the ISIA (IT and Advanced Systems) and Telecoms courses at CentraleSupélec. A strong relationship also exists with ESTP, specifically through the sponsorship of two graduating classes by Colas (2018) and Bouygues Construction (2019), respectively, and in the form of a partnership with Bouygues Immobilier.

The aim of this sponsorship is to forge ties with students right from their first year by promoting the Group's brand and the opportunities on offer at its companies. This, in turn, aims to prepare a strong pool of interns and graduates for the future. Sponsorship initiatives generally last three years. During this time, regular events are held and students can avail themselves of an individual coaching programme to support them with their career goals.

The policy for hosting students operated by Group companies in conjunction with universities and other higher-education institutions gives students and graduates access to considerable internship experience as well as to hiring opportunities.

In 2017, the five business segments of the Bouygues group were recognised by France's "Happy Trainees"<sup>a</sup> ranking, which highlights those companies most preferred by interns and work/study students: Bouygues Telecom came 3rd, Bouygues Construction 6th, Bouygues Immobilier 10th, Colas 16th and TF1 29th.

(a) https://happytrainees.org/

At business-segment level, targeted actions were implemented in 2017, first and foremost concerning the recruitment of interns.

**Bouygues Construction** met candidates by holding an "internship marathon", through which numerous opportunities could be offered to potential interns. Candidates were first short-listed, then interviews were held in seven cities in France. Sessions were specifically held on worksites, giving future interns a first contact with work at the grassroots level.

A Top Trainees Day was held on 22 June 2017, bringing together one hundred interns chosen for their commitment to the company. The focal points of this event were team building, personal development and learning about Bouygues Construction's activities. Its overriding purpose is to retain the best talent, so that every single one of the interns becomes an employee.

Hiring policy at **Colas** is predicated on initiatives such as continuous engagement with higher education establishments.

Its ability to attract new employees is clearly also bolstered by its top spot in the best construction employer rankings (Capital – Statista) and the positive opinions posted on business rating sites (Glassdoor, Indeed, Viadeo).

As well as strengthening ties with engineering schools, university technology institutes and public works and civil engineering students at the Centre d'Égletons (the French public works and civil engineering training school), Colas last year enhanced its employer brand with measures including:

- an ambassador programme covering higher education establishments, assisted by diversity ambassadors;
- Golden Roads, in which interns document their internships, with the possibility of winning a trip to London, Berlin or Venice;
- the Colas Clubs Spring Challenge, a ground-breaking contest between different schools' performing arts clubs that aims to reward creativity.

In addition, the subsidiaries hold worksite visits and get involved at schools in their local areas.

As part of the **Bouygues Immobilier** Campus in-house challenge, interns and work/study students discovered the various professions and entities within Bouygues Immobilier and held discussions with operational employees, while finalist teams were able to showcase their projects to the competition panel.

Bouygues Immobilier held a forum at its main locations on the same day to promote diversity in recruitment profiles and present its business activities. Additionally, a Graduate Programme is in operation. It is designed to produce home-grown talent and lasts 18 months. Admission is highly selective.

**TF1** group has more than 200 different professions on offer. It is also forging partnerships with leading higher-education institutions for each of its business activities, from broadcasting, journalism and management to digital and business development. Students from TF1 partner academic institutions are welcomed throughout the year for exclusive visits to television studios and valuable interaction with group employees. Every year, the TF1 group organises the Grand Prix Patrick Bourrat, awarded to students from industry-recognised journalism schools. Lastly, TF1 renewed its sponsorship of the Media & Digital chair at the Essec business school.

**Bouygues Telecom** held its first-ever "Partner Day" with selected 25 highereducation institutions at its head office with the aim of enhancing the company's visibility and renewing trust about its strength, prospects and business strategy. Other schemes were also developed last year. For example, an in-house *alumni* network was launched for Bouygues Telecom employees who had graduated from 19 key engineering, business or general educational institutions. Networking events such as breakfast and after-work meetings were held. In 2017, My Job Glasses, digital hub, was launched to bring students and educational liaison officers into contact with each other.

#### Innovating for the benefit of candidates

To support recruitment policy and attract future talent, the Group's business segments are developing action plans using digital communication channels (social media and job boards) and scouting operations at the grassroots level by attending higher-education fairs and forums and, as far as possible, endeavouring to develop joint representation on behalf of all business segments.

Providing access to all job offers through the bouygues.com website promotes equal opportunities and highlights the wealth of possibilities on offer at the Group in its various operations, both inside and outside France. More than 1,300 offers are available on the website, divided into 26 different professions.

**Bouygues Construction** pursuing its digitisation strategy on LinkedIn and Facebook (with the Campus Bouygues Construction page). For the second consecutive year, virtual forums were also held. In 2017, the main themes were work/study arrangements and careers for women in engineering. These forums provide a platform for the group to connect with its target population, leading potentially to job offers. During these forums, as well as continuing the practice of digitising CVs, the process of offering internships was trialled on a purely online basis, with success.

In addition to Hub Carrière **Colas** (hubcarrierecolas.com) and its careers platform, Colas last year continued its digital communications policy.

In 2017, Colas launched three major employee advocacy programmes (employee ambassadors) internationally to encourage its employees who are active online to raise the profile of its employer brand and share its job offers on business social media:

- Follow-Me, a programme providing tailored support on LinkedIn for managers in and outside France;
- Roadshows, which are mobile training workshops to encourage business-unit managers and executives to share their brand messages on professional social media;
- BuzzClub, a mobile-based social sharing platform open to support departments and recent graduates, through which it is possible to participate in an employee referral programme.

As well as taking part in campus-based meetings and other initiatives with partner higher-education institutions, **TF1** group has a strong presence on the web and in social media with its TF1 Carrières Positives employer brand. Last year, TF1 earned first place in the media category in the Potential Park <sup>a</sup> rankings assessing corporate digital-recruitment strategies.

In connection with the launch of its new employer brand, #Connectonsnosambitions, **Bouygues Telecom** last year ran its social networking campaign on Facebook and Twitter in addition to LinkedIn. It also launched its new careers site in mobile-first mode.

#### Strengthening higher-education partnerships outside France

At **Bouygues Construction**, most higher-education partnerships outside France are planned at the local levels, according to subsidiaries' needs. Dragages Hong-Kong initiated a partnership with four universities to design a graduate training programme, while Bouygues Thailand forged long-term ties with a partner university by sharing its expertise in building high-rise buildings. Bouygues Construction increased intake into its "INTERNational Programme" in its fourth year, taking on 25 standard and international business interns. This programme is designed to train international managers who can evolve in diverse cultural environments and projects.

As in France, **Colas** international subsidiaries continue to build ties with academic institutions, primarily through partnerships within the geographic areas that they cover.

In North America, interns and partnerships with higher education (e.g. between the Terus subsidiary and the Northern Alberta Institute of Technology (NAIT) in Canada) have a local dimension. In the US, the Branscome subsidiary has teamed up with local community colleges that offer qualifications in construction. The HRI and Reeves subsidiaries have several partnerships in place with universities.

In Europe, Colas Ireland has signed a new partnership agreement with the National University of Ireland. In most countries in Central Europe, subsidiaries take part in student fairs and have ties with technical colleges and universities.

In Africa, new partnerships were set up with schools in Ivory Coast, Cameroon and Morocco while subsidiaries continued hosting interns. In Morocco, Colas is active in forums and has established new partnerships with public training institutes.

#### **Recruitment and departures**

#### External recruitment by job category

| Scope <sup>a</sup> : Global          | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas  | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--------------------------------------|---------------------------------|--------------------------|------------------------|--------|-----|---------------------|---------------------|---------------------|
| France                               | 88                              | 3,178                    | 495                    | 4,080  | 557 | 1,645               | 10,043              | 7,473               |
| Managerial                           | 59                              | 1,516                    | 249                    | 611    | 298 | 415                 | 3,148               | 2,439               |
| Clerical,<br>technical & supervisory | 29                              | 1,118                    | 193                    | 978    | 259 | 1,230               | 3,807               | 2,823               |
| Site workers                         |                                 | 544                      | 53                     | 2,491  |     |                     | 3,088               | 2,211               |
| International                        |                                 | 7,011                    | 19                     | 13,517 | 51  |                     | 20,598              | 24,889              |
| Staff♭                               |                                 | 2,073                    | 19                     | 2,780  | 51  |                     | 4,923               | 5,415               |
| Workers°                             |                                 | 4,938                    |                        | 10,737 |     |                     | 15,675              | 19,474              |
| France + International               | 88                              | 10,189                   | 514                    | 17,597 | 608 | 1,645               | 30,641              | 32,362              |

(a) Coverage: 100% of the Group's headcount

(b) Supervisory, managerial and technical employees

(c) Site workers

Indicator available at bouygues.com: Internships during the year (France)

Recruitment at **Bouygues Construction** decreased over the entire scope of business activities in 2017. However, this masks a contrast since in France the number of new hires was 45% higher than in 2016, reflecting a nationwide upturn in business activity as well as tight labour-market conditions. International recruitment numbers were down 41%. Completion of work projects led to a decline in business activity, which in turn reduced hiring across all entities.

The number of new hires by **Colas** rose 11.2%. In France, the steep rise in new hires (up 39.9%) reflects a significant recovery in the roads market and a rise in the backlog.

In North America, Africa and Asia, hiring levels vary widely, mainly due to seasonal factors.

By geographic region:

- In North America, hiring levels rose in Canada but fell in the US.
- In Europe, hiring rose sharply in northern Europe, especially in Belgium in line with the pick-up in business activity, and in Central Europe, as a result of numerous EU-funded infrastructure projects.
- In Africa, recruitment was significantly higher in Guinea due to the massive GAAC mining project.

External recruitment by **Bouygues Telecom** in 2017 mainly served to bring in rare expertise and fill shortages in skillsets in connection with 4G, fixed-line, fibre, BtoB and data-related developments.

#### Number of departures

| Scope <sup>a</sup> : Global                      | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas  | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|--------|-----|---------------------|---------------------|---------------------|
| Number of departures<br>(all types of contracts) | 75                              | 11,915                   | 440                    | 17,547 | 771 | 1,564               | 32,312              | 34,688              |

(a) Coverage: 100% of the Group's headcount

Indicators available at bouygues.com: Reason for departure (France), Staff turnover (France)

In France, the number of departures at Bouygues Construction edged up by 3.5% as tight conditions in the labour market resulted in resignations.

In international activities, the number of departures should be viewed in light of the high number of recruitments. The project structure of business activities accounts for the intensive use of locally sourced, temporary labour, with employment contracts running for short times and expiring upon completion of construction cycles or projects. Although employee leaving numbers were high outside France, they were far lower than in 2017. This was due to a broad-based decline in business activity as several work projects were handed over – mainly in Africa (Morocco, Qatar, Nigeria and Ghana) and Asia (Singapore, Turkmenistan, Thailand and Hong Kong) – and the lack of new projects.

At **Colas**, the number of departures internationally is not meaningful because this chiefly results from the seasonal nature of its business, as worksite contracts expire.

| Scope <sup>®</sup> : France                   | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|---|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|---------------------|---------------------|
| Number of dismissals<br>(permanent employees) | 8                               | 676                      | 29                     | 1,372 | 132 | 296                 | 2,513               | 2,899               |

(a) Coverage: 58.0% of the Group's headcount

At Colas, the number of dismissals in France decreased by 10.3% versus 2016 to 1,372, of which 482 terminations following the completion of work projects.

#### 3.2.1.3 Compliance with ILO conventions



The Bouygues group promotes the fundamental conventions of the ILO (International Labour Organisation) as well as human rights in the countries where it operates. Signed in 2006, the UN Global Compact recognises freedom of association and the right to collective bargaining while

seeking to eliminate discrimination and forced and child labour. Each year, the Group reaffirms its commitment to these objectives. The Group's Code of Ethics and Human Resources Charter, widely circulated internally and available at bouygues.com, remind all employees of its expectations in this regard. In sometimes complex circumstances, operational managers have a duty to prevent any infringement of human rights in areas relating to their activity. That vigilance must be an integral part of their day-to-day work. It should be noted that, outside France, an employee consultation body exists in the 63% of subsidiaries that have more than 300 employees.

Because its operations span the globe, **Bouygues Construction** must constantly house work teams arriving from abroad or distant locations. Standards for worksite living quarters have been defined to guarantee a minimum level of facilities and living conditions, irrespective of country and place of work. Initially put in place by Bouygues Bâtiment International, these standards were deployed to all Bouygues Construction entities in 2017, and apply to all new worksite living quarters created for a duration upwards of six months. To help deployment, toolkits (containing a guide to living quarter standards, an assessment sheet, a scorecard and the list of standards applicable to subcontractors) were handed out to project managers. Subsequently, the Health and Safety department will be tasked with conducting internal audits.

### Freedom of association and the right to collective bargaining

In countries where ILO conventions governing trade union rights and freedoms have not been ratified, all subsidiaries aim to implement arrangements that give employees a voice as the Group strongly believes that high-grade dialogue between labour and management is the cornerstone of harmonious relations in the workplace.

**Bouygues Construction**'s presence outside France often drives progress in countries where social protection is poorly developed. To measure the level of progress in HR policies, by location and by their contribution to labour relations, Bouygues Construction has introduced a human resources development indicator (HRDI). Using 21 criteria categorised into five themes (HR management, careers, remuneration, labour standards and quality of life at work), the HRDI draws a comprehensive picture showing the extent to which Bouygues Construction's HR policy, its culture and its values have become ingrained, while also highlighting avenues for improvement.

| Scope <sup>ь</sup> : International,<br>outside France<br>(companies with more<br>than 300 employees) | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|---------------------|---------------------|
| Existence of employee<br>representative bodies<br>in the international<br>activities                 |                                 | 50%                      |                        | 74%   |     |                     | 63%                 | 64%                 |

#### Existence of employee representative bodies in the international activities<sup>a</sup>

(a) Holding company and other, Bouygues Immobilier, TFI and Bouygues Telecom are not covered by this indicator on account of its scope. Only companies employing more than 300 people operating outside France are concerned

(b) Coverage: 36.0% of the Group's headcount

### Elimination of forced or compulsory labour and the effective abolition of child labour

Respect for fundamental values and principles of human rights is enshrined in the Bouygues group's Code of Ethics and Human Resources Charter. The Supplier CSR Charter forbids all use of forced or compulsory labour. Further to strict compliance with ILO recommendations on child labour, companies within the Bouygues group work to ensure that rules are also complied with by their business partners through the Supplier CSR Charter (see section 3.4.3 "Partners, suppliers and subcontractors").

### 3.2.2 Making life better for employees every day

## 3.2.2.1 Adaptable and scalable worktime organisation

Worktime organisation varies by local business context and by the type of legal arrangements in force, which may differ from country to country. Decisions take into account the need to satisfy customers and maintain a healthy work/life balance for employees.

#### Adapting and organising worktime

Practices for monitoring worktime within **Bouygues Construction** are being harmonised. In France, revisions to clocking-in procedures continued in 2017. After introduction of a common system for clerical/technical/supervisory and managerial employees, whose worktime is measured according to their absences, the worktime of site workers is monitored using a new standardised clocking-in procedure adapted to worksites.

Monitoring worktime helps safeguard a healthy work/life balance. For that purpose, Bouygues Construction has introduced strict rules whenever it requires its employees to work extraordinary hours (on weekends, public holidays and at night). Extraordinary hours systematically require management authorisation and prior consultation of employee representative bodies. Such work also qualifies for overtime pay or time off in lieu. Lastly, close attention is paid to regulating the use of digital technology. Under the "Harmonies" <sup>a</sup> programme, employees are made aware of the importance of "switching off", should they work outside of normal hours.

Because business activity fluctuates, several tools are available to the company and employees for adapting worktime to schedules, in observance of the legislation. For example, employees can add leave or rest days to their

time savings accounts, which store up paid-leave entitlements, making it easier to manage fluctuations in business activity. The adjustable worktime arrangements governing site workers under the collective agreements can absorb variations in HR requirements.

In **Colas'** global scope, the organisation of worktime takes into account the seasonal nature of the transport infrastructure construction and maintenance business.

 In France, the preferred organisation of worktime is either annualisation or a fixed number of days worked. Annualisation and the worktime modulation plan – which apply to workers and office employees, technicians and supervisors in the Operations business line – mean that work can be organised according to seasonality, while rewarding overtime.

The tool used to manage worktime and time off for employees on fixed number of days worked contracts keeps track of days worked, rest days and leave days on a monthly basis. It is also designed to facilitate ongoing dialogue between managers and employees about their workloads and work/life balance.

• Outside France, the seasonal nature of business also has an impact on the organisation of worktime. In North America, for example, projects primarily take place between April and November, with seasonal employees making up a large proportion of the workforce.

Both in the US and Canada, weather conditions prevent working yearround on worksites. Seasonality dictates employment patterns. Employees work at the entities for six to eight months of the year and are rehired from one year to the next.

A Fatigue Management System Policy is in place at most Canadian companies for tracking hours worked and rest periods.

<sup>(</sup>a) Introduced as part of the "Quality of Life at Work" agreement in 2017, "Harmonies" comprises a range of innovative management practices that can be implemented at both individual and group level.

In Europe, worktime is calculated on an annualised basis in most countries, in line with the local legislation. Flexibility encourages work at the times of the year best suited to construction. At the end of the year or when new projects come in, the entities publish a schedule of activity for the upcoming year and submit it to employee representatives. In some other countries such as the Czech Republic, Austria, Denmark and Iceland, subsidiaries bring in seasonal employees at the busiest times of the year.

In Africa, worktime is geared to the legislation in force in each country. An overtime rate is paid for hours worked outside normal working times. On certain projects, employees are granted time-off at the end of the month.

**Bouygues Telecom,** intent on improving customer experience, overhauled worktime arrangements in 2017. As a consequence, teams have better availability at the times when customers need them most (front office and internal operations). Employees volunteering for this were awarded a pay increase.

#### Adopting new forms of work organisation

In France, the Group encourages working from home, which can increase employee satisfaction while yielding gains for the company by improving productivity and optimising the use of office space. The Group's business segments:

- have put into place flexible work methods such as mobile working, working from home and have opened coworking spaces;
- have defined a strategy for preventing cognitive overload (e.g. stress, burn-out) as well as harassment by signing agreements on quality of life at work and conducting anonymous surveys amongst employees. The issues of workload and work/life balance are addressed twice per year, including during annual appraisals (Bouygues Telecom), and early-warnings systems (for filing complaints with management) have been put into place;
- have policies for maintaining a healthy work/life balance, while TF1 and Bouygues Telecom have signed the Parenting Charter. Bouygues Telecom also has a "well-being observatory".

At **Bouygues Construction**, the "Harmonies" programme – introduced as part of the "Quality of Life at Work" agreement in 2017 – comprises a range of innovative management practices that can be implemented at both individual and group level. The "Serenity" stress-prevention module is part of this programme, helping employees handle stress better through resources such as conferences and a network of "stress coaches". It also assists companies in limiting workplace-related stress though better management practices (as dispensed in the Manager 2.0 training course). Operations wise, "Harmonies" meetings – held at the start of worksites – are now systematic and serve to define each person's limits in order to make resource management more fluid. For example, to compensate for the remoteness of some locations, siteworkers do not stop for lunch on Fridays so that they may leave earlier than usual. This initiative has also been introduced for clerical, technical and supervisory employees at Bouygues Bâtiment Nord-Est headquarters.

To encourage remote working, Bouygues Bâtiment Ile-de-France has set up mobile offices at its Paris worksites. Space can be reserved using the Place To Work application.

In France, **Colas** in December 2017 signed an agreement with employee representatives on quality of life at work so that employees could have a healthier work/life balance. This included making provision for working from home and occasional remote working.

A new agreement on time savings accounts is being negotiated. One of the ideas under discussion is to broaden its application so that employees can take time off to deal with exceptional situations (such as supporting a partner, child or parent with a serious illness) rather than simply building up an end-of-career leave entitlement.

**Bouygues Immobilier** is redesigning workspaces for its customers and for its own teams in accordance with the new digital paradigm and latest management practices. For example, its Galeo headquarters and several other locations have been transformed into shared workspaces, with a focus on functionality, collaborative working and well-being in the workplace. There is a broad range of working environments, from fixed and shared office space to creative rooms and quiet zones.

These new workspaces served as a demonstrator for the new sharedoffice service (also known as "third places") that Bouygues Immobilier now markets under the Nextdoor brand. Bouygues Immobilier opened five new Nextdoor spaces in 2017 (see section 3.3, "Environmental information") and aims to become market leader through the partnership it has forged with AccorHotels.

**TF1** has teamed up with Nextdoor to overhaul its workspaces under a scheme called "TF1 by Nextdoor". The delivery of these new workspaces began in November 2017 and will be spread over a three-year period. The project responds to changing collaborative working methods and the increasing digitisation of TF1's operations.

At **Bouygues Telecom**, the flex office (whereby employees have no assigned workstation) has become common practice and working from home has been adopted by 1,300 employees (20% of the headcount, out of the 40% eligible).

#### Number of hours worked

| Scope <sup>a</sup> : Global | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas       | TF1       | Bouygues<br>Telecom | 2017⁵<br>Group total | 2016<br>Group total |
|-----------------------------|---------------------------------|--------------------------|------------------------|-------------|-----------|---------------------|----------------------|---------------------|
| Number of<br>hours worked   | 597,116                         | 94,208,956               | 2,748,772              | 106,669,569 | 7,107,157 | 11,516,205          | 222,847,775          | 229,926,024         |

(a) Coverage: 100% of the Group's headcount

(b) For 2017 data, the calculation method was made more realistic by no longer taking into account various types of absence – including time off work for illness or as a result of a workplace accident. This partially explains the decline in the number of hours worked in 2017

#### Worktime schedule

| Scopeª: Global                      | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|-------------------------------------|---------------------------------|--------------------------|------------------------|-------|-------|---------------------|---------------------|---------------------|
| Hourly                              | 32.9%                           | 52.1%                    | 32.9%                  | 80.6% | 35.8% | 55.4%               | 65.4%               | 66.3%               |
| Annual (incl.<br>senior executives) | 67.1%                           | 47.9%                    | 67.1%                  | 19.4% | 64.2% | 44.6%               | 34.6%               | 33.7%               |

(a) Coverage: 58.0% of the Group's headcount

The indicator is specific to France and thus excludes international data

Indicator available at bouygues.com: Average number of part-time workers (France)

#### Absenteeism

#### Number of days off work as a result of a workplace accident<sup>a</sup>

| Scope <sup>®</sup> : Global                                       | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas  | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|---|---------------------------------|--------------------------|------------------------|--------|-------|---------------------|---------------------|---------------------|
| Number of days off<br>work as a result of a<br>workplace accident | 39                              | 22,030                   | 1,446                  | 51,585 | 1,281 | 2,229               | 78,610              | 82,642              |

(a) Coverage: 99.6% of the Group's headcount

#### Absenteeism<sup>a</sup>

|                             | Holding   |              |            |       |      |          |             |             |
|-----------------------------|-----------|--------------|------------|-------|------|----------|-------------|-------------|
|                             | company   | Bouygues     | Bouygues   |       |      | Bouygues | 2017        | 2016        |
| Scope <sup>b</sup> : France | and other | Construction | Immobilier | Colas | TF1  | Telecom  | Group total | Group total |
| Absenteeism <sup>®</sup>    | 2.4%      | 3.5%         | 2.6%       | 5.1%  | 3.1% | 5.1%     | 4.5%        | 4.6%        |

(a) Permanent staff

(b) Coverage: 57.6% of the Group's headcount

Absenteeism is defined as the number of calendar days absent as a result of workplace accidents, commuting accidents, occupational illnesses and other illnesses versus [average number of permanent staff x 365]

In France, absenteeism edged down, chiefly because of reduced absences resulting from occupational- or commuting-related accidents. This reflects continued efforts to improve working conditions.

#### 3.2.2.2 An ambitious health and safety policy

The Bouygues group aims to reduce the frequency and severity of occupational accidents to which it is highly exposed through its operations, and works towards better employee health. Furthermore, all business segments aim to enhance road safety and forestall psychosocial risks (through surveys, early warnings and management training in best practices).

It is on worksites where the need for accident prevention is crucial. The Group's construction businesses are therefore working extremely hard in

the area of health and safety (safety equipment, training, detection and monitoring of near-accidents), and their results surpass industry standards <sup>a</sup>. In France, health, safety and working-conditions policies are implemented in consultation with Health & Safety committees. Implementation of a safety management system, part of which may have OHSAS 18001 certification, is the organisational bedrock at Bouygues' operating units in the construction sector.

Group entities take active steps to improve the safety of all persons who work on their sites. As personal physical integrity is at stake, Bouygues group

(a) http://travail-emploi.gouv.fr/IMG/pdf/ct\_2014.pdf

entities require their suppliers to have identical work safety requirements when operating on Bouygues sites. In that regard, it is each supplier's responsibility to bring any identified anomaly to the attention of the manager of the Bouygues group site where it is working (extract from the Group's CSR Charter for Suppliers and Subcontractors, which is appended to procurement contracts).

#### Boosting safety in the workplace

To implement this policy in the field, senior managers at subsidiaries have for many years drawn on a global network of health & safety officers as well as a broad range of safety resources, including training on safety, eco-driving techniques, first aid training and 15-minute "starter" sessions on safety basics. Other resources include awareness-raising initiatives, accident analysis, bestpractice sharing, cross-subsidiary challenges and half-yearly rankings.

A large part of **Bouygues Construction's** business takes place outside France, sometimes in high-risk areas with political instability, high levels of crime and health hazards, to name but a few. In this context, the Security department assesses safety risks and provides an adequate response to each identified risk factor. As assessed situations are by definition unstable, the Security department maintains a real-time early-warning network in the areas where projects are under way, so that changes can be made in the event of increased risks. Specific expertise is also provided to project managers to ensure the smooth running of operations in sensitive areas. To help employees, a training programme in assessing safety risks has been introduced.

Bouygues Construction continued broadening its safety policy as it aims for zero accidents. In 2017, 12 fundamental health and safety rules were set forth, applicable to all business activities around the world. These rules, founded on entities' best practices, are designed to maintain performance.

On 13 June 2017, over 900 worksites in around 40 countries stopped work for a day to mark the official launch of these fundamental rules. The Bouygues Construction World Health & Safety Day provided an opportunity for employees, business partners and customers to:

- share a single health and safety commitment based around the slogan "We Love Life, We Protect It";
- discuss best practices at all organisational levels;
- assess operating performances and requirements at each level.

Bouygues Construction believes that each person with a supervisory role within a team is responsible for fostering an accident-free working environment for the operations they oversee. This responsibility requires leadership qualities to be developed at all levels of the company. Three health and safety training modules, common to Bouygues Construction as a whole and disseminated across all divisions, were followed by over 650 employees in 2017, lasting between three and five days.

Bouygues Construction is a standard-setter for safety in the construction industry. Consequently, the procedures and technologies that it makes available to stakeholders are beneficial to the entire profession. This transfer of knowledge takes place via the following:

- Bouygues Construction experts sit on national technical committees introducing new industry health and safety standards.
- The company also works jointly with start-ups to develop and disseminate new technologies (such as automatic guided vehicles (AGV) to assist in handling as well as connected clothing that warns wearers of danger).
- The health and safety progress drive has been introduced among suppliers and temporary employment agencies, led by the purchasing and healthand-safety departments.

In 2017, this increasing expertise at Bouygues Construction was recognised by a special prize, awarded by OPPBTP (the industry-wide risk prevention body for the French construction sector), for its "exceptional commitment to health and safety".

Health and safety policy at **Colas** is built around four priorities: respect for rules, training and information, a safety-first approach to project and process design, and follow-up of action plans.

New measures were introduced in 2017, including the compulsory wearing of safety belts in all machinery, the roll-out of new training sessions in safety culture for all new employees in Metropolitan France (around 700 employees in 2017) and the prevention of dust risk.

Other significant actions included:

- safety coaching sessions (from the CEO to business unit managers) held by Colas Centre-Ouest;
- the Goal Zero process rolled out in Canada with Caterpillar Safety Services;
- the Safety Culture programme launched at Spac together with ICSI a;
- the roll-out of innovative tools providing assistance with manual tasks to the French road construction subsidiaries (such as Exopush), presented at the Viva Technology event in June 2017. These exoskeletons were designed through cooperation between engineers, workers and Colas experts to help workers spread asphalt mixes and thus improve their working conditions;
- virtual reality safety training.

Bouygues Telecom and Bouygues Immobilier have developed e-learning modules for all employees on safety rules, major risks, and the procedures to follow.

#### Workplace accidents

| Scope ª: Global  | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas          | TF1  | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|----------------|------|---------------------|---------------------|---------------------|
| Frequency rate <sup>b</sup> of<br>workplace accidents<br>among staff | 8.4                             | 3.3                      | 8.4                    | 6.4            | 4.5  | 4.7                 | 5.0                 | 5.4                 |
| Severity rate <sup>c</sup> of<br>workplace accidents<br>among staff  | 0.07                            | 0.23                     | 0.53                   | 0.48           | 0.29 | 0.19                | 0.36                | 0.36                |
| Number of<br>fatal accidents   |                                 | 1                        |                        | 7 <sup>d</sup> |      |                     | 8                   | 4                   |

(a) Coverage: 99.6% of the Group's headcount

(b) Number of accidents involving time off work x 1,000,000/number of hours worked. In France, these are accidents leading to more than one day off work, reported to and recognised by healthcare authorities

(c) Number of days off work as a result of a workplace accident x 1,000/number of hours worked

(d) At Colas, although health & safety is improving, which can be seen in the accident frequency rate statistics, there were seven fatalities in 2017, mainly related to accidents involving heavy plant machinery. A specific plan of action related to this risk has been defined for the years to come

#### Promoting health in the workplace



For several years, an ergonomics department within **Bouygues Construction**, reporting to senior management, has worked to reduce the burden of arduous work in production-related occupations. It does this by leveraging best practices and expert knowledge so that it can provide

worksites with tangible solutions. Its scope is comprehensive, encompassing both behaviour (handling, posture and communication) and working environment (equipment and travel as well as exposure to noise and dust).

The department seeks to intervene as early as possible in processes so that ergonomic principles can be integrated into design, rather than being introduced remedially at a later stage. Ensuring that employees have adopted fundamental principles before starting work must become a prerequisite. Around 30 one-day workshops were held in France and Switzerland last year, during which site workers were made aware of the importance of maintaining their health by experiencing various scenarios, including simulations of deafness or even the ageing process and how everyday life is impacted. The ergonomics department also runs equipment and organisational challenges to demonstrate that ergonomic principles are beneficial for both the individual health of site workers and the overall operation of worksites. At supervisory level, ergonomics training for employees working on methods and prevention was introduced into Bouygues Construction's long-standing overseas subsidiaries (Morocco, Hong Kong, Singapore and the UK), putting into practice the principles contained in the Ergonomics Guide published in 2016, covering all of Bouygues Construction's activities.

Protecting from noise and dust first involves modifying equipment in order to reduce vibration and noise levels. Next, the provision of equipment adapted to individuals (e.g. made-to-measure ear plugs) and the raising of awareness among site workers about the importance of wearing it all the time ensures comprehensive protection. Streamlining by Bouygues Construction's Equipment division made it possible to select products with better quality and safety standards. Equipment standardisation furthermore helps obtain improvements, in cooperation with manufacturers and ergonomists. For example, standardising equipment – together with a practical training dimension – has reduced the rate of accidents associated with the use of power tools by 90%. Bouygues Construction now only uses chemicals whose INRS <sup>a</sup> risk ratings are either low or moderate. Lastly, procedures have been implemented to replace form oil or paint containing solvents with safer alternatives.

At Colas, with regard to health, specific initiatives have continued to limit:

- musculoskeletal disorders, through risk-prevention training or providing exoskeletons to make applying asphalt a less arduous task;
- noise exposure (mandatory hearing protectors);
- exposure to ultraviolet rays (wearing of clothing and testing of new materials with long-sleeved T-shirts manufacturers).

**Colas** has also implemented mechanisms and actions to reduce employee exposure to bitumen fumes, silica dust and chlorinated solvents.

In 2017, Colas' fifth Global "Safety Week" (26–30 June) was held on the theme of health and lifestyle to raise awareness among all Colas employees about the need to preserve their health and provide them with ideas for improving it. At all locations, employees were able to test their physical condition thanks to simple, enjoyable exercises based on balance, breathing and heart rate, strength, flexibility and sleep. Workplace accidents and physical condition are often closely related.

**Bouygues Telecom** offers a Health and Safety programme at its headquarters. This contains several initiatives promoting well-being and a sound work/life balance, such as "Cosy Rooms" (offering counselling from a psychologist). Additionally, the well-being and stress observatory, introduced in 1999 in partnership with Préventis, also offers workshops to raise awareness about sleep patterns, relaxation techniques and more besides.

(a) French National Research and Safety Institute for the Prevention of Occupational Accidents and Diseases

#### **Recognised occupational illnesses**<sup>a</sup>

| Scope: France                          | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom |     | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|-----|---------------------|
| Recognised<br>occupational illnesses ª |                                 | 63                       | 2                      | 120   |     |                     | 185 | 221                 |

(a) Coverage: 57.6% of the Group's headcount

The indicator is specific to France and thus excludes international data

The Group endeavours to provide its employees with social protection, both in France and in other countries.

In France, all employees benefit from personal risk coverage (long-term incapacity and death) and healthcare insurance. Entitlements are far superior than minima under the law (especially state-approved complementary healthcare policies) and contractual arrangements. In addition to employee healthcare coverage, the Group also contributes towards covering family members' healthcare costs.

The Group Personal-Risks Scheme, which covers employees of Bouygues Construction, Bouygues Telecom, Bouygues Immobilier and Bouygues SA, improved the level of reimbursement of several items in 2017, from dental and optician costs to alternative medicine and contraception. In 2018, it will offer new services aimed at facilitating prevention (coaching to prevent backache, stop smoking, deal with stress, etc.) as well as offering a 24/7 medical helpline for employees and their families, offered free of charge and reachable from France or abroad.

#### Social protection outside France<sup>a</sup>

| Scope⁵: Global                       | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--------------------------------------|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|---------------------|---------------------|
| Social protection<br>outside Franceª | N/A                             | 100%                     | N/A                    | 100%  | N/A | N/A                 | 100%                | 98%                 |

(a) Percentage of companies employing more than 300 people and operating outside France that provide social protection to employees (b) Coverage: 36.0% of the Group's headcount

N/A: not applicable

Social protection schemes remain a key priority in HR policies internationally. The goal is still that each employee will be covered for personal risks (death and incapacity at the very least).

## 3.2.2.3 Labour relations based on permanent and constructive dialogue

The Bouygues group believes that trade unions and other employee representative bodies are essential for progressive labour relations, which in turn contribute to its companies' success. Having open communication channels with these bodies lays the groundwork for constructive relations.

Resources available to trade unions, in addition to those allocated by each business segment, were determined at Group level by a 2005 agreement. Employee representative bodies in the different business segments are supplemented by the Group Council in France (30 representatives from various works councils around the Group) and the European Works Council (24 representatives from 12 countries). As privileged forums for meetings between union representatives and Group executives, they provide an opportunity for forthright discussions about the Group's business and financial prospects and about developments relating to jobs, HR policy, health and safety. The year 2017 marked another milestone in the development of labourmanagement dialogue at European level. A new agreement was approved by all members of the committee, comprised of representatives from Belgium, the Czech Republic, France, Hungary, Poland, Slovakia, Switzerland and the UK.

The new agreement modifies the membership rules governing the European Works Council. From now on, countries with at least 250 employees are represented (as opposed to 500 previously). Consequently, Croatia, Denmark, Spain and Romania were able to take part in the European Works Council meeting on 18 October 2017.

With such vast representation of its employees (3,474 elected representatives and 407 bodies), the Group sees high turnouts at workplace elections (81.4% in 2017) – far higher than in France on a nationwide level (42.76% in 2017 according to France's National Council on Labour Relations) <sup>a</sup>.

The Group offers a unique resource allowing employee representatives to access data in the e-library of economic and HR-related information related to their scope.

(a) https://www.elections-professionnelles.travail.gouv.fr/documents/20181/122310/Communique-de-presse-nouvelle-mesure-de-l-audience-syndicale.pdf/903f6114c0eb-4217-9ffc-25d97a47ac4b

### Ensuring high-quality dialogue between labour and management

Because each of its businesses is so different, collective bargaining within the Group has naturally evolved by business segment so that agreements stay as close as possible to each one's requirements and limitations.

In 2017, collective bargaining at Group level resulted in two amendments to the Group Personal-Risks Scheme being signed: one involved changes in contributions and benefits for site workers, clerical, technical and supervisory employees, and managerial employees; the other renewed the terms of the Supervisory Board.

In 2017, 185 agreements were signed or renewed, underlining the dynamic labour relations within the Group.

Internationally, labour relations are guided by the rules applicable in the specific countries.

Lastly, each of the Group's business segments has been required to sign other agreements based on their own circumstances.

In 2017, **Bouygues Construction** signed four collective agreements on disabilities, gender equality, management of jobs, careers and wages, and worktime.

In France, **Colas** concluded an agreement on quality of life in the workplace that aims to provide a better work/life balance through the possibility of

working from home, using time savings accounts more flexibly and offering more parental leave. Colas also extended the labour-management dialogue agreement with the three registered unions that sets the level of funding enabling them to conduct their duties effectively.

Within the subsidiaries, the agreements relate mainly to collective bargaining arrangements, employee benefits and employee compensation.

During the compulsory annual negotiations, employee representatives at **Bouygues Immobilier** implemented a solution supplementing statutory arrangements whereby employees can take leave to look after a seriously ill child, spouse or parent. Paid leave donations are possible as a way of helping colleagues within the same company.

In 2017, **TF1** held compulsory annual negotiations for the entire group for the first time, resulting in three agreements in the areas of wage policy, employee benefits and flexible working hours, and labour relations.

It also continued negotiations relative to its job and skills planning agreement in a highly competitive context. Under this agreement, employees will soon have access to 170 factsheets – covering all professions – drawn up jointly between elected representatives, senior management and operational employees. After trialling the idea, TF1 also began negotiations on working from home.

#### Turnout in elections for employee representatives (1st round, principals)

| Scope <sup>a</sup> : France                              | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|---------------------|---------------------|
| Turnout in the most<br>recent works council<br>elections | 86%                             | 86%                      | 73%                    | 82%   | 76% | 70%                 | 81%                 | 82%                 |

(a) Coverage: 58.0% of the Group's headcount

The indicator is specific to France and thus excludes international data

Indicators available on bouygues.com: Percentage of employees covered by a satisfaction survey (France), Percentage of employees receiving a formal annual appraisal (France)

#### Collective agreements negotiated

| Scope <sup>a</sup> : France   | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|---|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|---------------------|---------------------|
| Number of collective<br>agreements negotiated<br>including mandatory<br>annual negotiations | 3                               | 97                       | 3                      | 62    | 11  | 9                   | 185                 | 237                 |

(a) Coverage: 57.6% of the Group's headcount

The indicator is specific to France and thus excludes international data

In 2017, 185 agreements were concluded: 40% concerned compensation and employee benefits, 30% labour relations, electoral and trade union rights, 14% quality of life at work and diversity, 10% worktime and work organisation, and 6% job and career planning.

#### Coordinating dialogue with employees

The collaborative ByLink Network, launched in 2015 and made available to all Bouygues group employees with an email address, gives access to an open and transparent discussion forum that can be used to stay up to date on Group news and share business-segment best practices through theme-based online communities.

The five business segments also have their own collaborative networks. Because these networks all use Microsoft's Yammer solution, adoption of this new work resource was easier for all concerned. Within the Group and around the globe, widely-distributed interactive communication channels are on offer to facilitate exchange (e.g. corporate social media and chat applications). Throughout the year, various events are held within each business segment, offering opportunities to meet and dialogue more often.

For example, **Bouygues Immobilier** periodically runs web conferences hosted by the CEO, who answers questions raised directly by any member of staff.

At the head office, **Colas** has set up pages dedicated to the life of each of its sites (Boulogne-Billancourt and Magny-les-Hameaux) to promote communication between employees (social and cultural activities organised by the works council, on-site events, HR news).

Several of the Group's business segments also conduct satisfaction or perception surveys, or both.

At **Bouygues Construction**, employee surveys provide ideas for improving work organisation and methods, as well as garnering information on the state of labour relations. These surveys, run at entity level, are based on a template common to Bouygues and are used to assess employee engagement and find out about any expectations that they may have. In some entities, this feedback channel is supplemented by a multi-annual employee opinion review.

In partnership with a start-up, **Bouygues Immobilier** last year developed a feedback resource accessible to employees via the intranet.

Because it is interested in how its employees view their work, **Bouygues Telecom** has since 1996 held biennial employee perception surveys on various topics, from the everyday work experience, relations with managers and professional development to strategy, culture and values, business procedures and overall commitment.

#### 3.2.2.4 Compensation policy rewarding individual and combined efforts

The Bouygues group's compensation policy aims to reward professional conduct and the potential of each employee, as well as individual and team performance. Having a range of possibilities for variable and deferred compensation offers different ways of rewarding their commitment to the company.

#### **Comprehensive compensation**

A comprehensive system of compensation applies to all employees worldwide, comprising a basic salary and variable bonus payments (determined by country and occupation). These arrangements may be supplemented by other employee benefits such as occupational pensions as well as health and personal-risk insurance.

In France, 97% of all employees are covered by compulsory or voluntary profit-sharing arrangements in various Group entities. Additionally, employeesavings incentives (e.g. company savings and collective retirement savings schemes) are regularly supplemented by capital increases reserved for employees, such as the Bouygues Confiance n°9 plan in 2017.

Internationally, company savings arrangements similar to the French system are available in some countries. In the UK, Bouygues Construction offers ShareBY and Colas UK offers the "Colas UK Share Incentive Plan". Similar arrangements exist in Switzerland and Hong Kong.

The Group also strives to reward professional conduct and mindset among its best site workers through the Minorange Guild. Bouygues Construction and Colas have 16 such site worker guilds, active in the Group's main locations. Bouygues Telecom recognises professional conduct and customer service acumen through the Customer Advisors Club. Similarly, the expertise of its engineers is recognised by co-option to the Bouygues Telecom "Experts Club".

## Tailoring compensation policies to profiles and geographical areas

**Bouygues Construction** assesses salaries at least twice annually to ensure that compensation is adapted to local conditions, both in France and internationally. Facing a tight labour market in a fast-growing industry, Bouygues Construction Australia raised wages by 5%. In other countries such as Switzerland and Singapore, pay rises were smaller (1.3% and 2.7% respectively) because of negative or zero inflation. In France, after two years of wage restraint, salaries were increased by 2.2% following the upturn in recruitment and the upward revision to the starting salary scale.

Besides business performance, the compensation policy helps manage other long-term strategic issues such as gender equality, attracting and retaining talent, and cross-disciplinarity within the group.

Bouygues Construction strictly adheres to wage equality. The "Committed to People" committee works to ensure the right application of agreements, using a scorecard to monitor gender equality. Less regularly, special attention is paid to this issue during pay reviews.

Since 2016, the Global HR platform has been operating worldwide. Henceforth, the three major HR processes (talent management, annual appraisal and compensation) are combined into the same system. Besides standardising managerial practices, this digital tool unlocks synergies between the processes. During appraisals, for example, information from the other processes provides important decision-making inputs for evaluating employee potential and performance.

At **Colas**, the budget available for compensation depends on three criteria: the results of the Colas group and of the relevant subsidiary, as well as individual performance.

For employees, it is based solely on individual performance, whereas for managers it also reflects the performance of the subsidiary or sector of activity. Every manager is provided with a pay review tool, plus relevant performance indicators. Managers are thus given all the information they need to review their team's pay levels and can submit their proposals with a single click to the subsidiary's and then the Colas group's "validators" for approval. The information system is no longer geared solely to the needs of HR employees: it is now a managerial monitoring system that provides traceability, efficiency and a seamless approach to the approval of pay increases and promotions.

Outside France, Colas Inc. in the US uses local pay surveys given the regional differences between its units spread across the West Coast (California and Nevada), the Midwest (Wyoming, Colorado, South Dakota, Nebraska, Arkansas, Missouri and Illinois) and the East Coast (Florida, Alabama, Georgia, South Carolina, North Carolina, Tennessee, Kentucky, Ohio, Virginia, Pennsylvania and New York). As a result, its employees can be paid at a level in line with the local market. Likewise, Colas Canada uses local surveys to set its pay. For unionised employees, pay is set through the collective bargaining arrangements applicable to their businesses.

In northern Europe, local pay surveys in some countries brought to light the need for pay adjustments in the Operations and Engineering activities, thus leading to remedial increases and therefore better staff retention. In central Europe, the large number of infrastructure projects created tension in the jobs market, driving wages up sharply.

In 2017, based on market surveys and best practices, the Moroccan subsidiary improved its processes to retain and attract talent through fair rules that reward employee performance.

In 2017, **Bouygues Telecom** expanded its compensation policy to include arrangements rewarding not only individual but also collective performance. For example, additional profit-sharing corresponding to 0.5% of payroll for eligible employees at appraisal time, was paid in 2017 in addition to the profit-sharing offered under the usual scheme.

#### Conducting regular pay research

To keep employees' compensation in line with the market, the business segments rely on surveys that highlight pay trends in the various professions and the levels of compensation for each specific function.

In France, reference is also made to a database containing the pay levels of managerial employees throughout the Group's business segments.

Keen to maintain pay practices in line with the market, **Bouygues Immobilier** took part in a survey conducted by Deloitte and AON Hewitt showing that it was in the market median. Importantly, the survey revealed that there was no gender pay gap at Bouygues Immobilier.

At **TF1**, salary scales specific to each business activity were implemented so that basic pay can remain competitive relative to the jobs market. The salary scales can also be used for forecasting a target wage increase over the course of a career, from novice to executive.

#### **Ensuring systematic feedback**

The Group appraisal process contains a section dedicated to systematic detailed feedback sessions carried out by the manager during interviews with each employee that they are responsible for.

Personalised documents are provided to employees of TF1, Bouygues Immobilier and Bouygues Telecom summarising their annual compensation package and other benefits, including bonuses, variable remuneration, benefits in kind, employee savings and training hours.

#### Salary trends in France

#### Average annual gross salary in France by job category and trend<sup>a</sup>

| Scope <sup>ь</sup> : France<br>€  | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier <sup>c</sup> | Colas  | TF1 <sup>d</sup> | Bouygues<br>Telecom° |
|-----------------------------------|---------------------------------|--------------------------|-------------------------------------|--------|------------------|----------------------|
| Managerial                        | 81,540                          | 59,228                   | 69,783                              | 61,502 | 70,771           | 62,067               |
| Change vs. 2016 <sup>f</sup>      | 3.1%                            | 1.4%                     | 7.2%                                | 0.1%   | -2.9%            | 2.3%                 |
| Clerical, technical & supervisory | 39,912                          | 32,533                   | 32,566                              | 36,723 | 39,610           | 27,342               |
| Change vs 2016 <sup>f</sup>       | 14.7%                           | 0.9%                     | 6.9%                                | 1.3%   | -3.9%            | 1.7%                 |
| Site workers                      |                                 | 27,824                   |                                     | 26,546 |                  |                      |
| Change vs 2016 <sup>f</sup>       |                                 | 1.0%                     |                                     | 1.5%   |                  |                      |

(a) Permanent staff

(b) Coverage: 58.0% of the Group's headcount

(c) Excluding sales staff

(d) Including journalists

(e) Including customer relations advisers

(f) Change calculated on the basis of average wages in the previous year

Indicators available at bouygues.com: Total gross contribution by employer to the company savings scheme (France), Total gross contribution by employer to the collective retirement savings scheme (France), Total amount of profit-sharing (paid in 2017 in respect of 2016) and Percentage of employees promoted (France).

At **Bouygues Construction**, after two years of wage restraint due to low inflation and mediocre economic conditions, the average wage in France rose more sharply in 2017, across all categories.

**Bouygues Immobilier** is working to make an employee's variable remuneration more objective. Senior management and employee representatives also sought to assign increased importance to quality of management and involvement in cross-disciplinary and strategic projects. Nearly 25% of company employees in 2017 received variable remuneration in line with their individual performance.

**Colas,** facing a testing market and with inflation at 1% in 2016, in 2017 budgeted for pay rises equivalent to 2.5% of the payroll on a like-for-like basis between 2016 and 2017.

#### Benefits granted to employees

| € million   | 2017  | 2016  | 2015  |
|---|-------|-------|-------|
| Net profit  | 1,205 | 784   | 480   |
| Cost of employee benefits excluding dividends               | 209   | 175   | 150   |
| Profit before costs associated with employee benefits       | 1,414 | 959   | 630   |
| Cost of employee benefits including dividends               | (281) | (248) | (237) |
| Dividends payable to non-employee shareholders for the year | (601) | (535) | (567) |
| APPROPRIATION TO RESERVES                                   | 532   | 176   | (174) |

Profit paid out as Group employee benefits and related costs takes into account profit-sharing, employer contributions to company savings and collective retirement savings schemes, expenses under IFRS on Bouygues Confiance employee share ownership schemes and stock options, as well as dividends paid on employee-owned shares.

The net residual balance of 2017 profits after employee benefits and distribution to non-employee shareholders represents an amount of €532 million, which was allocated to reserves

### 3.2.3 Developing people's potential

The Bouygues group endeavours, for its employees, to create a setting in which they can develop their employability and enhance job skills through support and training programmes.

Systematic interviews with managers (mandatory in all business segments), the provision of training to all Group employees, and internal job mobility departments in each entity are some of the tangible initiatives being carried out in France and in the international operations, in keeping with the strategic targets of the business segments.

## 3.2.3.1 Inducting employees and supporting them throughout their careers

#### Inducting new employees with the help of digital tools

Work/study contracts, end-of-study internships, mentoring, and Group and segment-specific induction days are all ways used by the Bouygues group to induct new recruits successfully. Graduate programmes run by Bouygues Construction, Bouygues Immobilier and Colas, together with digital induction processes (including Serious games<sup>a</sup> and MOOC<sup>b</sup> also help in this respect. The training of young people via work/study contracts helps form a large recruitment pool for the Group's business segments, which host students of all levels, from vocational high-school to postgraduate level, in all lines of work.



In 2017, **Bouygues Construction** launched "In'Pulse", a fully digital induction process for all its entities. This is the first stage in the induction of clerical, technical and supervisory employees, and managerial employees. It provides a window on Bouygues Construction's business culture, history, major

achievements and locations as well as a better understanding of its values, strategic priorities and organisation.

In'Pulse is accessible worldwide, in four languages and in self-service mode, on the distance learning platform. It is mandatory for all new employees.

The induction of young junior managers at **Colas** is carried out following an induction process in the field. For example, a works engineer can train with teams on construction sites before gradually being given responsibilities. Induction takes place in various locations in France, during which the new employee has three to four internships in different subsidiaries, and can even cover a whole region for the same subsidiary. New employees with less than

 (a) An app that combines the serious aspects (Serious) of instruction, learning, communication or information, with the fun aspects of video games (Game) – based on the definition of researcher Julian Alvarez
 (b) Massive Open Online Courses eighteen months of seniority are enrolled in Colas University so that they can learn self-reliance, a sense of responsibility, about teamwork and more about Colas as a group. The budding engineers quickly take on management responsibilities (between three and ten years depending on business line).

**Bouygues Immobilier** has completely redesigned its BI Quest induction days. Now, new employees are invited to take part in a serious game through which they can find out more about the company, and are then invited to meet members of the Strategy Committee over a period of one and a half days. The purpose of these meetings, which are based around participation and interaction, is to make teamwork a habit and close the gap between employees and senior management.

**TF1** offers interns and work/study students a specific induction process to foster – from the time they enter the company – a sharing community and a network serving the needs of these young professionals.

In 2017, TF1 started implementing a new digital induction system enabling future employees to process all their employment paperwork online.

For GenBYtel, its community of interns and apprentices, **Bouygues Telecom** holds special induction days, after-work meetings and supervised participation in key company events.

To improve and simplify the "customer experience" for newcomers, the Group's business segments last year continued digitising HR procedures, right from the moment employees join.

In 2017, **Bouygues Telecom** began end-to-end digital administrative induction. After paperless pay slips, it continued pursuing a zero-paper policy for personnel management. As a result, employment contracts have become digitised and all employee-related documentation is now scanned. A digital service platform was also created for exchanging information and files. It can be accessed at any time, from any location, even before the employee joins the company.

| Scope <sup>®</sup> : Global                                     | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|---|---------------------------------|--------------------------|------------------------|-------|-----|---------------------|---------------------|---------------------|
| Number of<br>apprenticeship contracts<br>during the year        |                                 | 273                      | 33                     | 431   | 37  | 61                  | 835                 | 724                 |
| Number of professional<br>training contracts during<br>the year | 7                               | 191                      | 87                     | 272   | 105 | 170                 | 832                 | 629                 |
| TOTAL   | 7                               | 464                      | 120                    | 703   | 142 | 231                 | 1,667               | 1,353               |

Work/study training contracts

(a) Coverage: 58.0% of the Group's headcount

The indicator is specific to France and thus excludes international data

The Group continued its pro-active work/study policy. The upturn in recruitment in France and increased opportunities for hosting students promoted the use of work-study contracts, the number of which rose relative to the previous year.

#### Promoting career advancement within the Group

Internal job mobility is positive for employees and their employability. Teams and mechanisms in each business segment assist in the dissemination of job offers, promote diversity in Group-based opportunities and support employees seeking internal mobility opportunities. Each business segment can call on the Group's Internal Job Mobility department, which is able to facilitate job mobility between the five business segments. The average number of vacancies listed on Mobyclic<sup>a</sup> rose by 17.8%, from 800 in 2016 to 943 in 2017.

In France, arrangements are supplemented by mobility committees in various regions and the Group Coordination and Reconversion committee.

During its mobility forum, **Bouygues Construction** promoted the job mobility existing between its five main domains of activity, which are business/ property development, technical department, production, support functions and exploitation/services.

A communication campaign was launched in March 2017 to keep employees better informed about the purpose of and practical arrangements for mobility at **Colas.** A corporate film entitled "Colas and me – A fresh look at my career path" was also made to raise employees' awareness of the benefits of mobility, a key factor in career advancement, and to encourage them to speak up about their career goals.

In addition, mobility support measures are being extended and will soon include a common set of assistance packages (including payment for removal costs, contribution towards the cost of finding a new home, etc.) plus specific grants that may vary according to employee status.

Subsidiaries, especially outside France, in many cases have their own information resources detailing the opportunities on offer to employees.

As part of its existing jobs and skills plan, **Bouygues Immobilier** introduced "mobility packages" to finance training for employees changing profession. This has helped increase the number of people switching jobs, particularly

between those working in support functions and those working in core business functions, and vice versa.

All internal job opportunities are accessible on the **TF1** intranet. Employees can contact their head of internal job mobility if they have any questions about the vacant positions or want to clarify their career goals. They can also join an "Impulse" workshop, which helps fine-tune the project. These workshops, run by an outside HR consultant, last a day and a half. Their purpose is to help employees think about their careers in depth.

**Bouygues Telecom** added an extra measure to support its teams, launching a portal dedicated to career development. It offers a wide range of individual and collective resources, such as advisory interviews and details on reversible voluntary mobility, to help employees perfect their career goals.

Bouygues Telecom permanently seeks to motivate and develop employees through a focus on in-house innovation, holding annual Innovation Days, encouraging participation in "Bouygues IoT Challenges", arranging meetings with start-ups for its leading talents and managers, and organising factfinding trips.

#### **Managing talent**

Identifying, retaining and developing talent is the key consideration at the heart of the mechanisms put in place by the Group's business segments. They promote performance and enhance commitment from individual employees and teams alike.

These mechanisms encourage innovation through diversified career paths and access to the Group's management-training courses.

Each business segment has specific solutions for meeting the challenge.

At **Bouygues Construction**, procedures for identifying and analysing homegrown talent provide a complete map of the resources in place worldwide while at the same time highlight individual needs and the skillsets that need to be strengthened. Areas for improvement are identified, both for individual employees and teams. This can be followed up by group or professional development training (World Club) or individual initiatives (coaching and mentoring).

**Colas** launched the Career Point initiative to understand employees' aspirations, offer vacancies and help plan careers ahead of time.

Another key resource for managing careers – a job and skills database – is being created and is scheduled to be accessible to employees by the end of 2018. Using job descriptions that associate jobs with key skills, it will be possible to determine career paths between sectors and increase visibility on employees' career paths as well.

**Bouygues Telecom** last year started overhauling its talent-management system. By doing so, the company is:

- improving performance management, with a redesigned performance interview and access to a library of qualitative targets representing the company's strategic challenges;
- guaranteeing a solid level of expertise for now and the future through a workforce planning process that identifies key requirements and distinctive skillsets;
- enhancing the employability of its employees by offering several certificate and diploma courses.

## 3.2.3.2 Developing skills by offering a varied range of training courses

Line managers, HR managers and training departments in all business segments are responsible for identifying training requirements.

Meetings such as annual appraisals and job-development interviews exist to help managers and employees assess and give feedback on training requirements.

The Training and Corporate university departments in the five business segments aim to develop – through grassroots initiatives – the technical and managerial skills of employees in the short and longer terms, at every level of the organisation. All the Group's business segments have introduced digital training platforms.

To allow for equal access to development resources, irrespective of location, **Bouygues Construction** henceforth launches all corporate programmes in at least two languages (French and English). Having a network of training centres in France, the UK, Switzerland, Morocco, North America and Asia ensures that the programmes are dispensed uniformly.

This year, the five Colas University courses had 266 participants, guiding them through the key stages of their professional development. Of these, 49 came from international subsidiaries.

In central and northern Europe, a programme was implemented to meet training needs, including in management, leadership and contract management. The programme aims to cater for English-speaking employees from all of Colas' units.

#### Supporting career development

Group employees have access to an increasing number of certificate and diploma courses to boost their employability. Arrangements are also in place, both in France and elsewhere, to provide refresher training to employees who so wish (e.g. literacy and numeracy).

In addition to its involvement in the Gustave Eiffel apprentice training centre, Bouygues is thinking about how it can develop continuing education and expertise in inducting and training people joining the world of work, with the aim of meeting contractual and business commitments more fully. In 2016, the Gustave Eiffel apprentice training centre hosted nearly 280 young people. The exam pass rate was 88%.

In 2017, **Bouygues Construction** widely introduced a common core of training programmes on health and safety, business ethics, sales and marketing, and project management.

Alongside health and safety training, which accounts for 51.54% of total training hours, **Colas** also prioritises general training relating to its various professions (foreman, site supervisor, engineering consultants, etc.), with 16.20% of training hours, as well as reinforcement of technical skills (over 15% of training hours).

The Colas Campus training school, which offers more than 150 personalised training programmes designed for and by Colas, played host to 3,463 French-speaking employees from all backgrounds.

As part of its overhaul of professional training, **TF1** group has introduced qualification-based courses specially designed by the TF1 University, e.g. Digital Fabrik and Connect.

TF1 has also revised its factsheets. The 175 that were drafted, with the help of collaborative workshops, describe the overall goals, main tasks, required expertise and career prospects for each occupation. They will be made available to employees on the TF1 University website so they can see what is on offer, career wise.



**Bouygues Telecom** modified its work experience accreditation (VAE) system to include training days in order to make it easier for employees to qualify.

In 2017, more than 150 customer relations advisers followed training to obtain the "Customer Portfolio Manager"

qualification. This included an additional module for more technical profiles. Bouygues Telecom currently offers 56 qualification-based courses, available through their personal training accounts (CPF).

Introduction of training areas in each customer relations centres has helped speed up training in the employee's specific job as well as teaching them new services, all with the help of a team coach.

#### Transforming learning and training methods

The digitisation of learning provides broader access to content and training that is adapted to the operational constraints faced by employees. Innovative teaching techniques (Serious games<sup>a</sup>, MOOC<sup>b</sup>, SPOC<sup>c</sup>, etc.) are encouraging take-up of new content. Four of the Bouygues group's business segments have digital training platforms: Bouygues Construction (Byle@ rn), Bouygues Immobilier (BI Learn), TF1 and Bouygues Telecom (e-campus).

#### For example, Bouygues Construction has:

 developed a tunnel boring machine (TBM) simulator, at Bouygues Travaux Publics. It is included in the TBM driver training course at the Gustave Eiffel apprentice training centre, and reproduces real-life conditions without endangering people or equipment. In a short space of time, this programme provides efficient training for TBM drivers, of which there is currently a shortage in France as business recovers;  offered a Digital Reverse Mentoring programme whereby experienced employees can be coached by the generations that grew up with digital technology. The self-service content on the online training platform run by Bouygues Construction (Byle@rn) is regularly updated to offer new procedures and learning opportunities for employees.

In June 2017, **Colas** introduced the Colas Campus online training system delivering digital training in innovative formats such as COOC<sup>d</sup>, MOOC<sup>b</sup>, serious games<sup>a</sup>, video tutorials, etc.

A wide variety of topics are covered, including management and leadership, ethics and compliance, desktop productivity software (Excel, Word, PowerPoint, etc.) and techniques (such as laying asphalt).

Most of the modules offered on the training platform are accessible to everyone. Since it was launched for employees in France and central Europe in June 2017, the Colas Campus platform has logged over 27,000 connections and delivered close to 5,000 hours of training. The platform was launched for employees in northern Europe in late 2017 and is to be gradually rolled out at all the other geographical locations during 2018.

**Bouygues Immobilier** is digitising more and more training thanks to the LMS, or Learning Management System, platform that it has acquired. This portal houses several types of instructive content such as e-learning, videos, quizzes and articles. It is self-service and can be accessed remotely so that each employee can train at the pace they want, according to their needs.

Last year, **TFI** launched Connect training courses for all its employees. This is a tailor-made programme meeting the strategic challenges faced by its spheres of activity, namely content, news, innovation and business. Based on three days of total immersion away from the company, Connect is specifically designed to develop expertise in innovation, sales and marketing, and digital services through open-mindedness and teamwork. The programme was certified in April 2017 and equates to level II core expertise.

Since 2017, **Bouygues Telecom** has been enhancing its digital training courses. Its e-campus offering non-stop training is now mobile-compatible, so that employees can receive content directly to their mobile handsets.

| Scope <sup>ь</sup> : France<br>– International<br>(companies with more<br>than 300 employees) | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1  | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|---|---------------------------------|--------------------------|------------------------|-------|------|---------------------|---------------------|---------------------|
| Existence of a formal<br>training plan  | 100%                            | 92%                      | 71%                    | 99%   | 100% | 80%                 | 98%                 | 96%                 |

#### Existence of a formal training plan<sup>a</sup>

(a) Scope of indicator extended to French companies in 2016

(b) Coverage: 93.6% of the Group's headcount

Structures still without a formal training plan nonetheless train their employees, most notably in safety and regulatory accreditations in addition to core expertise relating to their professions.

<sup>(</sup>a) An app that combines the serious aspects (Serious) of instruction, learning, communication or information, with the fun aspects of video games (Game) – based on the definition of researcher Julian Alvarez

<sup>(</sup>b) Massive Open Online Courses

<sup>(</sup>c) Small Private Online Courses

<sup>(</sup>d) Corporate Online Open Courses

#### Training

| Scope ª: France – International<br>(companies with more than<br>300 employees) | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas   | TF1   | Bouygues<br>Telecom |         | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|---------|-------|---------------------|---------|---------------------|
| Number of employees trained  | 154                             | 25,503                   | 1,493                  | 36,050  | 1,327 | 5,269               | 69,796  | 68,902              |
| Number of training days:   | 772                             | 58,193                   | 4,510                  | 107,848 | 7,040 | 16,135              | 194,498 | 195,633             |

(a) Coverage: 93.6% of the Group's headcount

Indicator available at bouygues.com: Training by type

## 3.2.3.3 Promoting diversity and equal opportunity in every policy

#### **Fighting discrimination**

The Bouygues group's Code of Ethics states that "the Group seeks to apply a fair policy of human resources that complies with the law. The Group will refrain from, in particular, all discrimination on unlawful grounds.". Fair treatment and equal opportunity are among the principles of the Human Resources Charter and apply to all aspects of the employee's career, from recruitment and training to promotion, information and communication.

"We are an equal opportunity employer. No applicant or employee receives less favourable treatment because of gender, ethnic background, religion, beliefs, disability, age, sexual orientation or nationality. This is a moral obligation as well as a corporate priority." (Taken from Bouygues group Human Resources Charter, drafted in 2008).

The Bouygues group aims to promote diversity in terms of professional experience and qualifications, at the hiring stage and thereafter. Equally important, occupational integration is managed through a variety of channels, such as direct hiring, outsourcing to occupational integration companies or to temporary employment agencies specialising in occupational integration. In addition, the Group ensures that its commitments in this domain are respected by subcontractors and Chantiers Ecoles, and integrated into its training programmes.

This diversity policy is promoted by the Diversity-Equal Opportunity committee, which meets several times annually with business-line specialists to share best practices.

At **Bouygues Construction**, all clerical/technical/supervisory and managerial employees have access – through the In'Pulse induction process – to the "Together Different" e-learning course, which contains three separate modules (equal opportunity, diversity and disability). This course is based around the analysis of stereotypes, then uses role-play to understand reallife cases. All employees are strongly encouraged to follow this course. It has become a prerequisite to taking certain management courses. Regarding classroom sessions, the new Committed to Equal Opportunity course for recruitment managers began in October 2017. At operational level, Bouygues Bâtiment Ile-de-France signed a partnership agreement with several employment agencies specialising in diversity promotion.

The equal opportunity perception indicator has been introduced into three subsidiaries of Bouygues Construction. More than 1,100 employees took part in the survey and the information provided helped guide the various action plans.

International subsidiaries are also active in this area, for example Bymaro, which is one of the founder companies behind the Morocco Diversity Charter

and the Morocco Diversity Club, which documents best practices and publicises them among recently co-opted member companies.

Because of its many international locations, Bouygues Construction sees cross-cultural management to be of prime importance. Day One, aimed at first-time expatriates, is now available in every subsidiary. This one-day training module helps foster cohesion in these teams by teaching concepts relating to management and cross-cultural relations.

Over 300 HR managers and line managers have been trained in dealing with religious sensibilities, responding to a need to have better grasp of the subject. In addition, the Religion in the Workplace guide was updated and distributed to all HR managers. A factsheet was created and distributed to other managers.

Since 2014, Dragages Hong Kong has held events promoting cultural diversity. In 2017, the Nepalese Dashain festival was commemorated in the headquarters, resulting in a cultural exchange between Nepalese and Hong Kong employees.

Outside France, **Colas** subsidiaries located in English-speaking countries are focusing their efforts on measures to combat discrimination.

Countries such as the UK, Ireland, Switzerland and Denmark, in particular, have drawn up specific statements and management charters to fight discrimination, complementing the Colas group's charters. Ireland has included a special chapter in its new HR manual called "Dignity and respect for all".

In Belgium, the retention of employees over 45 years of age in employment is covered by specific action plans for each agency, covering recruitment policies, training, skills development and health.

The UK, which is very proactive on these issues, is in the process of obtaining a specific certification from the construction sector (CITB – Construction Industry Training Board) covering in particular the issues of diversity and the fight against discrimination, in addition to transparency and equality. Diversity is promoted through actions organised with associations of former prisoners, ex-military personnel, disabled people and outplacement agencies. Colas UK also participated in the National Action Week for Inclusion in September 2017, with a specific communication campaign on these topics.

In Switzerland, a system for collecting information on acts of discrimination was established, offering guaranteed anonymity.

US subsidiaries are bound by federal laws prohibiting job discrimination in hiring, employee treatment and compensation. They make their commitments clear and send vacancy announcements to placement agencies that specialise in the employment of minorities, or to specialist newspapers. The Colas North America Corporate University offers ethics courses. US-based employees who feel they are victims of harassment may call a toll-free number for help. **Bouygues Immobilier** provides the Respect and Performance module on the theme of managing diversity to all the company's experienced managers. This helps them foster cooperation within their diverse teams, whether this diversity is based on culture, generation, gender or disability.

Bouygues Immobilier is also a founding partner of the Bagneux secondchance school near Paris. Mentoring sessions on job interviews as well as discovery workshops focusing on various professions are organised regularly.

At **TF1**, all employee categories concerned (managers, programme makers, viewer host teams and HR) have been trained in diversity issues and antidiscrimination measures. The Afnor audit in March 2017 to renew the Diversity label highlighted the effectiveness of diversity policy within TF1 resulting from the proactive measures taken to reinforce equal opportunities. The label was again awarded on 11 July 2017, a sign of TF1's unflagging commitment to diversity inside and outside the company.

#### Promoting gender equality



The promotion of gender equality is a goal expressed clearly by Martin Bouygues and shared by all Bouygues group business segments. At a convention on 25 April 2017 bringing together women's networks and chief executives, managers and HR employees, the Bouygues group launched its 2020

Diversity Plan, containing targets on recruitment, promotion and development.

Concerning **recruitment**, the aim is to make the Group more attractive to women. Currently the worldwide gender breakdown is 18% women and 82% men; the Group is targeting **21%** women by 2020. The situation varies markedly depending on Group business segment. Men are more represented in the construction activities whereas at TF1, Bouygues Telecom and Bouygues Immobilier, the gender split is close to even. The Bouygues group has also set a target that, by 2020, **37%** of all managers hired will be women.

Recruitment is also being targeted so that it contributes to better diversity in the construction activities; design and financing as well as communications

and human resources. The Group is also working to encourage young women to take up careers in engineering. Bouygues Construction, Colas and Bouygues Telecom have signed agreements with the non-profit organisation "Elles Bougent" to make the Group's activities more visible to women throughout France and promote engineering careers among female secondary school students studying science and technology.

When offering **promotions,** the Group is intent on facilitating equal access to career advancement. Each business segment has set targets to be reached by 2020 for increasing the number of women in management positions worldwide. For example, at Bouygues Construction and Colas, these targets are 18% and 15%. In France, the Bouygues group has set a target that 20% of women will occupy the grade of department head or higher. Also in France, the proportion of women in executive bodies – an indicator tracked for the past two years – rose from 16.2% in 2016 to 18.3%. The Group is targeting 23% by 2020. Already, wage equality is a reality in all the Group's business segments. Where there are gaps, specific amounts can be allocated.

To improve women's **career development** within the Group, support initiatives are offered in various forms.

For example, the business segments run mentoring programmes. On 8 December 2017, the first inter-segment cross-mentoring programmes, in which mentors can be male or female but mentees only women, were launched. Bouygues Telecom and TF1 launched the concept in 2011 and 2014 respectively, extended in conjunction with partners Cisco and Ciena last October. Colas is rolling out its programme (80 female employees concerned) in early 2018. Training courses in leadership for women are offered by TF1 and Colas. Bouygues Construction, Colas (since 2017), TF1 and Bouygues Telecom all run women's networks offering conferences, mentoring workshops on how to market oneself, and informal discussions, for example. In October 2017, following on from previous years, the Bouygues group invited 12 female employees working in various business segments to take part in the 13th "Women's Forum for Economy & Society", with a view to drawing inspiration from current trends and best practices enacted in companies around the globe.

#### Status of women in the Group

| Scopeª: Global                           | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--|---------------------------------|--------------------------|------------------------|-------|-------|---------------------|---------------------|---------------------|
| Women with<br>Staff status <sup>b</sup>  | 23.6%                           | 26.4%                    | 50.9%                  | 21.9% | 52.2% | 41.4%               | 28.4%               | 27.6%               |
| o/w women with<br>Manager status°        | 17.9%                           | 13.8%                    | 28.0%                  | 10.0% | 40.9% | 26.1%               | 16.8%               | 16.1%               |
| Woman with<br>Worker status <sup>d</sup> |                                 | 12.4%                    |                        | 1.7%  |       |                     | 5.8%                | 6.1%                |

(a) Coverage: 100% of the Group's headcount

(b) Supervisory, managerial and technical employees

(c) In France, managers are employees who are department heads or higher; internationally, they are employees who are part of a management body (d) Site workers

Figures for 2017 show progress towards achieving the targets of the Diversity Plan.

The proportion of women managers rose by 0.7 percentage points, reflecting the Group's determination to support women in taking on high-responsibility positions and reach the 20% target for women managers in France by 2020.

Gender equality has been progressing within **Bouygues Immobilier** for years, at all levels of the company, such that parity has been reached in its workforce. The company has exceeded all targets set in its gender equality agreement: the proportion of women with managerial status reached 41% in 2017. Similarly, the proportion of women managers rose to 28%.

#### Hiring people with disabilities

The Bouygues group is active in employing people with disabilities. Its policy in this area has four priority areas:

- recruitment through specialist forums as well as membership of specialist organisations or the use of specialist recruitment agencies;
- keeping the disabled in employment by improving access via the adaptation of workstations and equipment as well as promoting professional development through core expertise training;
- raising awareness and communicating clearly to encourage employees and managers to regard people with disabilities in a positive way, e.g. Bouygues Telecom's e-learning module on disabilities;
- subcontracting to sheltered workshops and disability-friendly companies.

A structured disability policy is firmly established in all the Bouygues group's business segments in France, including disability officers to coordinate actions and training for human resources managers and employees. Specific policies exist to help retain disabled employees and adapt working hours to their needs.

In 2017, the Group – in conjunction with Cap Emploi – ran a job-dating event to recruit employees with disabilities on work/study contracts, which led to fresh intake of disabled people in this category. Several positions as management controllers, accountants and personal assistants were filled at Bouygues Construction.

In 2017, **Bouygues Construction** held an event targeting its 3,000 head office employees, organised around the following themes: a discussion and sporting challenge with Alexis Hanquinquant, the world para-triathlon champion, who is sponsored by Bouygues Bâtiment Grand Ouest; a game focusing on different types of disability; a quiz to learn the right attitudes to adopt in the workplace; and information stands promoting the strengths of disabled workers and sheltered sector companies.

Bouygues Construction is expanding its initiatives in favour of hiring disabled people to outside France. In 2017, it joined the ILO<sup>a</sup> Global Business and Disability Network to forge ties between its subsidiaries and other companies for the purpose of sharing best practices and running joint initiatives. For example, Dragages Hong Kong and Dragages Singapore are even now active in recruiting and training disabled employees, winning the Barrier-Free Company Award and Enabling Employers Award, respectively, in 2017.

The disability agreements in force at Bouygues Construction provide for the financing of service vouchers for disabled employees or for those caring for a disabled parent or child. Extra leave is also available for employees who need to renew their disabled worker status. In Poland, the Karmar subsidiary provides financial support to employees with disabled children.

At **TF1**, a fourth triennial agreement (2017–2020) on hiring and retaining disabled workers was signed in 2017 by all trade unions and approved by Direccte<sup>b</sup>. In 2017, TF1 helped raise public awareness about mental disabilities by airing the TV film Special Honors.

To mark the 21st European Disability Employment Week, **Bouygues Telecom** inaugurated an e-learning module called Marc and Andy about hidden disabilities, involving a competition of good deeds. It continued raising awareness about disabilities by holding a "lunch in the dark", interacting with sheltered and disability-friendly companies, and holding a conference on the theme of Handicap and Performance with Trézor Makunda Gauthier, international para-athlete and a four-times paralympic medallist at the Athens (2004), Beijing (2008) and London (2012) games, and Émeric Chattey, his guide.

#### Using the sheltered sector

Making use of the sheltered sector is also a way of encouraging disabled employment (see also section 3.4.3.1). In 2017, at **Bouygues Construction**, Bouygues Bâtiment IIe-de-France contracted sheltered workshop l'Atelier Protégé des Yvelines to clean accommodation on several of its worksites. Additionally, Bouygues Energies & Services has joined the TIH Business platform, making it easier to hire self-employed disabled workers such as consultants, graphic designers and photographers.

At **Bouygues Immobilier**, the Disability Task Force (created in 2011) works hard to promote outsourcing to companies in the sheltered and disability-friendly sector. A team of 46 disability liaison officers, coordinated by the disability officer, is responsible for implementing subcontracting initiatives via Gesat<sup>a</sup>, which markets the services of the sheltered and disability-friendly sector. A second company-wide agreement – dedicated to the employment of people with disabilities – was negotiated in 2014. This latest agreement set forth a target for increasing the amount of sales generated with the sheltered and disability-friendly sector by 5% annually.

**Colas** has begun a process in conjunction with purchasing departments. The suppliers deemed as having offered a satisfactory level of service are listed and their names disseminated internally. Part of this process is encouraging use of the sheltered and disability-friendly sector each time this is possible and beneficial to both sides.

Buyers at **Bouygues Telecom** ask suppliers about their ability to work on a co-contracting basis with the sheltered and disability-friendly sector, using this as a criterion to choose between them. The company is also a member of Handeco-Pas@Pas, created on the initiative of CDAF<sup>b</sup> and major companies, to promote and facilitate subcontracting to the sheltered workshops, disability-friendly companies and occupational integration programmes. In 2017, Bouygues Telecom won the Jury's Special Award in the Sustainable and Responsible Purchasing category of the annual purchasing awards. This accolade recognises the training course on purchasing aimed at managers of disability-friendly companies, designed and dispensed by the Bouygues Telecom purchasing department as part of its University of Excellence – a joint initiative with HEC Paris and BPI group (see section 3.4.1 of this document).

#### **Employees with disabilities**

| Scope: France   | Holding<br>company<br>and other | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas   | TF1   | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|---|---------------------------------|--------------------------|------------------------|---------|-------|---------------------|---------------------|---------------------|
| Number of employees with disabilities <sup>a</sup>  | 3                               | 530                      | 37                     | 975     | 78    | 280                 | 1,903               | 1,901               |
| Number of employees<br>with disabilities<br>hired during the year <sup>a</sup>                            |                                 | 13                       | 6                      | 25      | 12    | 15                  | 71                  | 49                  |
| Sales with sheltered<br>workshops and<br>disability-friendly<br>companies during<br>the year <sup>b</sup> | n.m.                            | €2,392k                  | €228k                  | €1,753k | €418k | €418k               | €5,210k             | €5,390k             |

(a) Coverage: 58.0% of the Group's headcount

(b) Coverage: 57.6% of the Group's headcount

n.m. non-meaningful

The indicator is specific to France and thus excludes international data

(a) A national disabled employment network

<sup>(</sup>b) The French association of purchasing managers and buyers

### 3.3 ENVIRONMENTAL INFORMATION

Further information can be found by visiting bouygues.com or consulting the CSR documentation of the individual business segments available on their respective websites.

### 3.3.1 General environmental policy

#### 3.3.1.1 Environmental policy

Environmental issues are considered strategic by Bouygues, as it aims to rank among the leading solution providers for the planet-wide challenges of climate change and resource scarcity. Sustainable construction and urban planning are two such solutions. Consistent with this policy, the Group is also enacting indicator-driven initiatives to limit and then reduce the environmental impact of its operations.

The environmental policies of the Group's business segments cover the various phases of their activities.

In the design phase, all business segments factor environmental issues into their products and services. This can be seen in the following:

- Bouygues Construction, Colas and Bouygues Immobilier's environmental certifications of their products (BREEAM<sup>®</sup>, LEED<sup>®</sup>, HQE<sup>™</sup>, BBC-effinergie<sup>®</sup>, Minergie<sup>®</sup>, E+C-<sup>b</sup>, BBCA and so forth);
- promotion of the circular economy by helping create the BBCA label (see section 3.3.4.4), which recognises circular economy criteria throughout a building's lifecycle, of new selective deconstruction methods, etc.;
- in the construction businesses, lifecycle assessments and the provision of eco-friendly alternatives.

Sustainable construction and research into environmental solutions are a key focus of innovation at Bouygues Construction, Bouygues Immobilier and Colas.

#### **Bouygues Construction**

| Indicator  | Scope<br>(activity or region)        | Coverage  | 2017 | 2016 | Remarks   |
|--|--------------------------------------|---|------|------|---|
| R&D budget spent on<br>sustainable construction  | Global                               | 95%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 39%  | 49%  | Bouygues Construction devotes a large proportion of<br>R&D expenditure to corporate social responsibility. The<br>decline in this indicator chiefly reflects the fact that R&D<br>solutions dedicated to CSR are more predominantly part<br>of frontline employees' daily routines. Huge research<br>efforts were made in recent years but have been reduced<br>in tandem with incorporation into operations. |
| Buildings in the<br>order intake with<br>environmental labelling<br>or certification<br>prescribed by<br>Bouygues Construction | Global<br>Construction<br>activities | 50%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 69%  | 76%  | Whenever Bouygues Construction acts as a designer/<br>builder, over two-thirds of its building-related order intake<br>includes environmental certification commitments that<br>are superior to applicable regulations. The small decline<br>in the consolidated figure for 2017 is due to a change in<br>the design/build market for some activities operated by<br>Bouygues Bâtiment Ile-de-France.         |

 Concerning Group operations (primarily worksites and fixed locations such as workshops and production sites), management of environmental impacts chiefly relies on the use of energy management systems (ISO 14001) as well as certifications (HQE<sup>™</sup>, LEED<sup>\*</sup>, BREEAM<sup>\*</sup>). • In addition to these tools, the Bouygues group's construction businesses have developed their own methods for assessing environmental performance that factor in the specific features of each profession: Bouygues Construction's Ecosite (see section 3.3.1.2), Bouygues Immobilier's Clean Worksite Charter<sup>c</sup> and Colas' self-assessment checklists.

(c) The Clean Worksite Charter applies to all of Bouygues Immobilier's commercial property developments (18.1% of its sales) and to residential developments that are NF Habitat HQE<sup>TM</sup> certified. Since 2016, NF Habitat HQE<sup>TM</sup> certification has superseded the NF Logement and NF Logement HQE certification schemes. This new certification places more emphasis on in-depth guidelines to minimise disturbances via worksite design

<sup>(</sup>a) Minergie\* and Minergie-eco\* are pan-European performance labels originating from Switzerland. They are mainly prescribed by Losinger Marazzi, Bouygues Construction's Swiss subsidiary

<sup>(</sup>b) The E+C- (energy + carbon - / positive energy building and carbon reduction) label is a regulatory pilot label that is a forerunner of future energy rules. Methodology was developed by the French government following in-depth consultation with stakeholders. This resulted in the publication of guidelines and a technical reference base, criteria of which are incorporated into the BBCA and Effinergie 2017 labels

- As part of its internal processes, the Group implements a certification policy governing the construction and operation of its own buildings. The headquarters of Bouygues SA, Bouygues Construction and Bouygues Immobilier as well as Bouygues Telecom's Technopôle, Printania (a customer relations centre) and data centre carry this certification <sup>a</sup> (see section 1.1.5. Bouygues group: main sites in chapter 1 of this document).
- Given the type of product and service offered by the Group, environmental-performance policies applied when structures are in operating phase are crucially important. Bouygues Construction and Bouygues Immobilier support customers in managing and limiting their final energy consumption. For example, their offers include performance commitments in the form of Energy Performance Contracts (EPC) for commercial and residential properties (see section 3.3.3.2).

Environmental certifications relating to the operation of buildings (HQE<sup>TM</sup>, LEED<sup>®</sup>, BREEAM<sup>®</sup> in use) prescribed by the business segments, carry requirements in energy and resource management under operations-maintenance.

#### 3.3.1.2 Environmental risk prevention

#### **Risk analysis**

In general, environmental risk prevention requires early-stage analysis that maps or assesses the risks connected with production sites or fixed business-related locations.

The main environmental risks are identified in section 4.1 Business-specific risks.

Financial risks arising from climate change are identified and described in section 5.2.3 of this document.

#### **Environmental management systems**

As an integral part of CSR policy at Bouygues, implementation of an environmental management system is one of the four principles that the business segments pledge to enact to improve the Group's environmental performance. Standards (ISO 14001 and ISO 9001) and the environmental certifications (HQE<sup>™</sup>, LEED<sup>®</sup>, BREEAM<sup>®</sup>) enacted in Group operations provide a framework for environmental management.

For example, Bouygues Immobilier has pledged to abide by all requirements of the NF Habitat – NF Habitat  $HQE^{TM}$  certifications, using a management system that is audited annually by Cerqual Qualitel Certification (25% of property developments are checked in the design stage and at handover for compliance with NF Habitat  $HQE^{TM}$ ).

To reduce environmental hazards on worksites and other locations operated by Colas and Bouygues Construction, both business segments rely on environmental management systems largely inspired by ISO 14001. ISO 14001 incorporates a risk assessment and procedures by which entities can address the environmental issues relating to their particular activity.

At Colas, ISO 14001 certification is rolled out at most fixed locations, especially materials production sites. Annual cross-audits of subsidiaries in Belgium, mainland France and Switzerland serve to evaluate facilities and reinforce environmental hazard prevention. These audits are carried out at approximately one hundred sites per year, representing around 14% of sites in that geographical area, by in-house teams. Analysis is under way to adapt these arrangements to other regional contexts.

#### **Bouygues Construction**

| Indicator  | Scope<br>(activity or region) | Coverage  | 2017 | 2016 | Remarks  |
|--|-------------------------------|---|------|------|--|
| Sales covered by an<br>ISO 14001-certified<br>EMS <sup>a</sup> | Global                        | 95%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 91%  | 96%  | Management of environmental impacts in<br>Bouygues Construction's operations is enhanced by a<br>risk prevention policy based on an ISO 14001-certified<br>environmental management system that is used almost<br>universally. |

(a) Environmental management system

#### Internal procedures

So that the environmental risks pertaining specifically to their type of activities are better managed, the Group's business segments have implemented their own internal environmental management systems and labels.

- Bouygues Immobilier applies the Clean Worksite Charter to all its commercial property developments (corresponding to 18.1% of sales)<sup>b</sup>. The Charter involves the appointment of an environmental coordinator before work begins, at the contractor's expense. These coordinators are present throughout projects. Their role is to gather, store and classify all environmental data required to ensure a low-impact worksite, as well as to ensure compliance with measures in force. Each trade designates an environmental officer, who is then the coordinator's contact person.
- Checklists at Colas, which cover each type of fixed facility (laboratories, work centre depots, workshops, hot and cold mixing plants, emulsion and binder plants, bitumen depots, quarries, gravel pits, recycling platforms, ready-mix concrete plants, prefabrication plants, construction waste disposal sites, etc.), constitute a concrete benchmark for assessing environmental performance. Standardised checklists have been developed for each type of fixed installation, representing around 2,000 production units all over the world.
- The Ecosite label is used to manage the impact of environmental hazards and pollution on Bouygues Construction's worksites.

(b) Residential property developments are covered by NF Habitat and NF Habitat HQETM certifications

<sup>(</sup>a) The new Colas headquarters is pursuing this same policy

## Ecosite label: enhancing the environmental performance of Bouygues Construction's worksites

Ecosite, developed by in-house teams and introduced in 2010, ensures compliance with Bouygues Construction's own environmental policies and with standards derived from the most stringent regulations, on issues ranging from managing waste and protecting biodiversity to minimising disturbances for local residents.

It is applicable to all Bouygues Construction entities and is based on three main strands:

- worksite environmental standards, which summarise recommendations for safeguarding the environment, with examples of best practices and suggested bio-based materials;
- an evaluation grid assessing implementation of recommendations;
- a worksite environmental label issued on the basis of assessments.

Ecosite stipulates early-stage analysis of environmental risks. The actions to be carried out are then organised in accordance with several themes: waste, hazardous materials, noise pollution, air, aquatic environment, biodiversity, energy consumption, cleanliness and storage. The label also has a section on managing environmental emergencies and on worksite-related information (especially maintaining dialogue with local residents). It is one component of Bouygues Construction's policy of achieving operational excellence on its worksites.

From 2018, Ecosite will be replaced by the new in-house label, Topsite, which, in addition to environmental criteria, will include new HR, social, health and safety and quality criteria, and will also assess the level of customer involvement in obtaining the label.

#### **Bouygues Construction**

| Indicator  | Scope<br>(activity or region) | Coverage  | 2017 | 7 2016 Remarks  |
|--|-------------------------------|---|------|---|
| Worksites carrying<br>the Ecosite <sup>®</sup> label | Global                        | 95%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 42%  | 56% The sharp decline reflects the creation of a new in-house label to replace Ecosite. |

(a) The percentage of worksites carrying the Ecosite label is calculated by dividing the number of eligible certified worksites by the number of those eligible (whether certified or otherwise). Eligibility criteria refer to duration, activity and worksite progress thresholds, which depend on each particular entity

#### Colas

| Indicator  | Scope  | Coverage   | 2017 | 2016 | Remarks   |
|--|--------|--|------|------|---|
| Environmental certification of<br>materials production sites<br>% of sales before inter-company<br>eliminations  | Global | 100%<br>of sales (before inter-<br>company eliminations)<br>generated by materials<br>production activities                              | 62%  | 62%  | The proportion was stable and at a satisfactory level<br>given the range of contexts around the world where<br>Colas operates and the non-controlling interests<br>held by Colas in many of these businesses.   |
| Rate of environmental<br>self-assessment using Colas<br>checklists <sup>a</sup><br>% of sales before inter-company<br>eliminations   | Global | 100%<br>of sales (before inter-<br>company eliminations)<br>of materials production<br>activities for which<br>checklists are applicable | 85%  | 85%  | The indicator was stable because of a decline in<br>international markets and in mainland France (down<br>three points). The indicator rose by two points in<br>North America. Checklist assessments remain the<br>cornerstone of the policy put into practice by Colas<br>to circumscribe its environmental risk. The number of<br>completed checklists rose marginally in 2017. |
| Materials production activities<br>that use a tool to manage<br>environmental impacts<br>(environmental certification<br>and/or Colas checklists)<br>% of sales before inter-company<br>eliminations | Global | 100%<br>of sales (before inter-<br>company eliminations)<br>generated by materials<br>production activities                              | 85%  | 85%  | The percentage of materials production sites that use<br>a tool to manage environmental impacts remained<br>steady at a high level in 2017. The target is to reach<br>100%. This is an ambitious target given that other<br>shareholders in subsidiaries might be involved, some<br>of which are majority owners, preventing Colas from<br>ensuring complete oversight.           |

(a) Activities to which the checklist applies: fixed quarries; fixed gravel pits; borrow pits; hot-mix plants; cold-mix plants; oil and bitumen refineries; asphalt plants; plants making binder, emulsions and/or fixed modified binders; ready-mix concrete plants; fixed prefabrication plants; fixed recycling plants; bituminous membrane facilities; various fixed installations; fixed bituminous binder storage facilities. This includes some highly specific, low-volume production activities (e.g. steel framing)

## 3.3.1.3 Training and raising awareness to help protect the environment

The Bouygues group runs a wide range of training and awareness-raising programmes for employees and externals on the importance of protecting the environment.

#### Training and awareness-raising at Group level

The Group Sustainable Development-QSE department holds seminars to train Group managers to self-assess their own practices and situate themselves in relation to best practice as defined by the EFQM (European Foundation for Quality Management) model and ISO 26000. The seminar programme – called Abby – has organised over 75 sessions (with an average of 12 participants per session) since beginning in 2006. In 2017, all training content and the software used were modernised.

Additionally, the Bouygues Management Institute (IMB) training module, "Towards the contributive firm", aimed at senior executives from the five business segments, tackles the major challenges relating to the societal shifts that are driving changes in the Group's business models. The eight sessions held in 2017 brought together some 80 managers.

The Group communications department also runs responsible communication training. Following the training course on event eco-design in previous years, training in responsible digital practices was offered to communications personnel, including eco-designing digital media and ensuring that the messages given out are responsible. A first session in this programme was held in 2017. It will continue in 2018.

Lastly, since its launch in 2015, the collaborative intranet site, ByLink Network, has driven synergies across the Group. The major sustainable development challenges (energy-carbon, circular economy, sustainable urban environments, CSR reporting, etc.) are currently managed through this network. At the end of 2017, this Group network had nearly 6,000 users.

#### **Business segment initiatives**

In conjunction with these Group-wide initiatives, the five business segments organise and run training and awareness-raising exercises so that the specific challenges relating to their respective activities can be taken into account. For example, at Bouygues Construction, Bouygues Immobilier and Colas, training programmes contain several modules that are partially or wholly devoted to such issues.

Teams on Bouygues Construction and Colas worksites take part in QSE "starter" sessions, which raise awareness among site workers about the quality, safety and environmental-related issues specific to the project in progress. One area of focus can be waste and pollution hazards. Lastly, each business segment raises awareness among employees about eco-friendly behaviour. In 2017, collection campaigns for used mobile telephones led by Bouygues Telecom were extended to Group sites, encouraging employees to donate their old unused handsets for recycling or reconditioning. Elsewhere, Bouygues Immobilier involves its employees in its "One tree, one home" programme. For each housing unit sold, a tree is planted as part of the Alto Huyabamba reforestation project in Peru. Since this partnership began in 2016, more than 13,000 trees have been planted.

European Sustainable Development Week (ESDW) and/or Mobility Week are other highlights in the internal communications calendar. In connection with ESDW, Bouygues Telecom held a talk on the theme of "CSR and Ethics: a key issue for business". Questionnaires were also handed out to test employees' knowledge. Employees can also participate occasionally in environmental protection initiatives organised by non-profit organisations sponsored by the corporate foundation. These initiatives are systematically accompanied by awareness-raising sessions.

#### Raising awareness among the general public

The Group works to raise awareness among external stakeholders about environmental protection and climate change. For example, the Energy Performance Contracts (EPC) prescribed by the business segments comprise information on how to reduce energy consumption within buildings.

Bouygues raises awareness all year round via several programmes viewable on the TV channels or websites of the TF1 group, from weather bulletins and news reports to shows on Ushuaïa TV (a nature channel) and children's awareness-raising campaigns. The Ushuaïa Nature TV show, which was first aired on TF1 before moving to Ushuaïa TV, celebrated its 30th birthday in September 2017.

The national collection campaign for used mobile handsets run by Bouygues Telecom alongside WWF France and campaign partners Samsung, Suez and Recommerce Solutions, was another way of emphasising the importance of recycling these devices. At Colas, local resident information campaigns are systematically included in biodiversity and local dialogue initiatives.

One of the charities supported by the Bouygues Immobilier corporate foundation is Unis-Cité, which has pioneered voluntary community service in France. As part of this initiative, the foundation provides financial support to the Médiaterre programme, which promotes eco-friendly behaviour among families living in underprivileged neighbourhoods, which in turn reduces their water and electricity bills. By encouraging the wider implementation of this programme, and through employee involvement, Bouygues Immobilier aims for such families to save 20% on these bills by 2020.

#### **Bouygues Immobilier**

| Indicator  | Scope<br>(activity<br>or region) | Coverage  | 2017 | 2016 Remarks   |
|--|----------------------------------|---|------|--|
| Number of volunteers<br>in the Médiaterre<br>programme supported<br>by Bouygues Immobilier<br>in areas of engagement | France and subsidiaries          | 95%<br>of Bouygues<br>Immobilier's<br>consolidated<br>sales | 164  | 186 Unis-Cité continued implementing Médiaterre.<br>A campaign to recruit new volunteers will be launched<br>in 2018, in conjunction with an awareness-raising initiative<br>within Bouygues Immobilier. |

The Bouygues group takes part in international trade fairs to promote its initiatives and innovations for making urban environments more sustainable. It was represented at the second annual Viva Technology fair (15-17 June 2017 in Paris) through an information stand and various events. It also took part in the first ever World Efficiency Summit (12-14 December in Paris), where several experts from its business lines gave talks. Lastly, designed for COP21, the 3D "Explore The City" app, which illustrates the environmental contribution of the Group's business segments by modelling 85 emblematic projects and solutions, was made available to Bouygues group employees and the general public.

## 3.3.1.4 Provisions and guarantees set aside for environmental risks

In the normal course of its business, Bouygues Construction is exposed to direct pollution risks, which are both limited in nature and strictly controlled. Potential hazards are carefully assessed based on a full analysis of operations. As a result, the company does not have to set aside a material amount of provisions.

Pollution risk is included in Bouygues Immobilier's major-risk map. Landpurchasing procedures include preliminary soil testing. Obtaining a report certifying the absence of any soil or subsoil pollution is a necessary precondition before signing a contract for the purchase of land. An exemption may only be granted upon prior authorisation of the vetting committee. In this specific case, cost overruns from decontamination, assessed on a case-by-case basis, are folded into the total cost of the transaction, prior to signature of the land-purchase contract. Because the related financial data is confidential, it is not possible to disclose an order of magnitude for the amount provisioned.

Colas makes provisions for clean-up expenses on contaminated land when the amounts have been determined based on an assessment by an independent firm and when a date for site rehabilitation has been set (by the competent authority, for example) or is otherwise known (upon lease termination, for example). With regard to financial guarantees and provisions for rehabilitation, a large number of quarries and other sites worldwide are subject to specific regulatory requirements when they are no longer operated and require provisions to cover environmental risks during operation. This entails a wide variety of guarantees and provisions) that depend on national laws. Colas' provisions for on-site rehabilitation commitments totalled €168 million at 31 December 2017. To date, there is nothing that indicates that these comprehensive measures are insufficient, neither during internal or external audits nor during the investigation of insurance claims.

There are no business-related environmental risks at TF1 and Bouygues Telecom that would warrant the booking of provisions.

### 3.3.2 Management of pollution and disturbances

#### 3.3.2.1 Preventing and rectifying pollution

Pollution arising from the Group's business activities is diverse and varied, involving air, water and soil. This is mainly generated by the Group's construction worksites or operations at fixed locations – in the form of dust, water pollution and fumes from plants.

On the Group's worksites and fixed locations, external certifications (ISO 14001) and in-house standards (the Bouygues Construction Ecosite label and the Colas checklist) are the main resources available to operating units for preventing pollution.

Bouygues Construction handles these issues through the hazardous materials, air and bodies of water standards that are part of its Ecosite policy (see section 3.3.1.2). Emergency procedures exist in the event of pollution incidents that put in place the appropriate remedial action. In addition, a database keeps a list of hazardous materials and the associated preventive measures.

Initiatives by Colas to prevent, limit and where possible eradicate pollution mainly centre on fixed locations and large worksites:

- All environmentally certified sites have as their basic documentation an environmental analysis, dashboards and action plans, most notably for reducing pollution in cases where this is deemed significant. This information is used during management reviews to analyse and limit the impact of operations and improve environmental performance. In addition to these measures, the checklists also cover non-certified sites in aspects such as administrative management, site organisation, storage, operations management and monitoring, environmental impact and risk management (water and air pollution, waste, natural and technological risks, noise and vibration) and dialogue with local communities.
- Specific arrangements such as an environmental protection plan are drawn up for each of these projects, for example the New Coastal Road project on Reunion Island. In addition, the QSE team of the Colas Projects subsidiary is responsible for analysing this feedback and improving performance.

The environmental certifications used by Bouygues Construction and Bouygues Immobilier also contain points to watch during the construction phase. For example, an HQE<sup>™</sup> project must ensure that all kinds of pollution (air, water and soil) are kept to a minimum. Bouygues Immobilier has developed the Clean Worksite Charter, which aims to prevent and reduce air, water and soil pollution. Lastly, the quality benchmarks (HQE<sup>™</sup>, BREEAM<sup>®</sup>, LEED<sup>®</sup>) promoted by Bouygues Construction and Bouygues Immobilier comprise obligations for the design and operational phases that reduce air, water and soil pollution.

In its infrastructure projects, Bouygues Construction's civil works entity does its utmost to limit impacts on biodiversity and the natural environment. For example, as part of the Monaco offshore extension project, measures were taken to limit the dispersion of fine particles, check water quality and monitor noise.

The Group's business segments also undertake other targeted initiatives to reduce the impact of disturbances arising from their activities. Bouygues Construction's rehabilitation of contaminated land, and closed-loop water recycling, and road watering (to limit the dust emissions) on Colas worksites, are examples of Group actions.

Air, water and soil pollution arising from the operations of Bouygues Telecom and TF1 are very low and, moreover, immaterial on the scale of the entire Bouygues group.

## 3.3.2.2 Measures taken to reduce other disturbances

The other forms of disturbances to which the Group's activities may give rise are mainly exposure to noise (either day or night time), odours, night-time lighting or vibrations. Its Media and Telecoms businesses are concerned by the issue of exposure to electromagnetic waves.

Acceptance of production sites and worksites by local residents is a sensitive question for the Group's business segments. In addition to the measures set out in the ISO 14001 environmental certification, disturbances suffered by local residents are among the points monitored in internal standards (Ecosite, Clean Worksite Charter, checklists).

One of the standards of Bouygues Construction's Ecosite initiative addresses the management of noise pollution in consultation with project stakeholders.

Furthermore, Bouygues Construction markets a noise barrier for local residents living close to worksites. It was developed by its acoustics and vibrations skills centre, which is staffed by experts from its various operating units.

Bouygues Immobilier checks noise levels on sites covered by the Clean Worksite Charter. Where necessary, remedial measures can be taken to reduce disturbances resulting from excessive noise or vibrations.

Bouygues Telecom and TF1 are especially attentive to exposure to the waves emanating from their masts. For example, a safety perimeter is set up around all of Bouygues Telecom's radioelectric sites (antenna). This ensures compliance, beyond the perimeter, with the exposure limits defined by the decree of 3 May 2002 in regard to all freely accessible areas. Any access inside the perimeter is only granted once the signals have been turned off. Bouygues Telecom also implemented new regulations on electromagnetic fields set out in the first specific European directive, which obliges companies to evaluate their employees' exposure.

Research conducted to reduce disturbances arising from use of the Group's products is yielding innovations, leading to the marketing of more effective solutions. For example, Colas is developing products that reduce traffic noise, such as fractal-technology noise barriers, and most significantly noise-reducing asphalt mixes (Nanosoft\*, Rugosoft\* and similar), which can reduce traffic noise by as much as 9 dB. In 2017, 544,300 tonnes were produced, up 68% compared to 2016. This product range reflects the continuing investment by Colas on R&D over many years, and for which it has received a number of technical awards.

Furthermore, new construction methods that re-use materials deconstructed directly on-site reduce the need for transportation, as well as the related disturbances. In its rehabilitation of the Hôtel-Dieu in Clermont-Ferrand, Bouygues Immobilier reused 50% of materials recovered from the site, equating to some 12,000 tonnes. Truck traffic devoted to removing deconstruction materials and bringing in new building materials was halved. Likewise, recycling by Colas (see text box in section 3.3.3.1.) helps limit transportation by heavy good vehicles.

Lastly, as part of the projects won for the Grand Paris major infrastructure programme, Bouygues Travaux Publics has undertaken to apply continuous noise-reduction measures on its worksites to lessen the impact of such disturbances.

### 3.3.3 The circular economy

The construction industry generates 70% of the 324 million tonnes of waste produced in France<sup>a</sup>. Under France's energy transition legislation, coming into effect in 2020, 70% of the waste produced from building deconstruction activities will have to be recycled. The Group's business segments have identified several potential environmental and economic benefits in their response to this challenge and are continuing efforts to develop exemplary practices and operations in each of their activities. Various initiatives are already in place within the Group to take into account the guiding principles of the circular economy and eco-design. These include selecting sustainable materials in design phases, using less resources in the building of products, recovering and recycling materials (whereby waste is reintroduced into the production cycle as a secondary raw material), and using innovation to lengthen product lifecycles.

An example of this is the renovation of the former 3Suisses logistics platform, a ten-hectare site in Villeneuve-d'Ascq (north of France), where Bouygues Bâtiment Nord-Est has been making extensive preparations to recycle or reuse (preferably on-site) the materials from the planned demolitions and renovations. The project plans to reuse the site's 10,000 m<sup>2</sup> solid oak parquet flooring, thus saving the equivalent of 200 135-year oak trees.

(a) 2017 data, Ademe (French environment and energy management agency), taken from "Waste: key Figures"

Additionally, Bouygues Immobilier is carrying out a rehabilitation operation involving a former plant in a mixed-use neighbourhood in Bagneux (near Paris). This ranks as one of the most ambitious circular-economy operations by a private-sector developer in France. It consists of three stages: referencing all the materials present on the site (between 2014 and 2015); identifying potential partners for recycling the materials; and designing a methodology for gutting, asbestos removal, sorting and recycling. The deconstruction work, completed in August 2017 and carried out in conjunction with Colas subsidiaries, selectively demolished virtually all the buildings, leading to the recycling of 80% of materials including all the concrete, equating to 25,000 tonnes, which was reused on-site for backfilling after crushing.

Other Group solutions make use of contributions from:

- the sharing economy (and mixing the use of space), which leads to optimised use of the goods and services offered by the Group, e.g. shared spaces in the eco-neighbourhoods built by Bouygues (car parks, gardens, third places, etc.);
- and from scalable building design principles that facilitate reversibility as well as extensions and changes in use over the lifecycle of the building or infrastructure.



Additionally, to produce new solutions for the circular economy and sustainable urban environments, the Bouygues group in 2016 launched a Group-wide intrapreneurship programme called "Innovate like a start-up",

which has led to the creation of several new activities, one of which is a digital platform listing materials obtained from demolition and renovation. In 2018, the project will lead to the creation of a company owned jointly between Bouygues Construction, Colas and Suez.

Colas is a leading actor in the circular economy. Its Colas Île-de-France Normandie entity is able to meet the requirements set by the Grand Paris major infrastructure programme's worksites. Its activities are able to handle excavation material and projects of all types, and it operates a network of around 40 sites across the Paris region, such as recycling platforms, business waste disposal centres, inert waste storage facilities, storage cells for asbestos-bearing waste and asphalt mixing plants that can recycle old road surfaces.

Colas has designed an innovative product (Ecosol<sup>®</sup>) that is manufactured from inert pre-treated materials. Ecosol<sup>®</sup> provides an alternative to concrete in road, rail and industrial projects, as well as for backfilling. It can be used to reuse spoil from excavations and earthworks, such as from Grand Paris projects, thereby helping to reduce consumption of natural resources. Thanks to all these activities, Colas Île-de-France Normandie was able to recycle close to 1.5 million metric tonnes of materials in 2017, including 200,000 metric tonnes of rail ballast.

#### 3.3.3.1 Preventing and managing waste<sup>a</sup>

#### Recycling and reusing construction-related waste

The business segments of the Bouygues group limit the production of waste arising from construction activities and promote recycling through several programmes. Environmental management systems (e.g. ISO 14001), as well as internal standards (Ecosite label, Clean Worksite Charter and checklists), also make provision for responsible waste management. One of Bouygues Construction's Ecosite standards includes metrics on the sorting, storage, collection, transportation and treatment of waste as well as the specific treatment of hazardous materials, namely pollutants or waste with properties endangering the environment or people. Bouygues Immobilier's Clean Worksite Charter<sup>b</sup> makes waste recycling mandatory, notably via a waste management plan.

At Bouygues Construction, programmes for reducing and recycling waste on construction sites, especially for civil works activities, continue to be implemented. Excavated materials are recovered for use as backfill or for the environmental rehabilitation of sites. Several of Bouygues Construction's operations reuse raw materials directly on-site. During the renovation of Longchamp racecourse by Bouygues Bâtiment Ile-de-France, concrete extracted from deconstruction operations was crushed, sorted and then reused in-place as part of a short supply chain. In this example, close to 30,000 m<sup>2</sup> of concrete was recycled for the requirements of the project, which is due to be handed over in 2018.

Additionally, as part of the Grand Paris major infrastructure programme, nearly 200 kilometres of tunnels will be dug, producing 43 million tonnes of spoil to be removed. To monitor environmental impact and ensure traceability, Société du Grand Paris has set up a special platform as well as a process for managing and recycling waste. For these worksites, Bouygues Construction's Bouygues Travaux Publics subsidiary has designed a supplementary tracing system called Ubysol, which through the geolocation of fleet vehicles can track waste itinerary, type, tonnage and place of discharge. This system not only provides productivity gains but also improves and increases the reliability of waste management processes. Ubysol uses the Lora network, used by Objenious (Bouygues Telecom) for smart objects.

Since 2016, Bouygues Immobilier has been part of the national multistakeholder Démoclès project, bringing together all the categories of companies involved in deconstruction. In this context, Bouygues Immobilier is co-signatory, alongside Ademe (the French environment and energy management agency), Récylum (a non-profit that recycles electrical equipment) and other public or private project owners, of a voluntary charter underlining their commitment to promoting use of the *Guidebook for Project Owners and Prime Contractors*, published in late 2017, which shows how to integrate materials recycling into construction contracts.

(a) Preventing food waste: given the type of businesses operated by the Bouygues group, this objective is not meaningful. Food waste is only an issue for institutional catering. However, it is mentioned specifically in some contracts with the catering providers servicing the Group's main head offices

<sup>(</sup>b) The Clean Worksite Charter applies to all of Bouygues Immobilier's commercial property developments and to residential developments that are HQE™ certified. (see section 3.3.1.2)

Lastly, waste management is a vital consideration for Colas, whose dedication to recycling is mainly seen in the recovery and reprocessing of asphalt pavement from roadway deconstruction. Three indicators track this process. Since most of the materials that Colas uses are relatively heavy, recycling must be optimised at a very local level to minimise transportation requirements <sup>a</sup>. This local dimension naturally favours an industrial ecology approach and there are many examples of how Colas has successfully brought quarries, recycling centres, mixing plants and other facilities on board with this approach. Amongst the products incorporating recycled materials is Ecomac<sup>®</sup>, developed by Colas itself, is an ultra-thin bitumen emulsion concrete. Made mostly from recovered asphalt mixes, its low-temperature production process reduces energy consumption for the same durability.

Cosson, a subsidiary of Colas Île-de-France Normandie, is extremely active in the circular economy. It uses professional-level sorting and recycling platforms to recover worksite materials and thus linking up deconstruction and public works companies in the same region.

Used hydraulic and motor lubrication oil, the main hazardous waste item generated by Colas in the course of its operations, is disposed of through a certified channel or processed responsibly. It is tracked using the following indicator.

#### Colas

| Indicator   | Scope<br>(activity or region) | Coverage   | 2017 | 2016 Remarks   |
|---|-------------------------------|--|------|--|
| Recycled materials<br>in relation to the<br>volume of aggregates<br>produced    | Global                        | Asphalt<br>mix and<br>aggregate<br>production<br>activities,<br>and railway<br>worksites | 12%  | 11% This indicator improved significantly year-on-year, with<br>the number of tonnes recycled increasing 6%, whereas<br>aggregates production declined 3%. The growing use of<br>recycled materials <sup>a</sup> by roadbuilding subsidiaries in mainlar<br>France and the US accounted for the increase in the numb<br>of tonnes of recycled materials. |
| Asphalt pavement<br>recycled in order to<br>reclaim bitumen                     | Global                        | Materials<br>production<br>activities  | 15%  | 15% The rate was unchanged in 2017 as the volume of reclaime<br>asphalt pavement rose by 2% whereas asphalt production<br>was down 2%.   |
| Surface area of road<br>pavement recycled<br>in-place<br>million m <sup>2</sup> | Global                        | Worksites<br>activities  | 3.6  | 3.4 The surface area of road pavement recycled in place by<br>Colas subsidiaries rose 4% in 2017 relative to 2016. The<br>sharp improvement in this indicator is the result of efforts i<br>western Africa (especially Benin) and by central European<br>subsidiaries, mainland France roadbuilding subsidiaries an<br>northern European entities.       |

(a) The industry consensus holds that the target recycling rate for asphalt mix (in order for all the asphalt mix from milling or deconstruction to be considered recycled) is between 20% and 25% in OECD countries, with this rate varying in accordance with urban density and the technologies employed by project owners. Colas has therefore achieved three-fourths of its estimated recycling potential, with some subsidiaries in Belgium, Switzerland, France, the US and Canada achieving this maximum ratio in 2016. There has been slower progress, however, in countries where recycling is less of a priority

#### Colas

| Indicator               | Scope<br>(activity or region) | Coverage       | 2017 | 2016 | Remarks   |
|-------------------------|-------------------------------|----------------|------|------|---|
| Waste oil recovery rate | Global                        | All activities | 61%  | 61%  | The general consensus is that the optimum waste oil<br>recovery rate is around 80%, taking into account the oil<br>that is consumed and burned by vehicles and plant. In 2017,<br>Colas obtained a steady ratio at 61%. |

(a) These considerations are determined from lifecycle analyses and carbon footprint calculations

#### Recycling - central to the circular economy at Colas

Colas, which produces and uses large amounts of construction materials, recycles and reuses previously used materials from building, civil works and other projects, as well as its own asphalt mixes, for road construction.

Aggregates are the commodity that human beings consume the most of, after water. Public works account for the bulk of this consumption, with road construction alone making up more than half of it. Consequently, Colas implements measures to recycle locally, which reduces the need to extract aggregates (thereby reducing the need for new quarries and gravel pits) while also lowering the amount of material sent to landfill. In 2017, Colas recycled and recovered almost 9 million tonnes of materials, representing worldwide savings equivalent to the average production of 17 Colas quarries.

Reclaiming asphalt pavement from the milling or deconstruction of roadway makes it possible to recover the bitumen. Asphalt mix, which is used in most road networks throughout the world, consists of a mixture of about 5% bitumen with aggregates. In 2017, reclaimed asphalt pavement accounted for 15% of Colas' global production of asphalt mixes, saving the equivalent of the annual bitumen output from a mid-sized refinery.

Additionally, Colas' circular economy policy is based on the results of various methodological tools, particularly lifecycle analysis of asphalt mixes. Research in this area began in 2000 through various industry federations<sup>a</sup> and is regularly intensified and updated.

Colas is also researching how to reuse deconstruction materials recovered from buildings and public infrastructure.

#### **Bouygues Construction**

| Indicator  | Scope<br>(activity or region)  | Coverage  | 2017 | 2016 Remarks  |
|--|--|---|------|---|
| Non-hazardous waste<br>that is recycled (not<br>disposed of in landfill) | Global<br>excluding<br>earthworks and<br>Energies and<br>Services activities | 74%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 63%  | 54% Aware of the negative impacts that construction waste<br>can have on the environment, Bouygues Construction<br>has a policy for recycling waste. Traceability systems are<br>used to encourage employees to take responsibility for<br>the conditions in which non-hazardous waste is collected,<br>transported and recycled. Bouygues Construction's<br>commitment to this issue resulted in a sharp improvement<br>in 2017.                                     |
| Rate of recycling<br>of excavated raw<br>materials                       | Global<br>Civil works activity   | 23%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 66%  | 80% Since 2015 Bouygues Travaux Publics has used an indicator<br>tracking its waste recycling, specifically the recycling of<br>spoil (which is the main category of waste generated by<br>earthworks). The indicator shows a percentage decline<br>in recycled spoil in 2017 relative to 2016. This was due to<br>the beginning of several projects for the Grand Paris major<br>infrastructure programme that generated polluted spoil<br>unsuitable for recycling. |

Through its subsidiaries Colas Environnement and Brézillon, the Bouygues group offers soil decontamination solutions. With over 1,000 worksites to its name, Colas Environnement has experience in most decontamination techniques. It is chiefly renowned for the high performance and reliability of its on-site treatment systems. It is also known for its transparency. It is the first company to have gained ISO 9001, ISO 14001 and OHSAS 18001 certifications. In addition to this trio of accreditations, it has also been MASE-compliant since 2010.

Brézillon implemented a platform for transporting, sifting and recycling contaminated soil in February 2017. In April 2017, the platform had handled nearly 10,000 tonnes of contaminated soil. Once received and checked, the materials are analysed by an external inspection agency. Inert materials are then repurposed on construction sites and intrinsically polluted materials are redirected for final disposal.

### Measures for preventing or reusing other types of waste

Although construction-related waste is the chief challenge due to the volumes involved and the environmental impacts, other types of waste arising in the course of the Group's operations must also be tightly managed.

From their offices, all the Group's business segments produce waste electrical and electronic equipment (WEEE), e.g. CPUs, laptops, screens, printers and servers, which are collected and then re-used or recycled. Processing WEEE is therefore a challenge common to the whole Group. In France, this has been entrusted to ATF Gaia, a disability-friendly company, since 2010. Starting in late 2015, the Group entrusted part of this task to another company, Nodixia, to ensure better national coverage. Since the start of these contracts, this initiative has collected 98,920 items of equipment (of which 10,634 between October 2016 and September 2017). In total, 30% of the 848 tonnes of the collected waste equipment was destroyed and 70% reused.

(a) EAPA (European Asphalt Pavement Association); Usirf (French road construction industry association), which is now called "Routes de France"

At the same time, Bouygues Telecom has its own recycling channel as well as a right of first refusal on telecoms and data centre equipment that is no longer used at their original sites. Whenever it has to dismantle sites, its first action is to analyse the on-site hardware closely and, where possible, assign it for reuse. Hardware that is not reused is sold on after reconditioning. Items that cannot be sold on are recycled by specialists. This first-refusal policy has been important in the dismantling arising from the network sharing agreement with SFR (see section 3.3.3.2). Nearly 95% of the hardware from this dismantling has been reused or recycled.

To manage office-related waste responsibly, all the Group's business segments have implemented further measures in addition to those contained in head-office and site certifications. For example, Bouygues Immobilier partners with Terracycle, Elise and other local organisations around France for the collection and recycling of office-related waste at all its sites.

## First national campaign operation for collecting and recycling pre-owned mobile handsets by Bouygues Telecom

In October 2017, Bouygues Telecom partnered with WWF France, Suez, Samsung and Recommerce Solutions (a reconditioning company) to run a national campaign for collecting pre-owned mobile handsets for reuse or recycling.

According to a parliamentary report, some 100 million mobile telephones are lying inactive French homes. This operation also involved all the stores in the Bouygues Telecom nationwide network and a multi-media campaign was run to raise public awareness about the importance of recycling pre-owned handsets.

Bouygues Telecom enlisted the help of two professional organisations involved in reconditioning and recycling: Recommerce Solutions, a leading company that reconditions or resells second-hand mobile handsets with quality certifications; and Suez, a leading waste processing group. Another reason for running the campaign was to assess the feasibility of setting up a French channel for recycling pre-owned mobile telephones that would bring together all parties involved in the lifecycle of a mobile handset: from manufacturing by Samsung (the world's leading producer of handsets), to distribution and collection by Bouygues Telecom stores, and finally to reconditioning for reuse by Recommerce Solutions, which guarantees the quality of the second-hand products it sells (and certifies them with the RCube label), and then recycling by Suez.

As early as 2004, Bouygues Telecom was the first operator in France to offer a service for collecting and recycling mobile handsets. This began in its own stores and was subsequently extended to encompass all distribution channels, irrespective of operator and handset make. Since 2011, this service has been supplemented by a page on the Bouygues Telecom website devoted to the sale of pre-owned handsets, through its partnership with Recommerce Solutions.

#### **Bouygues Telecom**

| Indicator  | Scope<br>(activity or region) | Coverage  | 2017    | 2016    | Remarks   |
|--|-------------------------------|---|---------|---------|---|
| Handsets collected for<br>recycling or re-use<br>number of handsets                                    | France                        | 100%<br>of Bouygues<br>Telecom's<br>consolidated<br>sales | 252,023 | 195,515 | The increase is due to the success of collection operations in stores.  |
| From customers<br>(Bouygues Telecom<br>stores, general public<br>and corporate websites,<br>employees) |                               |   | 215,632 | 159,106 | The increase is explained by the success of collection<br>operations in stores. Data on the national collection<br>campaign run in conjunction with WWF will be reported<br>in 2018 as it occurred in October 2017, after the reporting<br>period for 2017 had ended. |
| Through the after-sales service  |                               |   | 36,391  | 36,409  | This indicator did not vary much between 2016 and 2017.   |

#### 3.3.3.2 Using resources sustainably

Energy, raw materials (such as timber and aggregates), water and excavated materials are the natural resources that are vital to the Bouygues group's construction businesses.



So that requirements can be calculated precisely and utilisation optimised, digital technology such as BIM (see box below) and specific lean management procedures are being steadily deployed in Group entities.

### Promoting the circular economy through BIM

BIM (Building Information Modelling) creates a smart virtual 3D model that is used to make the best possible decisions in regard to a structure's entire lifecycle, then disseminate these decisions to all project stakeholders.

BIM contains information on the identity and the thermal, environmental and mechanical performance of objects and their constituent materials, as well as on their installation, utilisation, maintenance, recyclability and lifecycle. The tool is used to optimise the building's environmental impact throughout its useful life. In design phase, for example, simulations made by taking into account the features of materials, their degree of recyclability and building methods are used to select the best scenario – one which combines reductions in materials used, optimisation of the building's eventual deconstruction and a lower construction-related environmental impact. Worksite management is also optimised because components come prefabricated, where possible. The frequency of remedial measures and the amount of reject materials are also reduced, which in turn leads to less waste materials from worksites. Lastly, in the deconstruction phase, BIM shows precisely the volumes of materials present that can be consigned for potential reuse. It also makes gutting and demolition operations more efficient.

The Group's construction businesses (Bouygues Construction, Bouygues Immobilier and Colas) use BIM for management of their operations.

Bouygues Construction has been working with BIM since 2007, using it on several small and large projects, in France or abroad. For the construction of the Paris Philharmonic Concert Hall, using a virtual 3D model avoided 90% of phasing-related problems upstream of the worksite, such as the schedule for fixing the girders. In the design of the Singapore Sports Hub, a virtual 3D model was used to coordinate technical networks with the structures provided by the architects and design offices. This highlighted incompatibilities that would not have been detected using 2D plans.

As part of Bouygues Construction's digitising of its activities, BIM is being rolled out to cover all projects and their phases by the sharing of best practices, access to dedicated software solutions, and the development of practical resources for BIM users. BIM booths are being installed on worksites so that up-to-date 3D plans can be readily used by site workers, even in the open air.

Bouygues Immobilier's policy is that all its operations will use BIM by 2020, in both design and production phases.

Finally, the Bouygues group is analysing new construction models that transform buildings into banks of materials referenced using digital modelling, making it easier to reuse such materials during subsequent deconstruction and renovation.

### Selecting and managing raw materials

To reduce the use of natural resources, those business segments concerned have pinpointed two major avenues. The first is giving priority to sustainably sourced resources (e.g. certified products); the second is optimising resource utilisation (through eco-design and recycling). Additionally, the Group dialogues with customers to ensure that secondary raw materials, i.e. those derived from recycling, are used as much as possible in buildings and infrastructure.

### Colas

| Indicator  | Scope<br>(activity or region) | Coverage   | 2017 | 2016 | Remarks   |
|--|-------------------------------|--|------|------|---|
| Volume of<br>recycled materials<br>millions of tonnes                | Global                        | Asphalt<br>mix and<br>aggregate<br>production<br>activities,<br>and railway<br>worksites | 9    | 8.5  | The volume of recycled materials increased by 6% whereas aggregates production fell by 3%, resulting in an increased recycling rate (see indicators under section 3.3.1).   |
| Volume of aggregates<br>from recycled pavement<br>millions of tonnes | Global                        | Materials<br>production<br>activities  | 5.8  | 5.6  | The industry consensus holds that the maximum recycling<br>ratio achievable for all asphalt mix excavated or planed<br>off the road is between 20% and 25% in OECD countries,<br>with this rate varying locally in accordance with urban<br>density and the technologies employed by project<br>owners. Colas has therefore achieved three-fourths of<br>its estimated recycling potential, with some subsidiaries<br>in Belgium, Switzerland, Morocco, the US and Canada<br>achieving this maximum ratio in 2017. There has been<br>slower progress, however, in countries where recycling is<br>less of a priority. |

When new materials have to be obtained, the Group works to make sure its supply chains are reliable and responsible.

Bouygues Construction is looking at alternative construction methods and has developed its expertise in the use of timber – the material with the smallest carbon footprint – in its projects. Almost 220 timber construction projects (new or rehabilitated) have been completed in France, Switzerland and the UK since 2005.

Bouygues Construction is consequently buying more and more timber products for its construction sites. A partnership agreement with WWF France, which was renewed for a further three years in 2017, is intended to ensure that timber purchases do not threaten the world's forests, individuals who depend on these forests and the biodiversity that they shelter. It eradicates potentially illegal timber from the supply chain and makes purchasing more responsible, considering that more and more certified timber is procured, especially with the FSC certification. Given the volume of materials purchased and its position as a sustainable construction specialist, Bouygues Construction has an important role to play in the development of the sustainable timber sector.

Separately, Ossabois (a Bouygues Immobilier subsidiary) is encouraging use of low-carbon materials through its modular timber construction activities. In 2017, Bouygues Immobilier also signed a partnership agreement with Karibati, a design office specialising in bio-sourced materials. Karibati will train Bouygues Immobilier teams about diversity in bio-sourced materials and provide support for proposing new solutions.

### Promoting eco-friendly alternatives to optimise use of raw materials

Colas and Bouygues Construction offer eco-friendly alternatives to customers for lessening the impact on the environment. Eco-friendly alternatives save on materials and have better energy efficiency and lower greenhouse gas emissions than basic solutions.

Colas has long led the way in designing low-carbon alternatives and developing eco-comparison tools for assessing these alternatives.

In France, these efforts have culminated in the Seve<sup>®</sup> eco-comparison tool, which measures companies' results in increasing the environmental performance of their projects on the basis of greenhouse gas emissions, reuse of materials, water conservation, protection of biodiversity and reduction of disturbances for nearby residents. In 2016, the tool underwent a software upgrade and two distinct modules were created: Roads & External Works and Earthworks, allowing for better targeting of environmental impacts from these two types of operation. Benefiting from these changes, some earthworks operations of Bouygues Travaux Publics, through the French earthworks trade federation (SPTF), also committed to use Seve<sup>®</sup> and were also part of the development team for the third version.

Additionally, the road industry and the EU are working to see how Seve<sup>®</sup> can be applied internationally – something with which Colas is actively involved. In 2017, the "SustainEuroRoad" project, 50%-grant funded under the EU's "Life" project, was audited by the European Commission. It was stated that there are no other projects of this type in road construction and it stands out by being a project that helps to make contracting more objective. The European Commission's Directorate-General for the Environment has referred to the possibility of reducing greenhouse gas emissions by more than 50%, energy consumption by 70% and consumption of natural resources by similar proportions by using this software. It may be rolled out to operations outside France over the coming years.

In today's challenging economic climate, the decline in the number of low-carbon alternatives reflects the current state of the market, which is becoming less open to alternatives every year. The proportion of greenhouse gas emissions avoided declined by 50% in 2017 and the number of selected low-carbon alternatives fell 30%. Within the industry, Colas is playing an active part in efforts to give new impetus to eco-friendly alternatives.

Considered an important avenue for differentiation in international operations, eco-friendly alternatives are regularly used by Bouygues Bâtiment International in its projects.

To include carbon emissions levels as a decision-support indicator in its projects, Bouygues Immobilier has introduced a calculation tool that is compatible with the E+C- regulatory framework. This makes it possible to assess the carbon footprint starting from pre-project phase and evaluate project compatibility with carbon targets contained in E+C-. Using this tool also has the advantage of raising awareness among frontline employees about carbon compatibility, in turn promoting the selection of low-carbon materials and construction methods.

To reduce the need for raw materials, which draw on the ecosystem, the Bouygues group's business segments are conducting research or using a variety of techniques for the eco-design of products.

Bouygues Construction has been working on eco-design since 2007 and on lifecycle analysis (LCA) since 2009, in partnership with the CSTB<sup>a</sup>. Research by laboratories at Colas aims to develop eco-friendly binders by applying the principles of "green chemistry", for example by introducing components bio-sourced from marine and forestry assets, reducing temperatures and

limiting greenhouse gas emissions. This work focuses on using waste and renewable raw materials that have no adverse impact on the production of human food resources.

Bouygues Telecom is lengthening the useful life of its Bbox router by adhering to eco-design principles (optimising materials and ensuring their reliability, minimising components and reducing power drain) and by operating a policy for repairing and reusing this hardware. Consequently, the average useful life of a Bbox router is between eight and ten years<sup>b</sup>.

(a) French building technology research centre

<sup>(</sup>b) Based on after-sales data and the entire installed base

## Sensations: an exemplary development, due to its timber construction and bio-sourced materials, by Bouygues Immobilier

Sensations, part of the Ilôt Bois programme – situated in the Deux Rives neighbourhood in eastern Strasbourg – is exemplary on account of its low-carbon construction, most notably for the use of bio-sourced materials. The project consists of 146 apartments in three buildings.

A feature of Sensations is that it is the first high-rise residential development to have its floors, façades, and stair and lift cores made entirely of wood. In addition, consideration was given to means of improving the indoor air quality of the apartments by aiming to use materials with low pollutant emission levels: the false ceilings eliminate 80% of the principal volatile organic compounds (VOC), wall paints are 'class A+, low solvent emissions', and floor coverings are made from mostly natural and recyclable materials.

Affordable thermal comfort is offered to future occupants through the use of a reversible floor system that will cover heating requirements in winter and provide cooling in summer. In winter, a heat pump harnesses natural energy from the Rhine valley water-table, relaying it through the heating element below the floor screed. It also pre-heats domestic hot water. In summer, a system harnesses coolness from the ground to lower the ambient temperature.

All the innovative technologies used in this development will ensure a passive energy score, with heating needs not exceeding 15 kWh/m<sup>2</sup> of living area annually. Work started in late 2017 for handover in 2019.

### **Energy efficiency**

The Bouygues group takes part in the energy transition through its expertise in active and passive energy efficiency in buildings and the operation of buildings under performance guarantees.

### Promoting effective energy-saving solutions

The environmental certifications that the Group promotes for adoption include energy-saving targets. Energy Performance Contracts (EPC) give occupants guarantees on the energy consumption of their premises, for the duration of the contract. More and more residential properties and offices are being handed over with EPCs. Bouygues Immobilier also offers an EPC with each of its Green Office<sup>®</sup> developments.

### **Bouygues Construction**

| Indicator  | Scope<br>(activity or region)     | Coverage  | 2017 | 2016 Remarks  |                |
|--|-----------------------------------|---|------|---|----------------|
| Projects in the<br>order intake where<br>energy performance<br>commitments are<br>included in the contract | Energy and Services<br>activities | 21%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 16%  | 13% Part of Bouygues Construction's business – more<br>specifically its Bouygues Energies & Services subsidia<br>helps customers to manage end-consumption once s<br>are in the operating phase. To accomplish this, it prop<br>offers that include performance commitments, partic<br>in the form of Energy Performance Contracts (EPC). | sites<br>poses |

The Bouygues group's business segments offer customers innovative but competitively priced services for optimising energy consumption. Most notably, they have built up expertise in the design of passive-energy buildings, positive-energy buildings, rehabilitation, urban services and energy performance management.

- Passive-energy buildings: Bouygues Immobilier has developed expertise in the design of passive-energy buildings (which consume less than 15 kWh/ m<sup>2</sup> per year for their indoor heating). In 2017, Bouygues Immobilier carried out two passive-energy residential developments: Tempo and Parc de Flore in Carquefou (just outside Nantes), totalling 154 housing units. Tempo has been handed over.
- Positive-energy buildings: in anticipation of new regulations coming into force in 2020 (e.g. 2018 Environmental Regulations<sup>a</sup>, which include a new Energy-Carbon label), buildings are henceforth designed with a

positive net energy consumption. In the commercial property segment, the Green Office® brand – launched in 2007 – enshrines Bouygues Immobilier's strategy for positive-energy office complexes that use renewable energy and bioclimatic design. Since its inception, 11 developments have been handed over. In 2017, Bouygues Immobilier started work on phases two and three of Nanterre Cœur Université, and on Green Office® Batignolles, which became the fifth positive-energy commercial development in the process of being built: Green Office® Trigone Quart Opale in Issy-les-Moulineaux, Green Office® Meudon Gaupillat and Green Office® Spring in Nanterre (all in the Paris region) and a Green Office® in Bordeaux. In the residential segment, Bouygues Immobilier started work on Symbioz, an 84-unit positive-energy development. Green Office® Enjoy in Paris, the first-ever Green Office® with a composite timber-concrete structure, leading to exemplary carbon performance, is in the construction phase.

(a) Environmental Regulations (RE 2018) comprise a new energy criterion, positive-energy certification and a carbon indicator that assesses greenhouse gas emissions throughout a building's lifetime. The new rules will come into force in 2018 and 2020

• Rehabilitation: Bouygues Construction and Bouygues Immobilier have also perfected rehabilitation methods. In 2009, Bouygues Immobilier launched the Rehagreen® service package for commercial property. Based on a comprehensive multi-criteria assessment of the building, covering technical, energy, planning, regulatory, commercial and other aspects, the purpose of the service is to identify and implement the rehabilitation scenario which most precisely meets the owner's enhancement objectives and the demands of the commercial property market, while respecting the building's architectural heritage. If the owner so wishes, the operation can be designed to fulfil the most exacting certification requirements (HQE<sup>™</sup>, BREEAM<sup>®</sup> and LEED<sup>®</sup>). Three Rehagreen<sup>®</sup> developments were still under way in 2017: Rehagreen® Scor Londres Budapest, Rehagreen® Malakoff Pichat and Rehagreen® Montrouge. These three renovations have a total surface under development of 47,744 m<sup>2</sup>. For the 2016–2020 period, Bouygues Immobilier has set a target that 70% of the total floor area for commercial property under development or handed over will be either Green Office® or Rehagreen® projects. At 30 September 2017, the figure was 64%.

In 2012 Bouygues Entreprises France-Europe, part of Bouygues Construction, launched Réavenir, its initiative for rehabilitating residential property, based on three commitments: respecting the environment, guaranteeing energy performance and raising awareness among residents. Projects handed over in 2017 included the energy renovation of almost 600 housing units in Le Havre and Bolbec, and 900 housing units in Rouen and Elbeuf (Normandy). These developments reduce energy consumption by 40–45% depending on the residence, backed by a 15-year commitment.

 Energy performance management: this is crucial to curbing energy consumption. Bouygues Energies & Services (with Hypervision<sup>®</sup>) and Bouygues Immobilier (with Si@go<sup>®</sup>) have developed and marketed tools for measuring and managing energy performance for their customers.

The Group's business segments also offer energy-performance solutions for local authorities. For example, Bouygues Immobilier ran the pilot phase for IssyGrid<sup>®</sup>, France's first district smart grid, in Issy-les-Moulineaux near Paris. Fully operational since 2016, IssyGrid<sup>®</sup> supervises the energy consumption and production of some 2,000 residents and 5,000 employees in a 100,000 m<sup>2</sup> perimeter. It does this by providing real-time information at the neighbourhood level so that people can optimise their consumption of renewable power generation and battery-stored energy. This kind of smart

network can also run street lighting systems, public amenities and buildings. In 2017, IssyGrid<sup>®</sup> was awarded the top prize in the Green Solutions Awards, in the sustainable infrastructure category.

Bouygues has also teamed up with Alstom to set up a firm specialising in energy, specifically smart grids. Embix was founded in 2011 and is notably involved in the first-ever large smart grid in Paris, in the western section of the Clichy-Batignolles development. In October 2016, the smart grid project CoRDEES (CoResponsibility in District Energy Efficiency & Sustainability) was a winner in the European call for projects entitled Urban Innovative Actions/ Energy Transition, organised by the ERDF<sup>a</sup>.

Elsewhere, Objenious, a Bouygues Telecom subsidiary founded in 2015 that uses LoRa technology to connect devices, already offers a wide range of solutions. These include a visual interface for monitoring and controlling energy consumption in industrial facilities and in buildings run by local authorities, the possibility of setting alarms indicating overconsumption, and cost optimisation apps (see box in section 3.3.4.2).

- Urban services: Bouygues Energies & Services, a subsidiary of Bouygues Construction, has developed a platform enabling local authorities to manage the energy of all their buildings and network infrastructure in order to reduce consumption. Other innovative services, also aiming to make urban environments more sustainable, include the following:
  - Citybox<sup>®</sup>, directly connected to lamp posts, converts street lighting systems into a broadband network that, in addition to reducing energy consumption, offers digital services such as Wifi, CCTV and sound systems. At the latest count, this solution remotely managed close to 60,000 street lamps.
  - Citycharge\*, which installs electric vehicle charge points on lamp posts, makes it easier to roll out electric mobility solutions.
  - Alizé<sup>\*</sup> is a solution offering charge points for electric vehicles used by local authorities and businesses, using real-time smart management.

Bouygues Immobilier in late-2016 teamed up with Stratumn and Energisme to introduce a blockchain<sup>b</sup> into its smart grid projects so that photovoltaic energy produced in each building can be used within the neighbourhood in which the building is situated. The future Lyon Confluence econeighbourhood, a sustainable-city demonstrator, the contract for which was won by a Bouygues-led consortium in 2016, will be the first test site for trialling this technology.

(a) European Regional Development Fund(b) A data transmission and storage technology

### **Bouygues Immobilier**

| Indicator  | Scope<br>(activity or region)       | Coverage   | 2017    | 2016 Remarks   |
|--|-------------------------------------|--|---------|--|
| Surface area of<br>Green Office <sup>®</sup><br>commercial property<br>developments in<br>operation during the<br>reporting period<br>m <sup>2</sup> | France and<br>subsidiaries          | 96%<br>of Bouygues<br>Immobilier's<br>consolidated<br>sales  | 127,181 | 84,623 In 2017, phases two and three of Nanterre Cœur Université<br>and Green Office® Batignolles (Paris), with a total area<br>of 14,916 m², joined the 24,665 m² of the Trigone Quart<br>Opale development (Issy-les-Moulineaux), on which work<br>started in October 2015, the 4,828 m² of Green Office®<br>Meudon Gaupillat and the 8,804 m² of Green Office® Link,<br>on which work began in summer 2016 in both cases, and<br>the 33,009 m² of Green Office® Spring in Nanterre and the<br>11,126 m² of Green Office® CEAPC in Bordeaux, work on<br>which started in 2016. |
| Number of passive/<br>positive-energy<br>homes being built or<br>handed over in the<br>full year   | Global                              | 100%<br>of Bouygues<br>Immobilier's<br>consolidated<br>sales | 238     | 363 Work started on the Symbiose positive-energy building<br>in June 2017. This was in addition to two passive-energy<br>residential developments: Tempo and Parc de Flore in<br>Carquefou (just outside Nantes), totalling 238 housing unit<br>work on which started in 2016.   |
| Number of<br>smart grids<br>to be rolled out   | France<br>excluding<br>subsidiaries | 89%<br>of Bouygues<br>Immobilier's<br>consolidated<br>sales  | 6       | 6 Bouygues Immobilier has committed to rolling out smart<br>grids for the following urban developments: the railway<br>station district in Divonne-les-Bains, Amédée Saint-Germai<br>in Bordeaux, Les Fabriques in Marseille, Nanterre Cœur<br>Université, Annemasse and Eureka Confluence (formerly<br>Lyon Living Lab). The progress made in planning varies<br>according to each project.   |

### Reducing the energy consumption of business activities

At the same time, the Group's business segments are implementing programmes to help limit or reduce energy consumption arising from their operations (Ecosite at Bouygues Construction and cLEANergie at Colas).

### Measures taken by Colas to improve the energy efficiency of its operations

Energy consumption comes in a variety of forms, from fuel purchased for machinery to electricity consumption at quarries. The cLEANergie (Colas Lean in energy) programme was launched in 2012 to provide Colas with a measuring and monitoring tool aimed at reducing the energy used by operations, from construction and production sites to buildings and logistics.

Roll-out this programme mainly revealed that the energy consumed by asphalt plant burners, vehicles and construction machines together accounted for three-quarters of Colas' direct energy consumption in almost equal proportions.

In order to better control its energy consumption, Colas is focusing its efforts on:

- measurement tools, with software currently being deployed to monitor the energy consumption of asphalt mixing plants. It can track energy consumption and mix temperatures in real time, and send alerts over the internet and to smartphones. These tools are currently being used by about 32% of Colas' asphalt plants.
- employee involvement, with on-board and tracking systems being rolled out to monitor consumption of site machinery and vehicles, including training on eco-driving. Using these arrangements, Colas aims to reduce fuel consumption by 20%.
- the use of renewable energy to power installations in some regions: For example, on Reunion Island, Colas subsidiary GTOI has equipped the roofs of several depot buildings with 6,600 m<sup>2</sup> of solar panels. This solar farm has been connected to the local power grid since 2009.

Additionally, it has been observed that, in addition to low-carbon alternatives, the following help achieve indirect energy savings:

- warm asphalt mixes, which require about 15% less energy to produce than hot mixes; warm asphalt mixes made by Colas accounted for 23% of total output in 2017. All employees are ready to start expanding the use of these products across all areas.
- recycled materials, and especially reclaimed asphalt pavement (planed materials from old road pavement), which save bitumen and aggregates and reduces production and transport costs;
- in-place recycling, which also saves energy by reducing the need for materials and transport.

At Colas, the programme for controlling and reducing energy consumption meets several sustainable development challenges; economic (including financial savings), environmental and safety.

For its own transport requirements, Colas also uses rail and inland waterways as an alternative to road haulage. The quantity of materials transported by rail or waterway is equivalent to nearly 3,300 freight trains (with each train containing 44 freight wagons), which avoids using some 295,000 thirty-tonne trucks.

### Colas

| Indicator  | Scope<br>(activity or region) | Coverage                                | 2017 | 2016 | Remarks   |
|--|-------------------------------|---|------|------|---|
| Energy used per<br>tonne of asphalt mix<br>produced<br>KWh per tonne | Global                        | Asphalt mix<br>production<br>activities | 77   | 78   | This indicator improved by approximately one point in 2017.   |
| Warm- and low-<br>temperature asphalt<br>mixes                       | Global                        | Asphalt mix<br>production<br>activities | 23%  | 21%  | In 2017, the US subsidiaries showed the greatest<br>improvements and the best rates. All employees are<br>working to expand the use of these products across all<br>regions, adapt production tools and conduct ongoing<br>research to develop new technical solutions that enable<br>lower product temperatures, all the more so given the<br>substantial health-related benefits. |
| Total energy costs<br>in millions of euros                           | Global                        | All activities                          | 375  | 370  | The Colas group's total energy costs are estimated at<br>about €375 million.  |
| Total energy<br>consumption<br>millions of MWh                       | Global                        | All activities                          | 7.4  | 7.8  | Total energy consumption was 7.4 million MWh, with a relatively even territorial distribution in accordance with sales.   |

Bouygues Telecom has implemented energy management systems and now has three ISO 50001-certified (energy management system) sites: Technopôle, the Printania customer relations centre and the Montigny-le-Bretonneux data centre (near Paris). This data centre reuses heat from servers and has a free cooling system harnessing outside air.

### **Bouygues Telecom**

| Indicator                                  | Scope<br>(activity or region) | Coverage  | 2017 | 2016 Remarks  |
|--|-------------------------------|---|------|---|
| Total electricity<br>consumption<br>in GWh | France<br>(excluding stores)  | 100%<br>of Bouygues<br>Telecom's<br>consolidated<br>sales | 562  | <ul> <li>505 The increase in total power consumption was due to increased energy use by mobile networks (up 13% like-for-like) and by fixed networks (approximately up 35% like-for-like). Together they represented nearly 90% of total electricity consumption.</li> <li>This increase was due to the following: (1) growth in the customer base (up 10%), (2) network expansion to meet coverage and performance targets, (3) the surge in customer activity with mobile traffic doubling over the CSR reporting period.</li> <li>Importantly, however, mobile-related energy consumption per terabyte carried fell by 45% year-on-year.</li> <li>Additionally, on-site technical optimisation reduced power consumption by data centres by nearly 30%.</li> </ul> |

### Promoting renewable energy sources

As far as possible, the Bouygues group's business segments use renewable energy sources as a way of reducing the energy footprints of their activities and of the products they use.



The solar road developed by Colas, Wattway, is an example of the solutions that the Group can provide. Wattway is a patented innovation, the result of five years of R&D in partnership between Colas and Ines<sup>a</sup>. By combining road building and photovoltaic techniques, this road surface

provides clean, renewable electricity, while allowing for all types of traffic. Wattway contributes to increasing the share of photovoltaic electricity in the energy mix, both in France and worldwide. Wattway<sup>b</sup> is able to power street lighting, illuminated signs and trams as well as homes and offices. By way of example, one kilometre of surfaced road can generate enough electricity to light a town of 5,000 inhabitants. Around 20 projects have been launched in and outside France since 2016. Various different applications have been trialled, such as vehicle recharging, information board power supplies, street lighting in mainland France and on Reunion Island, as well as in supplying power to buildings in Canada, the US, France and Japan. Lastly, the electricity generated is also being sold to the local power grid in Monaco and France.

(b) In 2017, a Wattway lifecycle assessment was conducted, showing that the main factor impacting the environment was the production of the modules, i.e. the making of the PV cells and, to a lesser extent, the polymer resin protective coating. The second factor is the installation phase (connecting the modules to the electrical enclosure). This study shows that the Wattway's impact could shrink to less than that of a standard photovoltaic farm in the years ahead

<sup>(</sup>a) France's National Solar Energy Institute

Bouygues Construction and Bouygues Immobilier have made positive-energy structures a major part of their business strategy, in order to prepare for the 2020 Bâtiment Responsable (responsible building) regulations. Positive-energy buildings produce more energy – much of which is solar, biomass or geothermal – than they consume. Challenger, the headquarters of Bouygues Construction<sup>a</sup>, was transformed into a positive-energy building during its renovation. The site has more than 25,500 m<sup>2</sup> of photovoltaic panels installed in the grounds, in a solar farm and on the roofs of the cockpit and technical building, capable of generating over 2,500 MWh/year. Geothermal systems were also installed for heating and cooling all the buildings in the complex. The site, which prior to its renovation consumed 310 kWhpe/m<sup>2</sup>/year, is now certified positive energy, producing 17 kWhpe/m<sup>2</sup>/year.

Hikari, developed by Bouygues Immobilier in Lyon, is France's first positiveenergy mixed-use development. All energy used in the development is renewably-sourced. Photovoltaic panels have been placed on the roof and façades. It is also equipped with a geothermal system and has a cogeneration power plant fuelled by locally produced rapeseed oil. Energy production and usage are pooled through an energy communication network. Electricity is also stored on batteries to deal with peak loads. In 2017, the development was recognised by the Green Solutions Awards, earning a special mention from the jury in the sustainable city major award category.

Bouygues Travaux Publics and Bouygues Energies & Services, part of Bouygues Construction, have since 2012 been developing bespoke projects around the globe in renewable power generation, from photovoltaic and biomass to thermal and wind power.

In 2017, Bouygues Energies & Services began construction of two solar farms in Japan (in Noheji and Yaita). The first is due to produce 14,800 MWh annually and came on line in November 2017. The second is due to produce 89,900 MWh annually and is scheduled to come on line in April 2018. These contracts include engineering, procurement and construction of the solar farm. In 2016, Bouygues Energies & Services had already handed over a photovoltaic farm in the Philippines. This contains over 425,000 photovoltaic solar panels, spread over 170 hectares, connected to the national grid. Forecast annual production is 190,000 MWh, giving it the potential to supply some 170,000 Philippine homes.

Bouygues Travaux Publics is also part of Floatgen<sup>b</sup>, a new generation of offshore wind turbines in French waters. In 2017, the first turbine of this project was placed off the coast of Le Croisic, on France's Atlantic seaboard, at a specific demonstration site. It will remain in place for two years and will produce an annual output equivalent to the energy consumption of 5,000 households. Bouygues Travaux Publics was active in the design engineering, construction and launching of the floating foundation in the port of Saint-Nazaire.

### Land use

The Group's construction businesses may have an impact on land, through the extraction of materials, pollution, occupation and loss of greenfield sites, in a context of increasing urbanisation.

Bouygues Construction's earthworks and civil works activities are those most concerned by land use and pollution, together with Colas and Bouygues Immobilier. Among the responses to this challenge:

- Bouygues Construction is continuing to develop its expertise in soil decontamination in development and construction operations (see section 3.3.3.1).
- All quarry and gravel pit sites operated by Colas are restored when they are shut down and many are progressively restored while still being operated. In addition, Colas Environment, whose core business is decontamination, has developed a large number of techniques and solutions for treating soil, groundwater, and air.
- Bouygues Immobilier carries out field surveys to determine soil type and ensure that no waste has been dumped. It also ensures that there are no chemical or radioactive substances, nor pollution that could result from current or past operations or from a nearby sensitive site. Finally, it makes sure that no dumped or buried waste, or any substance, could be hazardous or detrimental to human health or to the environment. The presence of any form of soil or subsoil pollution can lead to the cancellation of land purchase contracts. An exemption may only be granted upon prior authorisation of the vetting committee.

The Group's operations also imply land occupancy, and therefore urbanisation.

Most of Colas' construction work involves the maintenance or redevelopment of areas that are no longer in their natural state. The construction of new infrastructure accounts for a very modest share of sales (estimated at less than 10%), and Colas often has no control over how land is used. Other than that, with its innovative Wattway solution, Colas is paving the way for the construction of solar energy-generating roads, covering a sizeable surface area, with the potential to meet some of a country's requirements in terms of solar power but without monopolising ground space solely for this purpose.

In 2017, Bouygues Telecom and SFR continued their programme to share close to 12,000 antennas located outside high population density areas in France, under the terms of an agreement signed in 2014. From an environmental standpoint, this will reduce the need for new equipment while lessening the impact of telecoms sites on land use.

<sup>(</sup>a) Challenger was the first building in the world to have achieved triple certification at the highest level in each case: HQETM Passeport Bâtiment Durable – Exceptional level, LEED\* Platinum and BREEAM\* Outstanding

<sup>(</sup>b) This collaborative project, carried out in conjunction with Ideol and the École Centrale de Nantes engineering school, required considerable human effort to succeed. It won the Renewable Energy prize, part of the Energy Transition awards run by L'Usine Nouvelle, a trade magazine

## Water consumption in accordance with local conditions

The issue of water consumption varies in importance from one part of the world to another, depending on whether operations are situated in arid or temperate regions. In each business segment, water management is consequently tailored to local contexts.

Bouygues Construction and Colas are those most exposed to waterconsumption issues in sensitive areas. In 2014, Bouygues Construction conducted its first-ever comprehensive water-stress analysis. The regional breakdown, updated in 2015, showed that the company generated 69% of sales in countries with low or medium water scarcity (levels 1 and 2), 27% in countries with medium to high water scarcity (level 3), 2% in countries with high water scarcity (level 4) and 3% in countries with extremely high water scarcity (level 5). Bouygues Construction is implementing specific measures to safeguard water resources through the use of special equipment, water

### re-use, consumption tracking and awareness-raising among employees and business partners. For example, Bouygues Travaux Publics has put in place systems for recycling wastewater in concrete batching plants and in liquid mud plants. It is also possible to introduce rainwater retention basins to provide water for operations.

In 2015, Colas introduced new indicators to measure and limit the pressure exerted on water resources by its operations in regions where water is extremely scarce. For these regions, water consumption by Colas' permanent facilities is estimated at approximately 734,000 m<sup>3</sup> in 2017. In order to limit the pressure exerted by Colas on water resources in dry regions, action plans aim to increase water self-sufficiency, encourage recycling and reduce waste. Additionally, the Colas Campus provides specially designed training courses for employees (site supervisors, foremen, engineering consultants, environment managers) on water legislation.

### Colas<sup>a</sup>

|  | Scope (activity |   |      |      |   |
|--|-----------------|---|------|------|---|
| Indicator  | or region)      | Coverage  | 2017 | 2016 | Remarks   |
| Share of permanent<br>activities located in highly<br>water-stressed areas<br>% of sales before inter-<br>company eliminations                       | Global          | 100%<br>of total sales<br>before<br>intercompany<br>eliminations<br>of permanent<br>activities  | 5%   | 6%   | Colas group's permanent facilities located in highly<br>water-stressed areas are in Canada (Saskatchewan),<br>the US (California and Wyoming), South Africa, Zambia,<br>Guadeloupe, Martinique, Ireland, India, Morocco, the<br>Middle East, Chile and mainland France (Normandy).<br>These facilities consist mainly of quarries and gravel<br>pits but also include workshops, binder plants, depots,<br>asphalt mixing plants, ready-mix concrete plants and<br>recycling platforms. |
| Water self-sufficiency rate<br>in highly water-stressed<br>areas<br>% of m <sup>3</sup>  | Global          | 100%<br>of total sales<br>before<br>inter-company<br>eliminations<br>of permanent<br>activities in<br>highly water-<br>stressed areas | 61%  | 84%  | In addition to reducing water consumption in these<br>localities, a key objective for Colas is to increase water<br>self-sufficiency so as to minimise disruption of the<br>water cycle and downstream water use. The water<br>self-sufficiency indicator for 2017 is 61%, which means<br>that most of the water consumed did not originate from<br>the local water system. This preserves access to water<br>resources for other local users.  |
| Share of sales in highly<br>water-stressed areas<br>where an action plan has<br>been implemented<br>% of sales before inter-<br>company eliminations | Global          | 100%<br>of total sales<br>before<br>inter-company<br>eliminations<br>of permanent<br>activities in<br>highly water-<br>stressed areas | 58%  | 38%  | By tracking its action plan progress indicators, as part<br>of a continuous improvement process, Colas is able<br>to monitor and reduce pressure on water resources in<br>highly water-stressed areas. The realisation of action<br>plans increased sharply between 2016 and 2017.  |

(a) These recent indicators will be audited for reliability in 2018. The comparison between 2016 and 2017 is supplied only as a rough indication

Generally speaking, business segments within the Bouygues group are responsible for taking local water constraints into consideration. How water is managed is one of the criteria of the ISO 14001 standard and is contained in internal standards (Ecosite and checklists).



Additionally, Bouygues Construction and Bouygues Immobilier strive to promote building environmental certifications (HQE<sup>™</sup> and NF Habitat HQE<sup>™</sup>), which have a section on responsible water management in a building's operational phase, covering drinking water management, rainwater

recovery as well as wastewater and rainwater management.

### 3.3.4 Climate change

In March 2017, the Bouygues group – alongside 80 companies and around 40 eminent people – signed the manifesto promoted by The Shift Project, a think tank, containing nine propositions to decarbonise Europe. The manifesto, which calls on European countries right now to propose policies to achieve a level of greenhouse gas emissions as close to zero as possible by 2050, was issued in the wake of the Paris climate accord. It aims to encourage Europe to reinvent its economy, most notably by limiting dependency on transport, construction and fossil fuel-related industrial activities. In this context, the Bouygues group has pledged to implement coherent and tangible actions able to meet the challenges of climate change and the need to preserve natural resources.

### 3.3.4.1 Measuring greenhouse gas emissions and material impacts of business activities and products on climate change

The Bouygues group's business segments audit their carbon emissions pursuant to Article 75 of the Grenelle II law. They have already pre-empted regulations by extending the sphere of Scope 3 to include the measurement of greenhouse gas emissions arising from subcontractors' goods and services. Bouygues Telecom and Bouygues Immobilier have also conducted measurements of the emissions generated by the operation of completed property developments and by the use of their products (starting in 2007 and 2014, respectively). Various methods are used in carbon accounting.

Bouygues Construction uses its own CarbonEco system, while Colas relies on  $\rm CO_2/sales$  ratios.



In 2017, to keep in step with regulatory changes and identify the major sources of greenhouse gas emissions related to the Group's activities, particularly those generated by the use of the goods and services produced by its business segments, the Bouygues group started expanding its carbon

reporting to include scope 3b where appropriate and significant. This also involves a change in presentation for the carbon audit whereby greenhouse gas emissions are shown by their source.

As part of this work, the criteria selected for qualifying an emissions source as significant (or not) are as follows: coverage<sup>a</sup>, relevance<sup>b</sup> and feasibility<sup>c</sup>. Emission sources that do not meet one or more of these criteria are considered to be insignificant.

For example, the criteria of feasibility, relevance and coverage cannot be applied to Colas for the following emissions sources: "Use of products and services sold" and "end-of-life of products". Extending scope 3b to these two emissions sources in relation to transport infrastructure (either rail or road) is not relevant because of the complexity of calculating the  $CO_2$  footprint from infrastructure usage, the lack of means to reduce and control this footprint, the low proportion of sales from the construction of new infrastructure and the complex rules for allocating emissions sources are therefore left out of the carbon footprint calculation for Colas.

### Bouygues group greenhouse gas emissions

| Kt CO2 eq                            | Bouygues<br>Construction | Bouygues<br>Immobilier                | Colas  | TF1    | Bouygues<br>Telecom | 2017<br>Group total | 2016<br>Group total |
|--------------------------------------|--------------------------|---------------------------------------|--------|--------|---------------------|---------------------|---------------------|
| <b>Scope</b><br>(activity or region) | Global                   | France<br>(excluding<br>subsidiaries) | Global | France | France              |                     |                     |
| Coverage<br>% of sales               | 95%                      | 89.1%                                 | 100%   | 82.6%  | 100%                | 96.2%               | 94.5%               |
| Scope 1                              | 245                      | 2.8                                   | 1,644  | 1      | 10                  | 1,903               | 2,225               |
| Scope 2                              | 197                      | 0.6                                   | 334    | 2      | 52                  | 586                 | 780                 |
| Scope 3                              | 3,072                    | 553                                   | 10,068 | 89     | 680                 | 14,462              | 12,274              |
| TOTAL                                | 3,514                    | 556                                   | 12,046 | 92     | 742                 | 16,950              | 15,280              |

(a) The reported information concerns the five sources with the highest emissions and/or that cover at least 80% of the emissions

(b) Sources exhibit existing potential for improvement and the company has some control over them

(c) The ability to collect reliable information

The carbon footprint is useful in providing an idea of scale but cannot be considered a reliable performance indicator because of its inherent uncertainties. In 2017, the carbon footprint of **Bouygues Construction** increased 18% versus 2016 because CO<sub>2</sub> emission measuring was broadened to include use of goods and services produced. For buildings, this now concerns the operational phase. Previously, the carbon audit only took the construction of the building into account.

**Bouygues Immobilier**'s carbon footprint increased 20%, partly due to the trend in its sales, which is itself indicative of the higher volume of activity undertaken. The inclusion of greenhouse gases generated by the operational phase of property developments also explains part of this increase.

At **Colas**, the carbon footprint increased marginally by 10% but this resulted from a more accurate calculation method, not because of an increase in emissions.

Carbon footprints at TF1 and Bouygues Telecom were stable year-on-year.

These results highlight an 11% increase in the Group's total carbon missions, which should not conceal the actions carried out in relation to these themes, such as the implementation of low-carbon solutions by Bouygues Construction (timber construction, low-carbon concrete, etc.) or the sharing of certain telecoms network infrastructure by Bouygues Telecom.

In relation to the Group's sales, the increase in the carbon footprint is 6% between 2016 and 2017.

### Greenhouse gas emissions by source

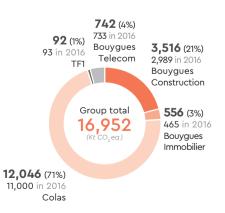
Kt CO<sub>2</sub> eq

| Scope   | Bouygues<br>Construction  | Bouygues<br>Immobilier  | Colas  | TF1  | Bouygues<br>Telecom   | 2017<br>Group total   |
|---------|---|---|--|--|---|---|
| Scope 1 | 245   | 1   | 1,644  | 0.1  | 5   | 1,895   |
| Scope 1 |   |   |  | 0.5  | 5   | 6   |
| Scope 2 | 197   | 1   | 334  | 2  | 52  | 586   |
| Scope 3 | 2,037   | 521   | 7,916  | 83   | 147   | 10,704  |
| Scope 3 | 88  | 0.2   | 363  | 0.1  | 2   | 453   |
| Scope 3 | 154   |   | 1,008  |  | 3   | 1,165   |
| Scope 3 |   | 3   | 545  | 1  | 440   | 989   |
| Scope 3 | 136   | 4   | 237  | 5  | 47  | 429   |
| Scope 3 | 658   | 25  |  |  | 37  | 720   |
| Scope 3 |   | n.d.  |  |  | 4   | 4   |
|         | 3,515   | 555   | 12,407   | 92   | 742   | 16,950  |
|         | Scope 1<br>Scope 2<br>Scope 3<br>Scope 3<br>Scope 3<br>Scope 3<br>Scope 3<br>Scope 3<br>Scope 3 | ScopeConstructionScope 1245Scope 2197Scope 32,037Scope 3388Scope 3154Scope 3154Scope 3658Scope 3658Scope 3658 | Scope         Construction         Immobilier           Scope 1         245         1           Scope 2         197         1           Scope 3         2,037         521           Scope 3         88         0.2           Scope 3         154         3           Scope 3         136         4           Scope 3         658         25           Scope 3         0.58         1.4 | Scope         Construction         Immobilier         Colas           Scope 1         245         1         1,644           Scope 1         1         334           Scope 2         197         1         334           Scope 3         2,037         521         7,916           Scope 3         88         0.2         363           Scope 3         154         1,008           Scope 3         136         4         237           Scope 3         136         4         237           Scope 3         658         25         5           Scope 3         658         25         5 | Scope         Construction         Immobilier         Colas         TF1           Scope 1         245         1         1,644         0.1           Scope 1         245         1         1,644         0.1           Scope 1         1         334         2           Scope 2         197         1         334         2           Scope 3         2,037         521         7,916         83           Scope 3         88         0.2         363         0.1           Scope 3         154         1,008         1           Scope 3         136         4         237         5           Scope 3         136         4         237         5           Scope 3         658         25         5         5           Scope 3         658         25         5         5 | Scope         Construction         Immobilier         Colas         TF1         Telecom           Scope 1         245         1         1,644         0.1         5           Scope 1         0.5         5         5         5           Scope 2         197         1         334         2         52           Scope 3         2,037         521         7,916         83         147           Scope 3         2,037         521         7,916         83         147           Scope 3         2,037         521         1,008         0.1         2           Scope 3         154         1,008         1         2         3           Scope 3         136         4         237         5         47           Scope 3         658         25         37         37           Scope 3         658         25         37         37           Scope 3         658         25         47 |

n.d: not disclosed

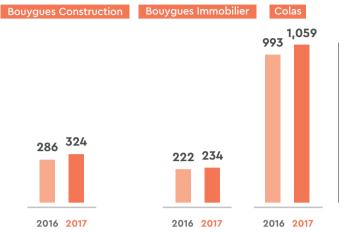
### Greenhouse gas emissions by business segment

 $Kt \; CO_2 \; eq$ 



### Carbon intensity by business segment

In tonnes of CO₂ equivalent per € million of sales



 TF1
 Bouygues Telecom
 Bouygues group

 57
 55

 2016
 2017

 2016
 2017

3

Bouygues Immobilier, by studying the emissions linked to its property developments over a 40-year period, identified the three largest sources of emissions over the various lifecycle phases of its property developments, and drafted a procedure for reducing greenhouse gas emissions that was implemented in 2015, with targets set for 2020. For example, the chief means for reducing transport emissions caused by occupants, once the buildings become operational (46% of Bouygues Immobilier's carbon output), are innovative mobility solutions and dialogue with local authorities.

For Bouygues Telecom, the three largest sources of emissions are, in descending order: investments, purchases of goods and services, and electricity consumption. Network equipment accounts for close to 90% of investments, i.e. half of Bouygues Telecom's total carbon footprint (emissions arising from the manufacturing and installation of this hardware). The solution enacted involves sharing equipment with other operators and encouraging its reuse.

The first of Colas' commitments is to reduce its carbon footprint and deliver solutions that reduce the footprint of its customers while accommodating their specific requirements. The second is to adapt to climate change by pursuing its research efforts into the formation of urban heat islands, developing techniques and materials protecting existing infrastructure and scaling new infrastructure projects to cope with a broader range of climate scenarios.

Bouygues Construction has pledged steadily to reduce its carbon footprint, targeting a 20% decrease by 2030 relative to 2015 regarding scopes 1,

2 and 3a (up to the handover of the projects). It is evaluating the  $CO_2$  emissions avoided thanks to its policies and positive actions such as timber construction, the use of low-carbon concrete and energy savings.

### 3.3.4.2 Low-carbon solutions

The recognised expertise of its business segments (construction, property, transport infrastructure, media and telecommunications) has enabled the Bouygues group to design a full-service offer for urban environments as they face the ecological challenges of the 21st century. For several years, the Group has been innovating to make measurable progress in energy and carbon, offering effective solutions in the areas of renovation, low-carbon construction, soft mobility and urban services.



• **Renovation:** the millions of poorly insulated buildings is a key issue for the Group whose business segments have developed solutions and recognised expertise in energy renovation for housing, offices and amenities. These offers improve the business models of renovated properties

and save on natural resources, while respecting the architectural heritage of buildings. In this domain, Bouygues Immobilier provides the Rehagreen<sup>®</sup> service package for commercial property (see section 3.3.3.2). The renovation of Bouygues Construction's headquarters, transforming it into a positive-energy building, is a showcase of its technological expertise.

### Bouygues Energies & Services to build France's first smart city in Dijon

The Dijon metropolitan authority has awarded a contract to install and manage urban infrastructure to a consortium made up of Bouygues Energies & Services, Suez, Capgemini and EDF, which will provide new services to the 253,000 inhabitants of Dijon and its surrounding area (24 municipalities). Starting in 2018, the metropolitan area will have a single connected control centre for remotely managing services and public infrastructure so that all zones can be interconnected. Through these innovations, residents will gain in quality of life:

- a new, safer street lighting system: more than 34,000 street lamps will be modernised. Using the Citybox\* technology, the street lamps will also provide digital services such as Wifi access, CCTV surveillance and electric charge points for devices;
- real-time traffic information, including smart car parking that guides drivers to free spaces. This will be a city-wide operation thanks to sensors connected to the LoRa network.
- a more fluid bus network, enabled by road-network regulation and priority to public transport (113 road junctions will give priority to buses);
- · real-time information about shops and events on mobile apps and connected billboards.

Additionally, the city's operations will adapt to the new usage habits. For example, residents will be able to notify an accident using a special app. Close to 330 geolocated/radio-equipped vehicles and 270 cameras will improve the effectiveness and enhance coordination between services (technical services, fire brigade and police). Over time, these innovations will save on public expenditure for the Dijon metropolitan authority. For example, a 65% reduction in energy consumption is forecast through the use of LED lighting, while maintenance expenditure is expected to be halved.

- Low-carbon buildings are economic and environmental profit centres. Bouygues and its business partners market scalable offers, beginning at the design stage – all the way through to when buildings are up and running. These offers use traditional and bio-sourced materials that can be reused or recycled, as well as renewable energy associated with storage systems (e.g. Eco2charge from Bouygues Energies & Services). Smart systems have also been developed to ensure optimised building management (Bouygues Immobilier's Green Office<sup>®</sup> positive-energy buildings). Sustainable construction is a major avenue of innovation and growth for Bouygues Construction and Bouygues Immobilier. For instance, the Sensations development, located in the Îlot Bois residential area in Strasbourg, is the first high-rise building that has a timber frame (see box in section 3.3.3.2).
- Eco-neighbourhoods: Bouygues and its partners offer local authorities a range of integrated solutions combining sustainable construction, energy efficiency, functional diversity, soft mobility, biodiversity and new technologies adapted to residents' needs. The Bouygues group has several such projects to its name, both in France and further afield, such as Les Fabriques (Marseille), Greencity (Zurich, Switzerland) and Les Faubourgs d'Anfa (Casablanca, Morocco). Since 2016, the Bouygues group has taken part in the creation of two sustainable-city demonstrators in France, under the aegis of the government-backed Institute for Sustainable Towns (Eureka Confluence and Descartes 21 Marne-la-Vallée). They will serve to test, free from current regulatory constraints, ground-breaking innovations in all areas of urban life.

### Objenious: the Internet of Things for the sustainable urban environment

In 2017, there were 8.3 billion connected objects worldwide. That figure is expected to exceed 20.5 billion <sup>a</sup> by 2020. The Internet of Things (IoT) offers fresh possibilities for furthering sustainable development for urban areas and for businesses.

Through its subsidiary Objenious, created in 2015, Bouygues Telecom is one of the first French operators to roll out a network designed for connected objects based on LoRa (or Long Range) technology. This network, which is slated to become the global standard, covers the whole of France, offering a range of applications for reducing the environmental footprints of urban environments. Since January 2017, Objenious has opened the leading nationwide LoRa network, covering 95% of the population through 4,300 antenna.

Objenious already offers a range of solutions. For example, its connected car-parking solution, which uses LoRa-connected sensors, informs drivers of free spaces.

Another solution is the installation of sensors on voluntary drop-off points, which measure how full they are and in turn optimise collection vehicle management. It thus reduces fuel consumption, pollution and greenhouse gas emissions as well as relieving congestion.

Lastly, Objenious can reduce energy costs by up to 30% by limiting energy consumption in industrial facilities and buildings run by local authorities, using three levers: a visual interface for monitoring energy costs; over-consumption alerts; and cost-saving procedures. In 2017, Objenious equipped several of Covéa Immobilier's premises so that energy performance could be tracked and comfort measured, leading to comprehensive savings in terms of water, electricity, gas and heating/refrigeration, all of which was positive for the business. Objenious has signed contracts with General Cable, for water metering, and with Sanef, for its motorway operations.

Objenious continues to work on new carbon footprint-lowering applications for the benefit of local authorities and companies alike, which cover air quality, energy, the environment, geolocation, cold-chain monitoring and load factors.

(a) According to Gartner research

 Soft mobility and urban services: Bouygues supports local authorities in the implementation of solutions promoting sustainable urban environments. Bouygues develops transport infrastructure (tram lines and cycle paths) and provides soft mobility solutions, such as strong links to public transport networks, vehicle sharing, electric vehicle charge points, shared parking spaces and electric bikes for its eco-neighbourhoods. The Bouygues group is also able to change the way roads are made in order to produce clean energy (Wattway) and integrate dynamic road marking, as well as offer local authorities innovative urban services based on embedded sensors (via the Internet of Things).

### Flowell: a dynamic road-marking solution for smart and scalable roads

At the "Maires et Collectivités Locales" local government trade fair held in Paris from 21 to 23 November 2017, Colas unveiled its latest roads innovation, Flowell, a dynamic, adaptable, scalable road-marking solution that will optimise urban space, traffic fluidity, safety, and the coexistence of multiple forms of transport on the same road surfaces.

The Flowell solution, developed by Colas R&D in collaboration with CEA Tech<sup>a</sup>, makes it possible to organise the shared space of roads and city streets thanks to a system based on the dynamic control of light-emitting signalling. Installed on existing roads, Flowell offers a great degree of flexibility and adapts the infrastructure to the needs of the local authority in real time.

Flowell can streamline traffic on existing roadways by giving priority to certain users over specific time periods. For example, local authorities can turn parking spaces reserved in the daytime for deliveries into car parking spaces at night. They can also create temporary drop-off spaces around schools, and secure pedestrian crossings by enhancing their visibility and that of pedestrians with light-emitting markings. In the longer term with this innovation, a continuous line can become discontinuous and instantaneously redistribute the number of allocated lanes according to real-time traffic conditions. Flowell's new traffic-regulation solution makes it a player in the smart, low-carbon towns and cities of the future.

## 3.3.4.3 Promoting solutions adapted to climate change

Climate change leads to rising sea levels, an increased frequency of freak weather events (e.g. windstorms and rapidly rising or decreasing temperatures) and affects ecosystems.

Bouygues Construction's ABC (Autonomous Building for Citizens) is an example of what the Group will be able to implement to deal with these changes. In the context of increasingly scarce resources, ABC's performance in terms of water recycling, insulation, and renewable energy generation, is likely to represent a huge step towards independence from various networks. In 2014, a partnership with the Municipality of Grenoble was signed to develop a demonstrator, involving the construction of an apartment building with some 60 housing units. The building permit was issued in October 2017 and work is due to begin in 2018.

As part of projects to extend the ports of Calais (in partnership with Colas) and Monaco, Bouygues Travaux Publics is building breakwaters – one of its specialisations – to counter rising sea levels.

VSL has been working alongside the Danish Technical University to optimise the performance of cable-stayed bridges in the face of severe weather, leading to improvements in the user safety and comfort of these structures. Research focuses on vibration control and managing risks relating to falling ice.

Bouygues Immobilier factors bioclimatic architecture into its developments: research into the best location, bioclimatic research, choice of efficient insulating materials and the use of renewable energy sources. UrbanEra\*,

a sustainable eco-neighbourhood service, introduces nature into urban environments, thus reducing the urban heat island effect and considerably improving water drainage.

Colas has acquired in-depth knowledge of the particular constraints of designing and building infrastructure in harsh climates<sup>b</sup>, enabling it to advise customers in dealing with climate change. For example, in 2009 Colas offered one of its customers a low-carbon alternative to the Colclair<sup>®</sup> binder to better reflect heat while resurfacing a road in Dawson (Yukon, Canada), where the permafrost ground (i.e. which does not thaw for at least two consecutive years) was threatened by increasing temperatures due to climate change. This expertise was once again in demand for work carried out on Iqaluit Airport under a public-private partnership signed at the end of 2013 in Nunavut (Canada's northernmost territory). Building work was completed in August 2017. Colas' research efforts also included developing light-coloured asphalt mixes to help protect permafrost ground (instead of the traditional black mixes which reflect less of the sun's heat). Other areas of research include the effects of extreme thermal shock on the development of cracks.

Colas launched a programme of academic discussions concerning the formation of urban heat islands to factor in the complex interactions and retroactions characterising this phenomenon, which is a concern for all the world's major urban centres. Concurrently, Colas continues to pursue a rigorous experimental approach to distinguish the thermodynamic properties of building materials and is ready and willing to participate in the full-scale measurement and experimental programmes launched by several municipal authorities. This is an area in which collaborative solutions spanning water management, big data, urban planning, materials science, human and social sciences can be developed.

(a) The French Alternative Energies and Atomic Energy Commission's technology research unit

(b) This includes regions with very hot, dry climates (such as southern Morocco and western Australia), extremely high rainfall (French Guiana and the Caribbean, and the Indian Ocean region) and extremely low temperatures (at high altitudes and in Canada, Alaska and Greenland)

### 3.3.4.4 Reducing the Group's carbon footprint

Whether on worksites, at headquarters or in regional offices, the Group's business segments work hard to reduce the carbon footprints of their operations.

To reduce the carbon footprints of worksites, Bouygues Construction and Colas choose materials using eco-friendly alternatives (Seve\*) and metrics to track energy savings.

Bouygues Construction is investing in innovation in the sphere of earthworks, by carrying out research into binders with low CO<sub>2</sub> emissions.

Soil improvement during landscaping projects is traditionally done by lime washing and/or by hydraulic binder, which, through their manufacturing process, generate large amounts of greenhouse gas emissions.

Colas implements initiatives to reduce fuel consumption, such as encouraging truck drivers and plant operators to adopt fuel-efficient driving behaviour and switch off engines when idling. Initiatives are also in place to reduce fuel consumed by asphalt plant burners. Fuel consumption per tonne of asphalt mix produced is monitored worldwide.

### Colas

| Indicator   | Scope<br>(activity or region) | Coverage                                | 2017    | 2016    | Remarks  |
|---|-------------------------------|---|---------|---------|--|
| Greenhouse gas<br>emissions relative to<br>the production of a<br>tonne of asphalt mix<br>Kt CO <sub>2</sub> eq per tonne | Global                        | Asphalt mix<br>production<br>activities | 18      | 18      | Greenhouse gas emissions from mixing plants were stable in 2017.   |
| Greenhouse gas<br>emissions avoided<br>as a result of action<br>taken by Colas<br>in tonnes of CO <sub>2</sub> eq         | Global                        | All activities                          | 153,000 | 176,000 | In 2017, the quantity of greenhouse gas emissions avoided<br>as a result of Colas' actions decreased due to the decline ir<br>CO <sub>2</sub> emissions avoided at mixing plant burners <sup>a</sup> . |

(a) Broadly speaking, action specifically involved limiting energy consumption by Colas at group level (plant and vehicle fuel consumption, asphalt plant burners) and reducing the energy and greenhouse gas component of the products and techniques offered to customers (warm asphalt and asphalt mixes, in-place road recycling, recovery of road pavement for use in production of asphalt mixes, Végéroute® products, promotion of EcologicieL® and Seve® eco-friendly alternatives software, Wattway, etc.)

### The BBCA label: a driver of ecological transition

To fight effectively against climate change and preserve resources, the construction sector is focusing increasingly on reducing greenhouse gas emissions, of which it accounts for 40% worldwide.

Bouygues Construction and Bouygues Immobilier are members of the BBCA (the Low-Carbon Building Association) and have helped launch a label of the same name by submitting projects for certification. The label is used to publicise actions aiming to reduce the carbon footprints of buildings across their entire lifecycle. It has four focuses: sustainable construction, optimised operation, on-site carbon storage and the circular economy. Operating along the same lines of environmental certifications from the US or the UK, the BBCA label is awarded by an independent entity, either Promotelec (housing) or Certivéa (offices).

Since its creation in 2016, Bouygues Construction and Bouygues Immobilier have submitted projects for assessment from the initial pilot phase: Passage Desgrais and Rue des Ardennes (Paris), Epicéa (Issy-les-Moulineaux (Bouygues Bâtiment Ile-de-France) and Green Office<sup>®</sup> Enjoy, a positive-energy office development (Bouygues Immobilier) situated in the heart of the Clichy-Batignolles mixed-development zone in Paris. Green Office<sup>®</sup> Enjoy represents the largest office development to receive BBCA certification.

In 2017, new developments by the Group received the BBCA label, such as in Aulnay-sous-Bois (Linkcity and Brézillon), as did several apartment buildings in the Rue des Ardennes (Brézillon) and Rue du Four (Bouygues Bâtiment Habitat Social) developments, in Paris and Choisy-le-Roi respectively, as well as the Paul Claudel mixed-development zone in Amiens (Brézillon).

After tackling new builds, the BBCA in 2017 developed a new label focusing on renovations, with the support of Bouygues Bâtiment Ile-de-France. BBCA is looking into how it could apply the label outside France as well as to eco-neighbourhood projects.

Operating fixed and mobile networks represents Bouygues Telecom's largest item of energy consumption and one of its three largest sources of greenhouse gas emissions. Even though this energy consumption has been rising on an absolute basis, owing to increased geographical coverage, government-required quality standards and customer usage, it has decreased per terabyte carried (down 45% year-on-year). To gain a more detailed view of its sites' energy profile, Bouygues Telecom in 2017 trialled a system that

can inform it of their primary and secondary consumption at any time, which in turn highlights where progress can be made. The findings of this trial are due in early 2018.

All the Group's business segments have corporate travel plans to limit the impacts of work-related travel. This has entailed revising vehicle assignment and utilisation policies, promoting public transport, setting up car sharing websites, making provision for working from home and flex office<sup>a</sup> solutions,

(a) Flexible working areas that optimise workstations and collaborative workspaces

and more besides. The main sites of Bouygues SA, Bouygues Construction, Bouygues Immobilier, Colas, Bouygues Telecom and TFI offer their employees electric vehicle charge points, electric vehicles or electric bikes to make corporate travel easier and reduce its impact on the environment.

From 2018, pursuant to the energy transition law, initiatives promoting mobility (corporate travel plans and inter-company travel plans) will be extended to all locations with over 100 employees.

Additionally, TF1 has set targets for reducing carbon emissions relating to its operations. It is a signatory to the Paris Climate Plan, which sets quantitative objectives for reducing greenhouse gas emissions and energy consumption (such as 20% less electricity consumption in 2020 relative to 2012). These targets have already been achieved. New ones will be defined as part of the process to obtain ISO 50001 certification.

## Ecoprod: working towards eliminating carbon from TV and film production – an initiative supported by TF1

In France, the audiovisual sector annually emits approximately the equivalent of 1 million tonnes of  $CO_2$  each year, approximately one-quarter of which is directly connected to filming, according to a report on the sector in 2011.

So that environmental considerations are better taken into account when producing audiovisual content, public and private stakeholders (including TF1) in 2009 launched Ecoprod, which offers a free resource centre aimed at reducing the environmental footprint of these operations. The ecoprod.com website offers best-practice sheets for each profession, a carbon-footprint calculator for TV productions (Carbon'Clap), an eco-production guide and feedback for producers and other industry professionals.

In addition to the financial contribution, paid by all members of the consortium, TF1 took charge of producing the new version of the Carbon'Clap calculator, released in late 2016, and is coordinating the production of practical guides.

In 2017, Ecoprod published a new guide to help harness the advantages of the digital world without widening the sector's carbon footprint. This includes updated advice on shooting, choosing technical resources and post-production. Ecoprod has also joined a pan-European initiative for helping film and television industries to cut their CO<sub>2</sub> emissions and enhance productions.

### 3.3.4.5 Partnering in research



To understand the future impacts of climate change on its business activities, the Bouygues group has become a partner and active member of The Shift Project (theshiftproject.org), a think-tank working towards a carbonfree economy. It comprises a multidisciplinary network of

scientists and industry representatives acknowledged for their experience in energy and climate change issues. The purpose of this think-tank is to issue economically viable and scientifically sound proposals to policymakers. In 2017, over 80 companies (including the Bouygues group) together with around 40 eminent persons signed The Shift Project charter, which has nine proposals for a carbon-free Europe (see section 3.4.3 "Partners, suppliers and subcontractors"). The Bouygues group is also a partner in IDEAs Laboratory<sup>®</sup>, a think-tank bringing together experts, industry players and researchers to carry out intelligence monitoring on the theme of the city of the future. Hosted by the CEA<sup>®</sup> in Grenoble, Ideas Laboratory<sup>®</sup> works to develop innovative projects meeting the social challenges of tomorrow. One such project was Cité 2030, which designed new services based on various disruptive urban scenarios.

Bouygues Immobilier and Bouygues Bâtiment Ile-de-France, both members of the Low Carbon Building Association (BBCA), participated in the launch of an eponymous label promoting low-carbon buildings (see box in section 3.3.4.4).

Lastly, Bouygues Construction participated in a working group alongside other construction and property development players to develop new methods and resources for assessing the value in use or intangible value of office buildings.

### 3.3.5 Taking account of biodiversity

The Bouygues group has pinpointed the impacts of its construction businesses on biodiversity. These include noise and light pollution, destruction or fragmentation of habitats and species, and the possible emergence of invasive species during certain work procedures or soil sterilisation. "Setting targets for improving biodiversity, when justified by business activity" is one of the four principles that the Group's business segments commit to for the improvement of their environmental performance.

The Group has undertaken measures to limit such impacts and sustain biodiversity in its construction businesses. Colas supports biodiversity in two ways:

• by actively participating in research on biodiversity: Colas has been part of the FRB <sup>a</sup> steering committee since 2011. Between 2014 and 2016, it also supported the Lengguru scientific expedition, which explored a particularly rich, unexplored area of Indonesia's Papua province – leading to the discovery of a number of new species. Scientific papers relating to this expedition are now starting to appear in specialist journals.

In 2016, Colas created a sanctuary for black bees in the Alpes de Haute-Provence department of south-east France, in partnership with Apilab<sup>b</sup>. The sanctuary, which comprises 20 hives, is located at the Cozzi quarry, near Norante. This project is conducted in partnership with local beekeepers and the mayors of the towns neighbouring the quarry.

On the innovation front, GTOI (a Colas subsidiary) has developed an acoustic insulator protecting marine mammals from the impact of the submarine noise caused by work on the New Coastal Road on Reunion Island. The aim is to create a barrier absorbing the acoustic waves caused by various phenomena, in a similar way to double-glazing. The innovation won the special Business and Environment award for 2017 in the biodiversity category at the World Efficiency fair.

• by implementing a policy with a direct connection to its operations, i.e. in its quarries and gravel pits. This consists of implementing and monitoring actions to enable and facilitate the presence and survival of a notable animal or plant species, and in installing beehives in collaboration with local stakeholders (bee-keepers, naturalists, nature reserves, NGOs and others). Trials are also under way to help Colas work crews address the issue of invasive plants, with a growing number of subsidiaries around the world tackling this issue.

### Colas

| Indicator   | Scope<br>(activity or region) | Coverage   | 2017 | 2016 | Remarks  |
|---|-------------------------------|--|------|------|--|
| Share of aggregates<br>production sites<br>working to<br>promote biodiversity<br>% of sales before inter-<br>company eliminations | Global                        | 100%<br>of sales before<br>inter-company<br>eliminations of<br>the permanent<br>aggregates<br>production<br>activities | 51%  | 44%  | In 2017, this indicator increased seven points thanks to non-French subsidiaries (up 15 points). |

Bouygues Construction has had an internal biodiversity advisory unit, Biositiv, since 2012. It is integrated into the Bouygues Travaux Publics subsidiary and helps each entity in Bouygues Construction to develop a biodiversity strategy. For example, the Nîmes-Montpellier railway bypass project has applied offsetting measures on neighbouring land to restore supportive conditions for almost 150 protected animal and plant species.

Additionally, to take proper account of biodiversity in urban development projects, Bouygues Construction has contributed to the creation of the firstever worldwide label for recognising construction and renovation projects that factor in urban biodiversity. BiodiverCity® is currently managed by IBPC °, an organisation bringing together builders, developers, users and trade federations.

Bouygues Construction and Bouygues Immobilier have already used this label with several certified structures. The Font-Pré eco-neighbourhood in Toulon received the BiodiverCity® label at the design stage. The project includes the landscaping of 10,000 m<sup>2</sup> of grounds and a partnership agreement with the regional Bird Protection League (LPO) to raise awareness among the neighbourhood's managers and residents. These actions led to the award of the best score ever – ABAA – for a property development project in France. The Néo-C eco-neighbourhood in Créteil and Green Office® Enjoy are also certified BiodiverCity® in the design phase. In 2017, Bouygues Immobilier was the only developer to obtain three of the 24 BiodiverCity® labels awarded during the year. This recognition encourages its ambitious efforts to include biodiversity in its property developments.

Drawing on the experiences from the certification of these three projects, Bouygues Immobilier wants to shift up a gear, so it is working on a pilot project to apply BiodiverCity\* to an entire neighbourhood (Nanterre Cœur Université), in partnership with Elan, the Group's property-development consulting arm. Working on a bigger scale will make it possible to integrate biodiversity issues in the development of future neighbourhoods, involving as many local stakeholders as possible and optimising ecological continuities.

(a) French Foundation for Biodiversity Research

(c) International Biodiversity and Property Council.

<sup>(</sup>b) A laboratory specialised in environmental biomonitoring using bees

### **Bouygues Immobilier**

| Indicator  | Scope<br>(activity or region)       | Coverage  | 2017  | 2016  | Remarks  |
|--|-------------------------------------|---|-------|-------|--|
| Number of housing<br>units carrying the<br>BiodiverCity® label<br>or covered by a<br>commitment to obtain it<br>At 30 September 2017 | France<br>excluding<br>subsidiaries | 89%<br>of Bouygues<br>Immobilier's<br>consolidated<br>sales | 8,224 | 8,008 | Since 2014, Bouygues Immobilier has systematically<br>incorporated biodiversity into all its property development<br>projects. In most cases, this has resulted in commitments<br>to obtain the BiodiverCity® label. |

### **Bouygues Construction**

| Indicator  | Scope<br>(activity or region)        | Coverage  | 2017 | 2016 Remarks   |
|--|--------------------------------------|---|------|--|
| Number of construction<br>projects in the backlog<br>with the BiodiverCity®<br>label | Global<br>construction<br>activities | 50%<br>of Bouygues<br>Construction's<br>consolidated<br>sales |      | 5 The certification date taken into account by IBPC is the<br>date on which the design audit ends, which explains<br>why no project was certified during the reporting<br>year. However, five projects have been certified<br>since 2015 and the process is under way for several<br>others (La Gloire and Les tours de Castilhon residences,<br>Roubaix-Palissy, etc.). Additionally, the Nanterre Cœur<br>Université eco-neighbourhood is one of the pilot projects<br>of the new BiodiverCity® Ready label that is being created. |

### Bouygues Construction's policies to encourage biodiversity



Bouygues Construction has included the protection of biodiversity into its product offering in order to give it value added and make it stand out from the competition. During COP21 in 2015, its biodiversity policy was recognised by the French Ministry of Ecology, Sustainable Development and Energy under the National Biodiversity Strategy (SNB).

For several years, Bouygues Construction has been running R&D programmes investigating biodiversity in infrastructures (measures to stop invasive species, offsetting mechanisms, encouragement of marine biodiversity, etc.) and urban biodiversity (green roofs, biodiversity in property development, etc.). This commitment has been conveyed by a host of different actions, including:

- creating an internal advisory unit, Biositiv, and partnering in the creation of BiodiverCity<sup>®</sup>, the first worldwide applicable biodiversity label, which the company has also used in several projects;
- participation in the annual National Biodiversity Conference since 2012;
- support for charities working to preserve biodiversity such as the French Bird Protection League (through Club Urbanisme, Bati et Biodiversité), or by contributing to the urban biodiversity database alongside Natureparif in the Paris region.

Here is a sample of the projects in which measures to protect and reintroduce biodiversity have been taken:

- the work to extend the port of Calais, the design of which includes a resting place for birds and a bird-watching observatory;
- the offshore extension of Monaco's port area, where 500 m<sup>2</sup> of Posidonia beds were moved to a place nearby in order to preserve them. In this project, the sea-based infrastructure will also comprise a wide array of artificial habitats and ecological corridors. One of the initiatives at Bouygues Bâtiment Ile-de-France is distributing a handbook for works supervisors giving tips on raising employee awareness about measures that promote biodiversity. Among the various options presented are bat houses, beehives and green roofs.

For the Paris Rive Gauche mixed-development zone project, Bouygues Bâtiment Ile-de-France is developing M6B2, known as the Biodiversity Tower. This tower, with its unique fully vegetated façade, is due to include a vertical garden where 285 shrubs of wild varieties will be planted.

Lastly, the Group's business segments have teamed up with expert partners in their efforts to protect biodiversity. For example, several entities at Bouygues Construction, chief among which Bouygues Energies & Services, have signed a commitment with Noé, a charity, for the incorporation of biodiversity considerations into their products and services. This covers street lighting, infrastructure biodiversity, knowledge-sharing, employee awareness-raising and outreach to users. From its base on the island of Sal in Cape Verde, Bouygues Energies & Services has teamed up with NGO Projeto Biodiversidade to assist in a turtle conservation programme. Most species on the island are endangered. Projeto Biodiversidade is protecting the turtles by setting up special colonies.

Furthermore, Bouygues Construction and Bouygues Immobilier are encouraging urban agriculture. In 2017, teams from UrbanEra<sup>®</sup> (part of Bouygues Immobilier) worked alongside AgroParisTech<sup>a</sup> to design a methodology for providing spaces for urban agriculture in its neighbourhood projects.

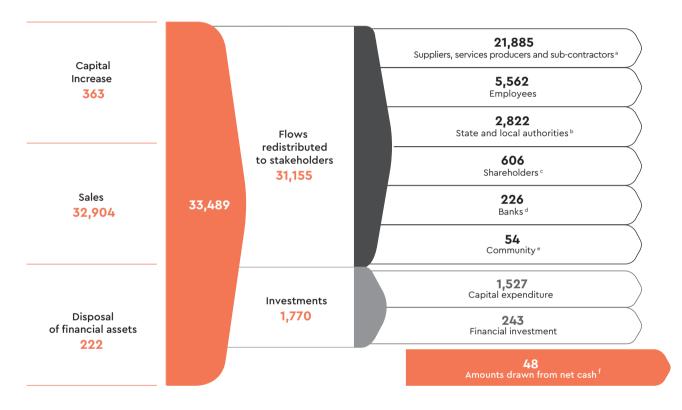
### 3.4 SOCIAL INFORMATION

Further information can be found by visiting bouygues.com or consulting the CSR documentation of the individual business segments available on their respective websites.

### Financial flows generated by the Bouygues group in 2017

€ millions

The redistribution of the financial flows generated by the Bouygues group has a positive impact on regional economic development and appeal. Investing in the Group's future growth contributes to sustaining this positive impact.



(a) purchases and other external expenditure

(b) income tax, social security contributions, and other taxes

(c) 2016 dividends paid in 2017, of which €73 million paid to employees

(d) cost of debt and other charges

(e) donations, patronage and sponsorship

(f) after changes in the working capital requirement (BFR) and currency effects

### 3.4.1 Socio-economic impacts worldwide

The purpose of the Bouygues group's activities is to provide solutions that drive progress and that support the major changes within society. Its business activities have an impact on regional and local development through the construction and maintenance of road and rail transport infrastructure and buildings as well as through the expansion and operation of a telecommunications network. In this respect, they aim to:

- facilitate personal travel. The urban cable car that became operational in Brest last year (and the one due to open in Toulouse in 2020) offers an alternative mode of transport that is environmentally friendly and more economical for passengers;
- protect populations against major risks. The Chernobyl confinement shelter, work on which took place between 2010 and 2016, will limit the environmental risks connected with this defunct nuclear power station;
- help provide access to housing and urban services. With its diverse offers, Bouygues endeavours to meet the needs of first-time buyers and users of

social housing. Bouygues Immobilier markets a significant portion of its developments (74% of block reservations in 2017) to social landlords. It also develops housing adapted to senior citizens (e.g. Les Jardins d'Arcadie). Additionally, the eco-neighbourhoods developed by Bouygues seek to factor in social diversity and access to public amenities;

- combat fuel poverty. Bouygues Construction's solution that provides energy renovation for social housing, without the need to decant the occupants, helps social landlords reduce fuel poverty among low-income households;
- develop the means of communication. The roll-out of very-high-speed technology (4G and fibre) to cities and more sparsely populated areas is helping local and regional economic development as well as expanding digital services to as many people as possible, including in rural areas.

## Grand Paris: a major infrastructure programme promoting economic development and environmental protection

Grand Paris is defined by the specific French law of 3 June 2010 as "an urban, social and economic project of national interest that unites the major strategic areas of the Paris region". Grand Paris aims to create a vast 200-km public transport network, made up of 68 stations for a total investment of  $\leq$ 24.5 billion.

The selected routes will link the centre of Paris with the main urban, scientific, technological, business, sporting and cultural centres in the region. It is an extremely important project for the city, the region and also for France as a whole, ahead of the 2024 Summer Olympics, which will be hosted in Paris. The four new lines of the Grand Paris Express rapid transport project (15, 16, 17 and 18) will be connected to the existing public transport network, while existing metro lines 11 and 14 will be extended. It will therefore become easier to travel around the Paris region without having to transit via the centre of the city, while travelling from outlying areas to the capital will also be quicker. As another alternative to car travel, the Grand Paris Express will cut pollution, traffic jams and create a more environmentally friendly urban area.

In responding to calls for tenders, Bouygues Travaux Publics paid consideration attention to the customers' concerns about protecting the environment and promoting economic development in the various areas. Colas Normandie Île-de-France is developing transit and screening platforms for the materials extracted from tunnelling work on the Grand Paris projects. One transit platform is operational in Saint-Witz (northeast of Paris). Other projects are in progress to extend the administrative permits of existing platforms to cover this type of activity.

The Société du Grand Paris, a public corporation overseeing the work on and the funding of the Grand Paris Express, is also tasked with urban development. Specifically, it is leading operations to develop the areas around stations, including the construction of residential property. For example, Linkcity Île-de-France and Bouygues Immobilier have won contracts to develop seven and four sites, respectively, as part of the "Invent the Grand Paris metropolitan area" call for tenders.

Among the initiatives in place to combat energy poverty, Bouygues Construction has signed the EnergieSprong charter, the purpose of which is to support the mass roll-out of energy renovations in social housing. This is sponsored by a network of European actors looking to develop an efficient system of energy that people want and which is economically viable. This is based on a high-grade level of specifications: zero-energy renovation<sup>b</sup> guaranteed over 30 years; one-week renovations with residents present; cost overruns funded by the resale of renewable energy and energy cost reductions; and a focus on occupant satisfaction. Fibre-optic networks add to the appeal of many towns, cities and regions, and this is helping to fuel innovation. The high speeds available and the signal stability are encouraging the boom in e-learnings, working from home and e-health. Bouygues Telecom has announced ambitious plans to invest in fibre to meet the rising demand from households for very-high-speed broadband. By 2022, it plans to have 20 million premises marketed nationwide in France. As well as laying fibre in urban areas, Bouygues Telecom will participate in Public Initiative Networks<sup>c</sup> (PINs). agreements sealing the arrival of Bouygues Telecom on the PINs of Axione, Covage, Altitude and TDF have already been signed.

(a) Europe's largest international calls for tenders in the field of urban planning

(b) Thermal renovation aiming for a passive energy score

<sup>(</sup>c) Fibre-optic networks rolled out by infrastructure operators in partnership with local authorities

The presence of the Group's activities in a given place helps to develop and sustain employment. Its business segments, whether in France or elsewhere, use local labour as a priority and encourage the development of local subcontractors. Colas has a positive impact on employment and regional development where it operates, through its workforce of 55,000 employees and network of long-standing local units. As customer proximity is a priority, jobs cannot be relocated abroad.

### France

The Group's companies span the entire country.

Bouygues Construction generates 48% of sales in France, where it has over 20,000 employees. Its operations span the entire country and range from building and civil works to energy and services (e.g. maintenance), concessions and more besides. Bouygues Immobilier operates 34 sites<sup>a</sup> in France. Bouygues Telecom is also represented throughout France by its six directly-owned customer relations centres and the 500 Club Bouygues Telecom stores. This places the Group at the heart of the regional economy and promotes local recruitment.

### The Group's business segments are drivers of occupational integration



In France, public procurement contracts include occupational integration clauses. To apply these criteria as effectively as possible, so that people remain in employment for the long term, Bouygues Construction and Colas forge partnerships with local and national specialised organisations.

In 2017, Bouygues Construction set out an ambitious policy for employment and occupational integration in which it made three commitments: a job and occupational integration initiative for each worksite; a job and occupational integration initiative per year on each of its long-standing sites; and a training initiative on each major worksite subject to an occupational integration clause. The first two commitments in this policy must be met by all worksites<sup>b</sup>. Having this policy gives actions a more qualitative dimension, especially as regards initiatives to help job-seekers and secondary school students in priority education networks.

On the La Gloire worksite (Toulouse), Bouygues Entreprises France-Europe has pledged to devote 10,000 hours to occupational integration. For example, the company has introduced a pre-qualification course, followed by a contract, for about a dozen people. The training focuses on technical knowledge and general knowledge of the construction industry, site safety (with certified training courses) and work rules. The course also contained a training module on appropriate behaviour on worksites.

Colas partners with CNCE-GEIQ<sup>c</sup> to combat discrimination in access to employment via actions applied locally.

Finally, the TF1 corporate foundation focuses on diversity and helping young people find employment by recruiting, each year, young people between the ages of 18 and 30 from underprivileged areas through a competitive process. Candidates are selected by a panel of industry experts and offered a two-year work/study contract with the TF1 group of companies, leading to a recognised professional qualification. Once in place, they are supported by a mentor and a sponsor, who introduce the students to colleagues and teach the students about the unwritten rules of the workplace. The programme covers over 25 different occupations connected with journalism, audiovisual production and support services. The tenth annual intake for this programme took place in September 2017.

After two voluntary redundancy plans, Bouygues Telecom has made a pledge to the French government that it will work to support employment in vulnerable areas. This has involved the signing of two national regeneration agreements. Bouygues Telecom, together with HEC Paris and BPI group, has created the University of Excellence, the first training opportunity in France dedicated to managers of sheltered workshops and disability-friendly companies. The programme aims to train these managers in purchasing best practices as a means of boosting results. It consists of three modules, one of which is dispensed by Bouygues Telecom employees. As a result of the programme, sales have increased by 34% over the past three years and more than 430 employees have been hired. The initiative was recognised by the annual purchasing awards, in the Sustainable and Responsible Purchasing category.

(a) Excluding permanent and temporary sales offices

(b) Including those not subject to an occupational integration clause

(c) French national committee for coordinating and evaluating groups of employers that promote occupational integration and vocational training

### **Bouygues Construction**

| Indicator   | Scope<br>(activity or region) | Coverage  | 2017      | 2016      | Remarks   |
|---|-------------------------------|---|-----------|-----------|---|
| Number of<br>hours devoted<br>to occupational<br>integration and the<br>corresponding FTE <sup>a</sup><br>equivalent (France) | France                        | 48%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 1,144,437 | 1,129,090 | Bouygues Construction remains firmly committed<br>to occupational integration and formally spelt out<br>this undertaking in 2017 to enable tangible actions<br>in all locations, above and beyond its contractual<br>obligations.             |
| Sales generated by<br>subcontracting to<br>local companies <sup>b</sup><br>%  | Global                        | 95%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 92%       | 75%       | Bouygues Construction works with customers to<br>maximise the value created by its operations in<br>the regions where they are located. This indicator<br>underlines the strong grassroots presence of<br>Bouygues Construction's activities. |

(a) Full-time equivalent

(b) "Local" denotes sourcing from the same region in France, but national sourcing in international operations

### International

The Group endeavours to source site workers and supervisory employees locally. This provides positive results in terms of direct and indirect employment, fosters the transfer of expertise and supports local communities.

For example, as part of the project for redeveloping Iqaluit international airport (handed over in August 2017) in the territory of Nunavut, the Arctic Infrastructure Partners consortium (of which Bouygues Building Canada and Colas Canada are a part) implemented a specific scheme for local Inuit populations. Contractual obligations in regard to hiring, subcontracting and training were defined for the benefit of the local Inuit community. Two major ventures were defined. First, the company works with the government, local Inuit organisations, and training and recruitment bodies to ensure that contractual obligations are met. Second, emphasis is placed on integration, through campaigns that raise awareness of Inuit culture, cross-cultural

training, and the organisation of and presence at cultural events. Team support is considered pivotal for the project to succeed both now and in the long term.

Colas Canada has taken steps since 2012 to integrate members of the First Nations<sup>a</sup> within its works teams. A nationwide approach is currently being drawn up. For example, this may include setting up partnerships on common themes, establishing training programmes (literacy, efforts to combat addiction, etc.) and prioritising the hiring of indigenous populations.

In the Philippines, VSL, a Bouygues Construction subsidiary, joined the Youth Inclusion Network, a network of companies committed to fostering the occupational integration of underprivileged young people as a means of fighting social exclusion. VSL is active both in the field and in the governance of this NGO, whose members offer special internships and help find work for these young people.

# 3.4.2 Relations with people and organisations affected by the company's business activity

### 3.4.2.1 Dialogue with stakeholders

At Bouygues, dialogue with stakeholders is conducted at three levels: group, business segment and at the local level.

The Group dialogues with stakeholders, including extra-financial ratings agencies, the investor community, trade unions, government departments and NGOs in an effort to take their expectations even more into account.

Each business segment maps out its respective stakeholders and liaises with them regularly on their own specific issues to identify areas for improvement and the associated relevant actions. For example, in 2017, TF1 posted an online questionnaire for external stakeholders to help it prioritise CSR issues.

## Being attentive to customers and satisfying them are at the forefront of concerns

The business segments place satisfying and listening to customers at the forefront of their concerns. Measuring customer satisfaction is a basic requirement of ISO 9001 (quality management system). Bouygues Construction and Bouygues Immobilier encourage customer surveys to be carried out at the end of each commercial phase.

In order for customer needs to be better identified and taken into account in product design, Bouygues Construction, for example, has carried out collaborative analysis on the subject of seniors living safely and independently in their own homes. Its aim is to obtain input from older people in order to design and build housing that will meet their needs, through a multi-disciplinary working group made up of landlords, sociologists, occupational therapists, home help providers and company employees. Bouygues Construction posted a summary of the proposals on its website. The findings of this analysis will serve as a foundation for designing scalable accommodation and tailored services for the Eureka Confluence econeighbourhood in Lyon, a prize-winning sustainable-city demonstrator.

### Customer Committee: when Bouygues Telecom involves customers in designing new offers

Since 2014, Bouygues Telecom has given customers the opportunity to help enhance its offers and services by giving them a say through the Customer Committee.

This 20-strong team – the only one of its kind in the telecoms sector – is tasked with helping Bouygues Telecom's employees improve the customer experience by devising new products and services and putting forward new ideas. This dovetails with the company's determination to place customer satisfaction at the forefront of its concerns. Bouygues Telecom asks them for their opinion on many different issues, such as the overhaul of the customer area on the website, parental controls on the Bbox home gateway, and the layout and clarity of bills. Each year, the Customer Committee is asked to choose – from among the 30 NGO projects selected by the Bouygues Telecom Corporate Foundation – its 10 favourites, which then receive technical and financial support from the company.

Several events were again held this year, such as the Customer Committee's meeting at the Bordeaux site, one of Bouygues Telecom's six directly owned customer relations locations, which provided an opportunity to find out more about the customer management process and meet customer relations advisers.

After two years in existence, the Customer Committee has quantified the results of its dialogue: 842 posts were published on the private forum together with 9,640 comments, and three meetings took place with the executive committee and its chairman.

At TF1, the news mediator receives opinions, queries and complaints from the public on news issues via the Viewer Relations section on the TF1 and LCI websites (www.lci.fr/la-mediatrice-vous-repond). The news mediator provides explanations about how television news is produced and the rules by which it must abide. This person also notifies the newsrooms whenever several similar opinions are voiced by viewers.

### Permanently in touch through social media

External social media are an excellent channel for exchanging ideas with stakeholders. Besides TF1, several of the Group's entities run blogs discussing current and future trends on which users can comment: www.bouyguesdd. com, blog.bouygues-construction.com, www.demainlaville.com, www.blog-groupecolas.com.

Each of Bouygues Immobilier's flagship projects is accompanied by comprehensive online content, posted on a dedicated website or on social media, for the purposes of informing and exchanging information with project stakeholders.

Through its "Les Experts' community composed of 250 in-house volunteers, who are on hand to deal with highly technical questions, Bouygues Telecom supports customers in their digital lives through social media (such as Facebook and Twitter) as well as through its help forum, which has close to one million monthly visitors.

Close, high-quality relations with its audience is a priority for TF1, which keeps permanently in touch with viewers through social media and the TF1&vous page. Audiences can interact about shows and presenters at any time. In 2017, TF1 community managers' exchanged with internet users representing over

64 million accounts (followers of specific shows or of hosts, as well as of corporate accounts).

Lastly, the mobile apps developed for residents of Bouygues-designed eco-neighbourhoods aim to improve communication with managers, local authorities and developers, as well as with retailers present in the neighbourhood.

## Consultation exercises with local authorities and local dialogue

At the local level, procedures have been introduced to promote grassroots dialogue between site and worksite managers and local residents, as well as to foster public acceptance of the Group's construction businesses (Bouygues Construction, Bouygues Immobilier and Colas).

Acceptance of production sites by local residents is becoming an increasingly sensitive issue for Colas worldwide. Issues include concerns of nuisances (odours, dust, traffic, noise) and risks of environmental or health impacts. Colas has identified community acceptance as one of its CSR priorities and has initiated action plans focused on two areas:

- exemplary production sites each site must implement progress measures that go beyond mere compliance with administrative or regulatory requirements;
- regular dialogue with local residents, elected representatives and the relevant authorities – maintaining an open dialogue with local communities makes it possible to better understand their expectations, explain the reality and constraints of production sites, and promote mutual understanding to prevent crisis situations.

### Colas

| Indicator   | Scope<br>(activity or region) | Coverage  | 2017 | 2016 | Remarks  |
|---|-------------------------------|---|------|------|--|
| Materials production<br>sites working to<br>promote dialogue with<br>local communities <sup>a</sup><br>% of sales before inter-<br>company eliminations | Global                        | 100%<br>of sales<br>(before<br>eliminations)<br>generated<br>by materials<br>production<br>activities | 47%  | 40%  | In 2017, the seven-point rise in this indicator was due<br>partly to the action plan initiated early in the year. The<br>sharpest increases were observed in Northern Europe,<br>Central Europe, Oceania and the US. |

(a) Activities that can justify (through a specific report) during the reporting period that they have genuinely interacted with local residents, elected representatives and government through meetings and proper responses to complaints. Supporting documentation must be kept on file.

Within the scope of their operations, Bouygues Construction and Bouygues Immobilier also implement initiatives promoting dialogue with local residents. For example, in the Eole Evangile project (in Paris), involving the reconversion of a former brownfield site into a 30,000 m<sup>2</sup> eco-neighbourhood, Linkcity Île-de-France teamed up with local non-profit organisations to inform residents about the site's transformation and obtain their opinions about the development. In addition, the Group's companies work directly with local authorities for urban development projects (e.g. through Bouygues Immobilier's UrbanEra<sup>\*</sup> initiative).

In 2017, Bouygues Construction also launched LinkCity.Play, a Serious game<sup>a</sup>, in order to involve stakeholders in its sustainable neighbourhood projects. LinkCity.Play can also be used to conduct workshops with users and local residents to enhance participatory initiatives.

As a signatory to the Operator-Municipality Guidelines (GROC), Bouygues Telecom has since 2006 committed itself to strengthening dialogue with local elected representatives and dealing transparently with local residents whenever installing antenna in a given area. Besides complying with urban regulatory requirements, Bouygues Telecom also provided an information pack for local municipalities (which outlines the project and its purpose), which can be consulted by local residents. It did this even though not all the provisions of the law of 9 February 2015 on information and consultation obligations regarding exposure to electromagnetic waves (known as the Abeille law) had come into effect. Electromagnetic-field forecasts for the planned equipment are conducted at the behest of local municipalities. The Waves and health page on Bouygues Telecom's corporate website (in French) is devoted to this topic.

In 2017, after publication of the decrees enacting the Abeille law, Bouygues Telecom revised and expanded its municipality information pack as well as its exposure simulation (to bring it into line with indications issued by the ANFR, the French Agency for Frequencies Management). Bouygues Telecom also revised its methodology for calculating exposure to incorporate the national ANFR guidelines under the Abeille law.

### 3.4.2.2 Patronage and partnerships

Patronage policy is implemented at Bouygues group level, within business segments and through community initiatives. The Group is active worldwide and contributes to local life wherever it operates.

The three main areas of sponsorship policy at parent company level (Bouygues SA) are community and social projects, education, and culture. The company helps and supports all kinds of initiatives, small-scale or otherwise, giving priority to long-term actions. It pays particular attention to projects sponsored by Group employees.

Each of the Group's five business segments also carries out its own patronage initiatives through their own corporate foundations.

### The Francis Bouygues Corporate Foundation supports deserving students



In the educational arena, the Francis Bouygues Foundation helps motivated and deserving school-leavers from low-income families so that they can pursue long-term studies and fulfil their ambitious career goals. In the past 13 years, it has awarded grants to 729 young students (of 36 different nationalities), 334 of which have now graduated. In addition to this financial assistance (ranging from  $\leq 1,500$  to  $\leq 10,000$  annually), each grant-holder is supported by a mentor working on a voluntary basis, chosen from among Bouygues group employees (active or retired) or former Foundation grant-holders who have graduated and found employment. The Foundation has pledged to continue supporting equal opportunities through this channel until 2025, with the

possibility of extending its commitment.

### Total spending on patronage and sponsorship by the Bouygues group

| € thousands   | The Francis<br>Bouygues<br>Foundation | Bouygues SA | Bouygues<br>Construction | Bouygues<br>Immobilier | Colas | TF1 ª  | Bouygues<br>Telecom | 2017<br>Group<br>total | 2016<br>Group<br>total |
|---|---------------------------------------|-------------|--------------------------|------------------------|-------|--------|---------------------|------------------------|------------------------|
| Total cash spending<br>on patronage and<br>sponsorship    | 1,190                                 | 2,512       | 3,376                    | 1,838                  | 5,500 | 3,648  | 555                 | 18,619                 | 20,184                 |
| Total spending in kind<br>on patronage and<br>sponsorship |                                       |             |                          |                        | 200   | 34,794 | 136                 | 35,130                 | 31,689                 |
| TOTAL   | 1,190                                 | 2,512       | 3,376                    | 1,838                  | 5,700 | 38,442 | 691                 | 53,749 <sup>b</sup>    | 51,873                 |

(a) Spending by TFI is calculated on a calendar-year basis; for the others, it is calculated on the 12-month rolling period from 1 October 2016 to 30 September 2017 (b) The total amount of patronage spending (cash or in kind) rose by 3% between 2016 and 2017, reflecting increased spending in kind by TFI in the form of free airtime

(+ 9%), and higher cash spending (+ 11%) that included the donation to Fondation Ecole Centrale Paris by Bouygues SA in 2017

(a) An app that combines the serious aspects (Serious) of instruction, learning, communication or information, with the fun aspects of video games (Game) – based on the definition of researcher Julian Alvarez

## Focusing on skills-patronage programmes and donations in kind

Whenever possible, the Group's business segments give tangible expression to their societal commitment by volunteering their knowledge and expertise.

TF1 donates airtime to a broad variety of causes and charitable organisations. Les Pièces Jaunes, Les Restos du Cœur, Sidaction, ELA (leukodystrophy research) and the Laurette Fugain charity (leukaemia research) are some of the beneficiaries receiving regular large-scale support. The TF1 TV channel provides charitable organisations with direct assistance while helping them gain in profile. This includes special prime-time operations, the production and free airing of TV spots as well as donations of game-show winnings and cash donations.

As part of its action to promote occupational integration and the training of young people from disadvantaged backgrounds, the TF1 corporate foundation welcomed its tenth intake from its annual recruitment competition, with 12 successful candidates joining TF1 on a two-year contract. Furthermore, in conjunction with the French Education Ministry, the foundation each year organises an inter-company internship scheme aimed at 14/15-year olds. Its purpose is to help pupils from disadvantaged areas see how companies work and to give them a glimpse of the careers that are on offer. Nearly 350 pupils were hosted by TF1 in 2017. Lastly, the foundation has for several years encouraged employees to take part in the anti-illiteracy programme, whereby help in reading and writing can be given to the employees of service providers.

Since the "For a Digital Republic" bill became law in 2016, Bouygues Telecom has offered mobile customers the opportunity to make charitable donations simply by sending a text message to the special short number allotted to the charity. The donation is then deducted from the customer's bill. Giving by text represents a new channel for charities to raise money and expand their donor bases.

### **Bouygues Construction**

|   | Scope                |   |      |      |   |
|---|----------------------|---|------|------|---|
| Indicator   | (activity or region) | Coverage  | 2017 | 2016 | Remarks   |
| Partnerships <sup>a</sup> during<br>the year supporting<br>integration, education<br>and health | Global               | 95%<br>of Bouygues<br>Construction's<br>consolidated<br>sales | 342  | 386  | Bouygues Construction affirmed its commitment to<br>civil society by maintaining the high amount allotted<br>to patronage, in spite of a small drop in the number of<br>partnerships in 2017. |

(a) A partnership contract, a long-term commitment to a charity, a one-time operation committing to minimum funding of €1,000

### Focusing on employee involvement

Several subsidiaries have made arrangements so that employees can take part in community action initiatives during their worktime.

For example, Bouygues Construction's corporate foundation, Terre Plurielle, supports employee-sponsored community action projects promoting access to education, employment and healthcare, through financing, skills patronage or both. In 2017, 203 projects from 25 countries were selected. Outside France, all long-term sites must carry out patronage initiatives in their local communities. In 2016, the foundation forged ties with the non-profit Entraide Scolaire Amicale, encouraging employees to give up their time to provide academic support to children from underprivileged backgrounds. In 2017, approximately 20 employees committed to providing regular support throughout the school year.

As part of its patronage policy, Bouygues Construction also helps rehabilitate schools and build housing in disaster-stricken areas. To help populations affected by Hurricane Irma, Bouygues Bâtiment International organised a collection amongst employees of Bouygues Construction.

Bouygues Travaux Publics is part of the "Job dans la Ville" programme, helping young people gain access to qualifications and employment. To help them enter the world of work, "Job dans la Ville" offers these young people the chance to visit companies and attend CV and cover-letter workshops as well as careers advice sessions. It also has a sponsorship programme and organises careers-related fact-finding trips in France and abroad. The company invests in this programme by holding site visits, recruiting from it and connecting young people with employees wanting to share their experience with these young people. Under the Colas Life programme, employees of the company have the possibility of supporting selected NGOs. Many employees have, through volunteering, donations and skills patronage, joined efforts to promote access to education, through the "On the Road to School" scheme.

The Bouygues Telecom Corporate Foundation has more than 1,050 volunteers from within the workforce. When they become charity volunteers, Bouygues Telecom employees can spend 14 hours of their worktime each year on patronage initiatives. The foundation, in addition, offers employees an opportunity to propose favourite charities of their own choice for patronage, in the context of a special call for projects. Since 2011, customers have also had the opportunity to put forward a charity or charities for patronage by means of an exclusive annual call for projects.

Bouygues Immobilier's Médiaterre and Solid'R schemes are also ways of involving employees (see section 3.3.1.3).

### Committed to urban planning and urban environments

The priorities of the Bouygues Immobilier Corporate Foundation are based around raising public awareness of architecture and urban planning, encouraging thinking among experts about the city of the future from a sustainable development standpoint, and promoting community action. Since 2007, it has partnered with La Cité de l'Architecture et du Patrimoine<sup>a</sup> in Paris. This partnership has been extended for a further three years until 2019. Its aim is to share thinking on matters such as the place of architecture in daily lives, urban construction and future land use.

<sup>(</sup>a) Bouygues Immobilier has retained its status as the exclusive founding partner of La Cité de l'Architecture et du Patrimoine in Paris, the largest architectural centre in the world (22,000 m<sup>2</sup>)

Bouygues Bâtiment International is also a sponsor of the Global Awards for Sustainable Architecture, organised by La Cité de l'Architecture et du Patrimoine, a commitment which it renewed in 2017. These prizes are awarded annually to five architects for innovation in sustainable development.

The Bouygues Immobilier Corporate Foundation supported the Réver(cités) exhibition for resilient and recyclable cities, which began at La Cité de l'Architecture et du Patrimoine in late 2016 before travelling around the country in 2017. This exhibition shines a spotlight on 30 innovative projects in sustainable urban planning, located in Europe, Canada, South America, Asia and South Africa. After three urban-themed exhibitions, the next will focus on social innovation.

The Bouygues Immobilier Corporate Foundation also supports l'Observatoire de la Ville, an urban think-tank through which it can exchange with all those who shape today's towns and cities.

### 3.4.2.3 Academic partnerships

The Bouygues group has set up partnerships with the academic world in an effort to meet major environmental and social challenges more effectively. For example, Bouygues SA alongside Alstom participates in the Advanced Master in Smart Cities Engineering and Management offered by École des Ponts ParisTech and EIVP<sup>a</sup>. To develop training programmes in sustainable construction techniques, the Bouygues group co-designed the specialist masters-level course in sustainable housing and construction alongside

ENSAM<sup>b</sup> and ESTP<sup>c</sup>. Bouygues Telecom and TF1 have run Open Innovation initiatives (such as hackathons and student project support) in the context of "Le Spot Bouygues" at Epitech (École de l'Innovation et de l'Expertise Informatique), where 120 m<sup>2</sup> of space is dedicated to students working on some of the Group's innovative projects.

Bouygues Construction is working on high-potential areas of innovation in conjunction with the universities of Cergy-Pontoise (mobility) and Aachen (asbestos-removing robots), Zurich ETH, NTU in Singapore (robotics), École Centrale de Lille (3D concrete printing) and Stanford University (BIM). In 2018, Bouygues Construction will forge new academic partnerships with several universities, in France and abroad (École Centrale de Lille, Munich Technische Universität, University of Texas at Austin and Université de Sherbrooke, Canada) to establish a Chair in Construction 4.0 and the Worksite of the Future.

Colas has forged academic partnerships with universities and other higher education establishments (e.g. University of Birmingham and of Alberta in Canada, the École Centrale engineering school in France) and scientific and R&D bodies and companies (Ineris<sup>d</sup>, the CEA <sup>e</sup> and ChemSud).

Bouygues Immobilier, through its support of L'Observatoire de la Ville, has forged partnership ties with the urban-planning department of l'Institut d'Études Politiques in Paris, l'École des Ponts ParisTech, l'École du Design de Nantes Atlantique and Nantes University. Bouygues Telecom also supports Webschool Factory, a digital innovation cluster located in Paris.

For additional information, see section 1.1.4 Bouygues and Innovation.

### 3.4.3 Partners, suppliers and subcontractors

Bouygues' overall performance is intrinsically linked to that of its suppliers and subcontractors. The selection of innovative products and services in technological, environmental and societal terms is essential to be able to offer the most high-performance and responsible solutions. The implementation of a CSR policy to Group purchasing is one of the conditions required for promoting this partnership mindset and developing joint value creation for its customers. Lastly, Open Innovation policy at Bouygues can also be seen through its programme supporting start-ups.

## 3.4.3.1 Integrating CSR criteria into the purchasing policy

For a number of years, Bouygues has undertaken to comply with the Corporate Social Responsibility (CSR) principles defined in the UN Global Compact, and to integrate them into the purchasing processes of its subsidiaries both in France and abroad.

In 2017, under the terms of the new due diligence law in France, the Group established its first monitoring plan for suppliers and subcontractors setting out the measures taken by its subsidiaries to prevent and mitigate the main risks identified in the areas of human rights, personal and environmental health and safety and detailing how these measures are monitored (see chapter 4, "Risk factors", section 4.5). This policy embodies the Group's requirements as defined in the CSR Charter for suppliers and subcontractors, which is systematically appended to purchasing contracts.

Over 2017, the Group's business segments made further progress in implementing their responsible purchasing policies. The purchasing departments of the Group's business segments are key to implementing these policies, which have two main components: assessment of subcontractors and suppliers, and careful selection of products and materials for their operations.

### Assessment of subcontractors and suppliers

Bouygues Telecom, Bouygues Construction, Bouygues Immobilier and TF1 use external assessments to evaluate and monitor the social and environmental performance of their suppliers and subcontractors. All business segments conduct supplier CSR audits. In late 2016, for example, Bouygues Construction signed a framework contract with SGS for the latter to carry out supplier CSR audits for countries and sourcing categories classified as high risk. Some audits were conducted in 2017 but most are planned for 2018.

Colas' responsible purchasing approach is designed to be cautious, gradual and targeted, considering its large number of suppliers, service providers and subcontractors as well as the decentralisation of purchasing decisions to subsidiaries. In 2017, several initiatives were launched, such as the implementation of an ethical charter and specific training to raise awareness among buyers about legal risks and corporate social responsibility.

Bouygues Immobilier assesses all suppliers and subcontractors using a framework contract based on the EcoVadis platform. Since 2017, small, medium-sized and micro businesses have been assessed using a digital

<sup>(</sup>a) École d'ingénieurs de la Ville de Paris

<sup>(</sup>b) Arts et Métiers ParisTech

<sup>(</sup>c) École Spéciale des Travaux Publics, du Bâtiment et de l'Industrie

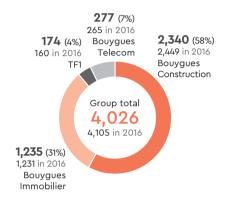
<sup>(</sup>d) French environmental safety institute

<sup>(</sup>e) The French Alternative Energies and Atomic Energy Commission

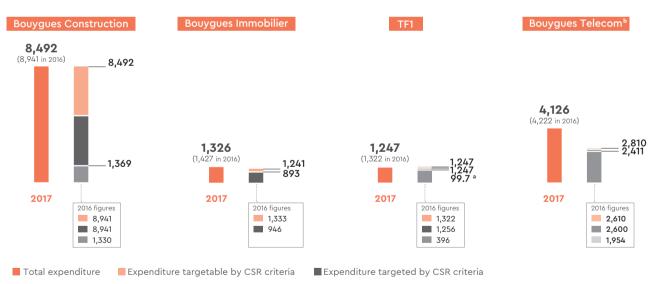
platform to improve monitoring of CSR performance. The company wants all of its suppliers assessed using this platform by 2020.

At Bouygues Telecom, CSR risk mapping by purchasing category (updated in 2017) is the starting point of the supplier assessment policy. The company conducts audits for major suppliers and on-site audits for suppliers<sup>a</sup> of high-risk purchasing categories. This includes verifying the manufacturing conditions for Bouygues Telecom-branded home gateways. In 2017, under the terms of the new due diligence law in France, Bouygues Telecom defined a vigilance plan for suppliers in the highest-risk purchasing categories based on its CSR risk mapping. Information is consolidated within the Bouygues SA vigilance plan, detailed in chapter 4, Risk factors, in this Registration Document. An auxiliary action plan was drawn up to assess supplier risk management CSR performance.

## Number of suppliers and/or subcontractors that underwent a CSR assessment over the past three years



Share of business segment expenditure targeted by CSR criteria or covered by CSR assessments  ${\ensuremath{\varepsilon}}$  millions



Expenditure covered by CSR assessments

(a) The sharp decline in the amount covered by assessments was due to the cessation of EcoVadis assessment tests on suppliers of audiovisual rights, which turned out to be of little relevance to the activity

(b) Concerning Bouygues Telecom, "Total expenditure" is calculated on the basis of invoiced expenditure. The indicators measuring "targetable expenditure" and "targeted expenditure" are calculated on the basis of expenses incurred

(a) There were ten such suppliers in 2017

The Group indicators provide a snapshot, based on the overall scope of expenditure, of the proportion that is potentially targetable by CSR criteria and that which is actually covered.

Some types of expenditure (e.g. expenditure relating to rental guarantees, notary fees and financial expense) are labelled as "non-targetable" because CSR requirements cannot be realistically attributed to them.

Furthermore, a distinction is drawn between expenditure that is covered by CSR criteria and expenditure that is covered by CSR assessments, the latter being more ambitious. On the one hand, CSR criteria include all types of possible action, such as expenditure that is covered by a responsible purchasing policy, contracts with a CSR charter or clause, and suppliers selected with help from CSR criteria and/or having undergone a CSR assessment or audit over the past three years. On the other, the "Expenditure covered by CSR assessments" indicator can be used to assess the initiatives that involve suppliers the most (solely using questionnaires and internal/external CSR audits), thereby potentially giving rise to improvement plans.

### Selecting responsibly sourced products and materials

The Bouygues group's business segments are also developing policies for sourcing more responsibly sourced products and materials, based on a risk analysis of various purchasing categories.

For example, Bouygues Construction's commitment to responsible purchasing of all-important timber is reflected in its measures to combat the illegal timber trade, identify and eliminate all sourcing of threatened wood-based products, and increase the proportion of eco-certified timber purchases. This policy is enacted as part of its partnership agreement with the WWF, which was renewed for three years in 2017. Since 2014, Colas has won several awards for its new work clothes made in accordance with fair trade principles. In 2017, several types of action were taken such as improving existing models through feedback from users, creating a workwear line especially for women and continuing to apply procedures outside France.

Bouygues Immobilier, as part of its drive to improve air quality in its buildings and reduce pollutants responsible for VOCs (volatile organic compounds), only selects those products whose health labelling is A+. Labelling has been mandatory since 2012. This concerns materials and products, listed in nationwide catalogues, in direct contact with indoor air.

## Use of the sheltered-workshop and disability-friendly sector

The use of companies in the sheltered sector, coupled with an effort to broaden the range of activities outsourced to these workshops, is a key part of the Group's responsible purchasing policy (see section 3.2.3.3).

### **Responsible purchasing**

Lastly, the Group's business segments uphold responsible purchasing principles in accordance with the pledges set forth in the Bouygues "Conflicts of interest" compliance programme. This commitment is also enshrined and promoted in codes of ethical conduct followed by buyers at Bouygues Construction, Bouygues Telecom, TF1 and Colas<sup>a</sup>, and by Bouygues Construction's conclusion of a charter for major accounts and SMEs as well as the SME Charter.

Bouygues group's worker health & safety requirements at its locations apply equally to employees, subcontractors and suppliers (see section 3.2.4).

In late December 2017, TF1 reapplied for the Responsible Supplier Relations label which it had been awarded in January 2014.

### 3.4.3.2 Supporting start-ups and SMEs

In the belief that open innovation between start-ups, SMEs and large firms can yield benefits, Bouygues began a group-wide initiative in this area in 2015  $^{\rm b}.$ 

- Each business segment is required to coordinate the initiative within its own scope and therefore set up an organisation capable of conducting codevelopment projects with start-ups. A cross-disciplinary structure with an allotted fixed annual budget overseeing and managing investments in startups has also been created. This unit is called Bouygues Développement and, as part of the Group's parent company, is responsible for selecting start-ups in search of seed money and providing innovation related to the operational topics identified by the business segments. A Group Open Innovation committee oversees the whole process and ensures that best practices are shared between the business segments.
- As part of its innovation drive, which draws on over 100 partnerships (with companies, universities, start-ups and NGOs), Bouygues Construction in 2015 founded Construction Venture, a fund investing in and supporting start-ups over a five-year period. So far, Construction Venture has invested in five start-ups.
- The Innovation Unit at Colas has partnered with RB3D, a cobotics (collaborative robotics) specialist, to develop exo push, a cobot designed to help site workers with the manual application of asphalt mixes. Other deals have been sealed with start-ups in energy and in the development of innovative solutions for local authorities.
- In 2015, Bouygues Immobilier founded Bird (Bouygues Immobilier R&D), a subsidiary investing in start-ups focused on the property development sector. Bird has set itself the target of supporting 50 start-ups out to 2020. This can include investment, and so far it has invested in six start-ups. Additionally, Bouygues Immobilier, through its Lyon regional branch, partners with Tuba, a project run by the Lyon Urban Data public-private consortium.
- TF1, which sees digital technologies as key to its business development, has initiated a partnership policy with the start-up ecosystem through the creation of One Innovation, a private equity fund with an initial budget of €2 million. Its aim is to provide financial support to between five and ten start-ups before their first or second rounds of fund-raising.
- This arrangement is a useful addition to the existing incubator scheme initiated in tandem with Paris&Co. The Municipality of Paris' innovation agency and TF1 have also joined forces to create an incubator. In addition,

TF1 has developed a Media for Equity strategy, whereby advertising slots are exchanged for equity stakes, thus enabling more mature start-ups with a mainstream slant to gain TV exposure.

 Bouygues Telecom has supported open innovation since 2009. Since its launch, the Bouygues Telecom Initiatives (BTI) start-up accelerator has examined 1,650 projects, conducted 60 co-development projects between a sponsoring operational division within Bouygues Telecom and a fledgling tech start-up, and acquired ten equity stakes (with four of these companies conducting two or more successive funding rounds). In 2017, Bouygues Telecom Initiatives launched trials with MyJobGlasses (an app offering students the possibility of meeting business people for free), Bloomr (a careers advisory scheme) and Wheeliz (a C-to-C

### 3.4.4 Responsible practices

## 3.4.4.1 Ethics and initiatives in place to guard against corruption

The Sapin 2 law of 9 December 2016 requires that senior executives of large companies take measures to prevent and detect acts of corruption and influence peddling, in both France and abroad.

The Group's Code of Ethics, disseminated since 2006, was updated in 2017 to take account of the provisions of the Sapin 2 law. It states that the Group's activity, especially the negotiation and performance of contracts, whether in the private or public sector, must not give rise to corruption, influence peddling or similar offences. It sets out the resulting obligations and responsibilities.

### Code of conduct

The Group Anti-Corruption compliance programme, adopted in 2014, was updated in 2017 to factor in the provisions of the Sapin 2 law relating to the prevention of corruption. It corresponds to the code of conduct covered by article 17, paragraph II, point 1, of the law. The programme has been integrated into the internal regulations of the company and its subsidiaries. Any failure to uphold its provisions may lead to disciplinary action.

It is prefaced by the Bouygues Chairman and CEO. The document clearly states the Group's zero-tolerance stance on corruption and its position as to the duty of understanding and care that everyone must exercise, along with the resulting responsibilities – especially for senior executives.

It also lays down the measures relating to information, training and prevention, together with the monitoring and sanctions that must carried out within each business segment. Furthermore, it summarises the appropriate legislation in force and devotes specific sections to Group rules and recommendations applicable to various practices that are prone to a risk of corruption, namely gifts and services, the financing of political parties, patronage, sponsorship, use of business intermediaries and lobbying.

The Group Ethics Officer within each business segment appoints an officer responsible for implementing the Group Anti-Corruption compliance programme.

At **Colas,** the Head of Compliance, who reports to the Chairman and CEO, is responsible for overseeing the operational deployment of compliance programmes at its various entities. This person is backed up by a network

rental solution for disabled person's vehicles). Bouygues Telecom has also invested in EkWateur, an independent alternative energy provider marketing renewable energy to households.

In 2017, the Bouygues and TF1 groups sponsored Viva Technology, the global event for high-tech innovation and start-ups, held in Paris on 15–17 June. The Group's business segments hosted at their stands and promoted over 20 partner start-ups, with many taking part in the challenge competition based on the theme of civic techs (community consultation apps). MadelnVote, the start-up that won the challenge, was given the opportunity to collaborate in the sustainable-city demonstrator, Eureka Confluence, with the Group. TF1, the official media partner of the event, set up a lab alongside around 30 innovative start-ups operating in e-sport, virtual reality and news.

of compliance officers appointed in each significant entity around the world where Colas is present.

The compliance programme, which is communicated within business lines and to business partners, is intended to be accessible to any employee in electronic format.

At **Colas,** mirroring efforts at other Group business segments, several instructions were introduced in 2017. In particular:

- an instruction concerning the benchmark thresholds and values for thirdparty gifts and invitations applicable to all Colas entities;
- an instruction on sponsorship and patronage initiatives and a procedure for authorising significant operations in excess of €20,000;
- an instruction on business intermediaries outlining, in addition to the Anti-Corruption compliance programme and the internal control repository, the mandatory authorisation process prior to use of an intermediary.

A model position statement by senior executives at Colas, pledging to abide by and promote the code of ethics and compliance programmes, was agreed by Executive general management. By the end of December 2017, 98% of the Colas group's senior executives and business unit managers had signed up to this undertaking.

**Bouygues Telecom**'s approach to business ethics aims to help employees in their everyday activity and to prevent the risk of non-ethical practices, such as corruption, via a business ethics guide (accessible to all employees).

### Prevention

The Group's Anti-Corruption compliance programme specifies that all senior executives who have operational responsibility for a Group entity (subsidiary, branch, division, etc.) must implement appropriate corruption prevention and detection measures and ensure that these measures have been effectively applied. They are supported in this by the compliance officer and the ethics committee of the business segment.

Briefly, the following prevention measures are provided for by this compliance programme:

• Legal departments will implement training and preventive actions in the area of best business practices; they must have solid expertise in anticorruption regulations; they can call on the services of criminal lawyers who have been selected by the compliance officer.

- The Group has strict financial and accounting procedures in place, designed and implemented by the Group's entities and aimed at mitigating the Group's exposure to risk, particularly by preventing the use of payment systems for fraudulent or corrupt purposes.
- Delegations of authority to persons with responsibility for an entity, department or project, or to an individual who exercises a role within a sales or purchasing department, must clearly set out to those granted authorities their obligations to comply with anti-corruption laws.
- Group subsidiaries are recommended to include a clause in the employment contracts of employees responsible for a subsidiary, entity, project, sales function or purchasing department setting out their obligation to refrain from engaging in corrupt practices. Furthermore, each business segment must ensure that all entities within its scope of responsibility integrate the compliance programme into their internal regulations.
- Pursuant to the Sapin 2 law, each business segment draws up a risk map to identify, analyse and rank the risks of its entities' exposure to external solicitations of corruption. This risk map, which is updated annually, should factor in the business sectors and geographical areas in which the entities operate.
- In accordance with the Sapin 2 law, each business segment implements procedures to assess the situation of its customers, direct suppliers, consultants, intermediaries and, more generally, its partners based on the corruption risk map. As partners do not all have the same risks, the assessment should be adapted to a specific risk analysis. The business segment ethics officer, in liaison with the relevant line managers, must therefore ensure that all of the business segment's entities can run an assessment process before entering into a business relationship with a partner, as well as during the business relationship.
- In accordance with the terms and conditions determined by each business segment, with the support of the compliance officer, an audit of the business segment's compliance with applicable legislation and the compliance programme must be carried out at the inception of all major projects, when launching a new business activity or when opening an operation in a new country, particularly if that country does not have a good reputation in terms of corruption.
- During the due diligence process prior to acquiring a company, special attention should be paid to the target company's compliance with anticorruption regulations. General or specific warranties must be obtained from the vendor, unless otherwise specifically agreed, justified and supervised by the business segment's senior management, with the support of its ethics officer.

### Training

The Sapin 2 law highlights the need to implement training for senior executives and other employees with the highest exposure to risks of corruption and influence peddling.

The Group Anti-Corruption compliance programme states that senior executives and employees involved in obtaining and negotiating contracts or purchases for their company must be aware of and understand the broad outlines of the anti-corruption laws and the risks involved if breached. Each business segment must therefore design and implement training adapted to the corruption risks specific to their operations and the regions in which they are active, comprising the following:

- general training in compliance with anti-corruption rules, to be introduced by each Group entity in the training modules aimed at different categories of employees;
- a simple and condensed training module available as an e-learning resource over the intranet, in line with the business segment's training policy;
- specific, more in-depth training for senior executives, managers and employees most exposed to the risk of corruption and influence peddling, especially for those liable to be posted to sensitive countries. Thus, within one year of their appointment, employees who are given responsibility for a subsidiary or equivalent entity, or a sales function, or an assignment within a purchasing department, are required to attend an anti-corruption training course run by or validated by the compliance officer of the relevant business segment.

Each business segment also organises training courses tailored to the different levels of management. These transmit the Group's ethical principles and values in practical ways, addressing the specific issues and risks associated with the business segment's activity.

### **Bouygues Construction**

All existing training programmes for sales employees and future managers incorporate an ethics and compliance module. Following on from initiatives undertaken since 2011, the special ethics and compliance training plan has been implemented within each Bouygues Construction entity through training modules targeting specific categories of employees. In addition, an ethics component has been added to training programmes for young and experienced managers viewed as high potential, as well as to the legal training taken by buyers that have been in their posts for less than a year. Altogether, there are more than 50 training modules relating to business ethics and compliance.



In order to expand and improve training performance, a specific e-learning module called "Fair Deal" was launched in December 2015 for 30,000 employees in France and abroad. The "Fair Deal" training programme is available in four different languages. Employees are shown real-life

situations whose themes are corruption, anti-competitive practices, gifts and invitations, as well as patronage and corporate sponsorship actions. In 2016, 12,107 employees had been asked to take part in the Fair Deal training programme. In 2017, it was made available freely to all Bouygues Construction employees so that each person would be responsible for completing the programme at the time suiting them best. "Fair Deal" has also been merged into "In'Pulse", the Bouygues Construction's digital induction process, to make sure new employees are aware of ethics within three months of joining.

### **Bouygues Immobilier**

Bouygues Immobilier's training courses on ethics continued in 2017:

• The e-learning module on business ethics, taught since 2016, is accessible on the "BI Learn" training platform in the Induction and Collective Actions sections. This practical module comprises a number of actual situations that present an ethical risk. It is made available to all new recruits, across all French subsidiaries (mainly for middle managers and senior managers), as part of their induction process. In 2017, close to 50% of Bouygues Immobilier's headcount was trained, equating to 971 employees.

- The "Property development and Competition Law" training module, taught by the Legal department for the benefit of regional managers, branch managers, administration/control/finance managers and property developers, goes through the various stages of a property development and, for each one, describes the resources available for preventing and mitigating risks relating to anti-competitive practices, passive corruption, influence peddling, unlawful acquisitions of interests, favouritism, and corruption between private parties, etc. In 2017, 133 employees followed this module.
- A procedure for combating fraud was distributed to all Bouygues Immobilier employees in 2017, showing how to prevent and manage cases of fraud and how to report suspicions. The obligation to report suspicious fraudulent activity is also included in delegations of authority, and enshrined in the public commitment signed by executive committee members in which they undertake to comply with anti-corruption and competition-related programmes.
- Three quizzes are used during the BI Quest induction seminar to raise awareness about business ethics principles. In 2017, 186 employees followed this induction seminar.
- Bouygues Immobilier's intranet has an ethics section containing the latest ethical requirements.
- Bouygues Immobilier is also developing a second e-learning module. Relative to the first module, this new one will examine anti-fraud procedures and, more generally, look at the new requirements under the Sapin 2 and due diligence for parent companies laws.

#### Colas

In 2017, training campaigns continued and were stepped up:

The "Business ethics and responsibility" training module, including compliance programmes, continued in 2017 both in France and abroad. It was offered at all subsidiaries for senior and middle managers. This training systematically includes business ethics and the implementation of compliance programmes. Since the training was introduced in 2016, 2,989 employees have been trained, with special attention paid in 2017 to the international subsidiaries. The topic of ethics is regularly discussed at subsidiaries' executive management committee meetings, regional meetings and business unit managers' meetings.

The "Ethical and accountable leadership" training programme, delivered for the first time in 2016 to promote discussions about business ethics and the individual and collective accountability of leaders of the Colas group and its subsidiaries, also continued throughout 2017 in and outside France. This programme, designed for branch managers and directors – regardless of business line – of subsidiaries, was followed by 547 employees.

Colas subsidiaries in North America continued their roll-out of a specific communication and training programme on ethics.

 In the US, training sessions for managers and worksite supervisors were held on the topic of anti-competitive practices as well as on gifts and invitations given to third parties. In parallel, each subsidiary regularly holds local training sessions on ethics-related topics. The online ethics training programme also continued in 2017. As part of this programme, all employees of subsidiaries in the US who have an email address received a quarterly questionnaire on fraud, conflicts of interest, discrimination and behaviour at work. A total of 4,820 US employees were trained through these various courses.

• In Canada, ethics and compliance programme training was delivered to 400 employees in 2017 (685 in 2016). In addition, the overhaul of the Colas Canada intranet provided an opportunity to reiterate the obligations with regard to business intermediaries, corporate patronage and sponsorship, gifts and invitations.

The "Fair Play" e-learning ethics training, which takes the form of a Serious game <sup>a</sup>, was rolled out during the second half of 2017 across all the French subsidiaries. Of the 3,475 employees targeted through this campaign, 3,195 completed "Fair Play". Other "Fair Play" training sessions are scheduled for the international subsidiaries in early 2018.

### TF1

The "Guide to day-to-day ethical practices", which supplements the code of ethics with practical examples and recommendations, was posted to the group intranet site in 2017. The Anti-corruption compliance programme and the whistleblowing facility have been the subject of training and awareness-raising exercises since the time of their implementation. Details are also available on the TF1 intranet. TF1 is revising these rules to meet the recommendations of the French government's anti-corruption agency (AFA). Training will be adapted to take account of these adaptations.

### **Bouygues Telecom**

Training aimed at fighting corruption and influence peddling is given by a criminal lawyer to all employees designated by management as exposed to such risks through their jobs, e.g. purchasing and contract negotiations. The first session, which took place in October 2017, was attended by a total of 188 employees. Additionally, e-learning modules on these subjects will be introduced in 2018 to raise awareness among employees.

### **Group seminars**

Since the early 2000s, the Group has promoted key values such as business ethics, respect and responsibility through a range of seminars aimed at managers. The purpose of each seminar is to create space for dialogue and discussion in which each participant not only learns more about the Group's positions but also must take a personal stance and clarify their own convictions as a way of guiding their behaviour and management style. Since 2002, over 70 seminars have been held, organised by the Bouygues Management Institute (IMB), bringing together more than 1,000 employees from the business segments. The closing address each time has been given by a senior executive of the Bouygues group. In 2018, a new seminar on business ethics will be given to Group managers, starting with members of the subsidiaries' executive or management committees.

<sup>(</sup>a) An app that combines the serious aspects (Serious) of instruction, learning, communication or information, with the fun aspects of video games (Game) – based on the definition of researcher Julian Alvarez

### The corporate whistleblowing facility

The compliance programme states that senior executives or employees who are aware of a practice that might be considered as corrupt should inform their hierarchy and Legal department immediately.

Senior executives or employees may also use the corporate whistleblowing facility provided by the Group's Code of Ethics. This facility covers corrupt practices. It has been updated to include the provisions of the Sapin 2 law. In principle, the Ethics Officer of the relevant business segment is the designated recipient of the whistleblowing alert. This person is the "référent désigné" stipulated by the Sapin 2 law. Exceptionally, if the whistleblower believes the situation goes beyond the scope of the business segment, the whistleblowing alert may be sent directly to the Group Ethics Officer. The procedure to be used for raising, receiving and processing whistleblowing alerts is described in the Code of Ethics and in its appendix (entitled "Procedure and rules pertaining to the receipt and processing of whistleblowing alerts").

### Internal assessment

The Sapin 2 law requires companies to run internal assessments to evaluate the measures in place.

Combating corruption is a theme of the Group's Internal Control Reference Manual. A business segment may add specific provisions to this manual where necessary to make the compliance programme more effective.

Its effectiveness is monitored annually by means of a self-assessment of the internal control principles implemented in the business segments and their subsidiaries.

Should the self-assessment reveal deficiencies in the implementation of the compliance programme, an action plan will be drawn up and implemented promptly.

During their regular or ad hoc internal audit assignments, the audit departments, assisted by the compliance officers, may be periodically asked to check that operations comply with the principles of the compliance programme and the Group's and business segment's Internal Control Reference Manual. Where required, the conclusions of the internal audit report are disclosed to the business segment ethics committee.

External audit offices may be appointed by the Group or a business segment to detect any instances of corruption, especially when the Group or the business segment has reliable indications suggesting that there has been wrongdoing.

### **Disciplinary sanctions**

The Sapin 2 law requires that companies implement disciplinary sanctions that will apply to its employees in the event of a breach of the company's code of conduct.

The compliance programme stipulates that when a company discovers an incidence of corruption, it should verify the facts and consult the necessary internal and external advisers before taking any legal action such as filing a complaint with the legal authorities. Senior executives or employees who breach the provisions of the compliance programme or engage in bribery or corruption will be liable to punishment, which may include termination of their executive office, disciplinary action and dismissal, even if no legal action is taken. Senior executives and employees will be responsible for paying any fines and other financial sanctions imposed on them by a court.

### 3.4.4.2 Accessibility of offers and services

The Bouygues group's objective is to make its products and services accessible to the greatest number of people possible. Its media and telecoms businesses therefore focus on making their programmes and digital technology available to all.



One of the fundamental values underpinning Bouygues Telecom's market positioning is to make the benefits of digital technology accessible to as many people as possible. This commitment is particularly reflected in the provision of more generous mobile internet products and

services. For example, the operator has significantly boosted the data allowances included in its mobile plans. In January 2017, Bouygues Telecom also launched the 4G Box, which offers very-high-speed broadband in the home via the 4G mobile network for areas of the country where ADSL speeds are insufficient. This innovative solution has been taken up by several tens of thousands of customers since its launch.

In order to combat the digital divide in some parts of France, Bouygues Telecom, like the other operators, is taking part in programmes to cover "blind spots". It is also stepping up the roll-out of its mobile network in less dense areas (57% of the French population) thanks to the network sharing agreement concluded in 2014 with SFR. Furthermore, Bouygues Telecom is speeding up 4G roll-out nationwide, backed with a commitment to provide 4G coverage to 99% of the population by the end of 2018. At the end of 2017, the operator covered 95% of the French population with 4G, equating to nearly 63 million people. In the less dense areas, 4G coverage increased from 26% in July 2016 to 67% one year later, thus exceeding the statutory requirement of 40% coverage of the population by January 2017.

Since 2005, Bouygues Telecom has been working to help disabled people access electronic communications services. One way has been making customer services accessible to people with total or partial hearing loss. Another is the offer of free installation of speech recognition and magnification software for customers who have impaired vision. In 2015, the company observed that 97% of its stores were accessible to disabled people. In 2016, installation and user guides for the Bbox Miami TV box were made available in Braille.

The TFI main channel ensures that its programmes are accessible, especially to people with impaired hearing (subtitling or sign language) or vision (audio description). The theme channels operated by TF1 have gone beyond statutory requirements in their subtitling. TF1 has also signed the CSA's (French broadcasting authority) Charter on Subtitling Quality.

### 3.4.4.3 Security of personal data

The protection of personal data<sup>a</sup> has become an ever-pressing CSR issue for the Group's media and telecoms businesses since 2013. This issue has become even more important with the appearance of the European regulation (EU2016-679) entitled "General Data Protection Regulation" (GDPR), which will, from May 2018, apply to all companies collecting, processing and storing personal data whose use may directly or indirectly identify an individual. The purpose of this regulation is to increase the rights of individuals over their personal data.

(a) "Personal data means any information relating to a natural person who is or can be identified, directly or indirectly, by reference to an identification number or to one or more factors specific to them." Article 2 of French Data Protection law 78-17 of 6 January 1978 The sites and apps produced by e-TF1 comply with all the legal provisions laid out on the site of Cnil<sup>a</sup> (see following link cnil.fr/). e-TF1 cooperates closely with Cnil when declaring new processing of personal data or updating existing personal data. The privacy policy governing users' personal data can be consulted on all digital assets and must be agreed to when registering for services. Concerning recommendations relative to cookies and other tracking files covered by Article 32-II of the law of 6 January 1978 (*"la Déliberation"*), e-TF1 regularly checks – chiefly through cookie audits – those files placed during visits to the electronic communication services published by e-TF1 (standard and mobile websites, applications) to ensure that they are lawful.

Likewise, e-TF1 makes it clear in contracts signed with technological, publishing and advertising partners that regulations on the protection of user data must be respected. The web sites produced by e-TF1 now have a cookies policy. Furthermore, e-TF1 has introduced technical mechanisms that allow users to directly deactivate third party cookies. For more information, read TF1's 2017 registration document available at the following address: groupe-tf1.fr.

As a telecommunications operator Bouygues Telecom attaches great importance to the protection of the personal data of its customers. In 2002, the company set up a dedicated unit responsible for applying the provisions of the French Data Protection Act, and particularly for the processing of the requests (from individuals or Cnil) that may be made within this framework. Furthermore, data governance has been introduced, comprising documentation of the processing of data, a classification of the data, the procedures to be applied, project validation committees and regular sessions to raise awareness amongst employees and subcontractors.

In 2017, Bouygues Telecom rounded out these arrangements with an inhouse charter called the "The ten principles of responsible Big Data" with covers in more detail the fundamental issue of mega data processing. This charter must be signed by all people concerned by this data processing.

Furthermore, since 2016, a special working group has been specifically dedicated to the new European regulation and aims to ensure the company's compliance with the provisions of the regulation. This working group is currently focusing on the new information that the European regulation will require Bouygues Telecom to make available to its customers.

Finally, since 2016 Bouygues Telecom's website has provided factsheets that advise customers on how to protect their data and their private lives (protection of passwords, management of confidential personal information on the internet or protection from web-borne viruses, etc.)

In 2017, Bouygues SA set up a working group of people from the IT and legal departments of all the Group's business segments to provide help to all subsidiaries in their preparations for the coming into force of the GDPR.

### 3.4.5 Product quality, safety and comfort

At the Bouygues group, respect for customers and users is a core value common to all its activities. This mindset is especially prominent in the commitments that it upholds for protecting the health and safety of users, as well as the requirement that it imposes on the quality and user comfort of its products.

## 3.4.5.1 Protecting consumer and user health and safety

### Air quality within buildings

Bouygues Construction and Bouygues Immobilier have been working for several years to improve the air quality of their buildings. They have begun measuring this and are striving to improve it through the use of suitable materials and more efficient ventilation systems that can be regulated in real time using sensors.

Bouygues Construction has conducted several campaigns and is designing solutions to lower the levels of primary pollutants.

Between 2014 and 2017, Bouygues Immobilier together with seven business partners ran the Inspir<sup>b</sup>, project, for managing and improving indoor air quality. The project applied the experimental methodology developed by Ademe (the French environment and energy management agency) to four pilot projects at various stages, from design to handover. The three years of trials not only tested the system but also helped enhance the methodology. Following this trial phase, the improvements in air quality will be applied to Bouygues Immobilier developments for the comfort of future occupants.

### **Electromagnetic fields**

Bouygues Telecom contributes through the Ifer<sup>c</sup> to the financing of electromagnetic-field measurement by companies certified by the French Accreditation Committee (Cofrac). This is carried out in accordance with new government rules on electromagnetic-field measurement, in force since January 2014. Findings can be consulted by visiting cartoradio.fr.

Additionally, Bouygues Telecom in 2017 contributed to the updated version of the French Telecoms Federation's brochure on mobile phones and health, which takes into account the Anses<sup>d</sup> recommendations on children's exposure to radiofrequencies. The new version is distributed to all new customers and to existing ones when they change their SIM card. Bouygues Telecom has also changed its trade practices for marketing handsets so that each mobile phone that is distributed meets the new European Radio Equipment Directive (RED).

Finally, Bouygues Telecom signed a new mobile telephone charter with the Municipality of Paris to define a single ceiling for radiofrequency exposure in Paris<sup>e</sup>.

(a) French Data Protection Authority

(b) This is part of the call for research proposals launched by Ademe under the heading "Responsible Buildings in 2020"

(c) Flat-rate tax on network businesses (Ifer)

(e) This is set at five volts per metre at a 900 MHz frequency in indoor living spaces

<sup>(</sup>d) French Agency for Food, Environmental and Occupational Health and Safety

### **Road safety**

Colas carries out R&D in several areas to meet road safety challenges, focusing on:

- producing a range of high-performance road surfaces that provide better tyre grip (textured and/or draining products to limit skidding in rainy weather);
- improving visibility (work on road markings in cold or wet weather and at night);
- manufacturing road safety equipment (by Aximum, its road safety and signalling subsidiary).

Additionally, Bouygues Construction has installed a full CCTV surveillance system for the Abidjan motorway and bridge (Ivory Coast). This covers a total stretch of eight kilometres. Incidents are detected automatically through real-time image analysis. For example, it can detect stoppages on the motorway and unusual behaviour by pedestrians.

Elsewhere, as part of the Dijon smart city project, Bouygues Energies & Services has developed a road-traffic regulation system that uses an immediate warning system so that the relevant municipal services can take immediate action.

Lastly, Objenious, Bouygues Telecom's dedicated Internet of Things subsidiary, in 2017 signed a contract with Sanef (Société des Autoroutes du Nord et de l'Est de la France) to monitor safety equipment on its motorway network (see box under section 3.3.4.2).

### 3.4.5.2 Product and service usage quality

Quality and user comfort are distinguishing features in the products and services marketed by the Bouygues group.

For example, the eco-neighbourhoods built by Bouygues Construction and developed by Bouygues Immobilier represent a huge stride forward in improving residents' quality of life, via the provision of convenience services, soft mobility, digital services, urban biodiversity, etc. To promote social cohesion, the Bouygues group has joined forces with start-up Smille to put in place neighbourhood networks that encourage interaction between residents through sharing, lending a helping hand or organising joint events.

For the structures that it builds, Bouygues Construction thinks ahead about every possible issue, employing user surveys to gauge the effectiveness of existing products and services.

For several years, Bouygues Construction has been studying the use value of the office buildings that it builds, with the aim of creating a system for estimating the impact of technical and functional solutions on occupant performance. A reference base developed in tandem with Goodwill Management studies the connection between a building and its occupants' motivation, mood, physical well-being, absenteeism and time lost in the building. A working group formed in 2016 by Gecina, Foncière des Régions, EDF, Sanofi, Bouygues Construction and Goodwill Management – joined by Sercib BNP Paribas, Bolloré Transports & Logistics, Engie, Ivanhoé Cambridge and Saint-Gobain in 2017 – has trialled the process by conducting field surveys in order to measure fluctuations in the individual performance of building occupants. The findings of this research highlighted the advantages of taking usage-quality criteria into account right from the design phase.

Bouygues Construction and Bouygues Immobilier both offer connected services to their residential customers. Bouygues Immobilier's Flexom, released in 2016, can be used to manage household features such as lighting, shutters or heating, either from inside the apartment or remotely, with a smartphone or tablet. Since the solution was launched, over 16,000 homes equipped with Flexom have been marketed. Bouygues Immobilier has pledged that all homes handed over in France will be equipped with Flexom by 2020. Bouygues Construction's Wizom offer can be used to manage housing units on the scale of an entire building. It has already been fitted to several residential properties in the Paris region, including a social housing development.

### Nextdoor, a Bouygues Immobilier subsidiary, is revolutionising workspaces

In 2014, Bouygues Immobilier launched a network of high-quality third places under the Nextdoor brand, offering businesses a range of topnotch workspaces comprising both private and shared offices. This innovative offering reflects the shift towards more nimble working methods while ensuring a pleasant working environment, thanks to coworking spaces, a concierge service, gardens, and business and festive events that promote interaction. Nextdoor aims to become a major driver for reducing emissions resulting from commuting and business travel in the areas in which it is located.

By late 2017, Nextdoor (which has over 4,000 customers) had eight locations up and running or in the design phase in France, such as Gare Saint-Lazare and Gare de Lyon in Paris, Issy-les-Moulineaux, Neuilly-sur-Seine and La Défense (in the Paris inner suburbs) and Lyon Part-Dieu. In July 2017, Bouygues Immobilier teamed up with AccorHotels, a global leader in hospitality, to form an equally-owned joint venture into which the two groups will pool their complementary expertise to accelerate growth in Nextdoor across France and Europe. Specifically, AccorHotels will contribute expertise in concierge services as well as its distribution channels (See also chapter 2 of this document – section 2.1.3 Bouygues Immobilier).

In addition, Bouygues Immobilier in 2016 launched Nextdoor Business Solutions, a range of services that large companies can use to rethink their office arrangements with a view to maximising employee well-being, promoting dialogue and collaborative working, as well as optimising floorspace and saving costs.

Bouygues Telecom endeavours to ensure that its customers have a reliable mobile network at their disposal. Arcep's survey of the quality of mobile services noted that, in June 2017, three of the four mobile network operators - including Bouygues Telecom - had improved their mobile data service in the previous year.

### Diversity within TF1's programming

Combating stereotypes and broadly representing diversity in society in its broadcasts represent a firm commitment of TF1's diversity policy. As a recognition of this commitment, and to publicise it, the TF1 group was re-awarded the Diversity Equal-Treatment label in 2017.

The TF1 group wants all its channels and websites to reflect the full range of diversity seen in society while avoiding stereotypes and ambiguity. Quantified pledges are disclosed to the industry regulator annually. A memo is sent out every year to producers of news-related programmes, game shows, entertainment and reality TV shows at the TF1 main TV channel to increase awareness about diversity in the shows they produce for the channel. All those responsible for making shows are given specific training on how to take account of diversity in all its forms.

Since 2016, efforts have been focused on quantitative studies and the use of results. The Diversity committee carried out two studies into news bulletins. One was in house and focused on the place of women in news; the other, conducted by Credoc<sup>a</sup>, examined the representation of ethnic minorities. Findings from these studies, which used strong, transparent and scalable methodology, will form the basis of action and communication plans for the production of the group's media content.

In 2017, an initiative action called "Women in the News", focusing on a fairer representation of women in news programmes was recognised at the fifth "Nuit de la RSE" awards in the category "best CSR project linked to a company's business operations".

Lastly, the Group's Media and Telecoms activities endeavour to shield younger viewers from the risks arising from television and the web. For the past ten years, a psychologist systematically views TV series for teenagers bought or co-produced by TF1, working closely with the creative team. This person can suggest edits and may even certify episodes as not apt for broadcasting, if images are deemed inappropriate for younger viewers. These recommendations are always followed. TF1 also pays special attention to safe browsing by users on its TFou.fr website for children, by moderating content, protecting children's personal data and taking other measures. Bouygues Telecom has adopted a proactive stance to guarantee the protection of children and teenagers from inappropriate online content. A parental-control solution for mobile handsets, PCs and TVs is available free of charge. In 2016, the operator expended its parental control solutions by adding a premium service. Lastly, the FFT<sup>b</sup>, of which Bouygues Telecom is a member, has posted on its website (fftelecoms.org) a guide for parents to help them protect their children. It gives advice about parental controls, protection of privacy and cyber-bullying.

(a) Research Centre for the Study and Monitoring of Living Standards (b) French Telecoms Federation.

## 3.5 INDEPENDENT VERIFIER'S REPORT ON THE CONSOLIDATED HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION PRESENTED IN THIS REGISTRATION DOCUMENT (year ended 31 December 2017)

#### To the shareholders,

In our quality as an independent verifier accredited by Cofrac<sup>a</sup> under the number n<sup>o</sup> 3–1050, and as a member of the network of one of the statutory auditors of Bouygues, we present our report on the consolidated human resources, environmental and social information established for the year ended on the 31<sup>st</sup> December 2017, presented in chapter 3 "Human resources, environmental and social information" of the Registration document, hereafter referred to as the "CSR Information", pursuant to the provisions of the article L.225–102–1 of the French Commercial code (Code de commerce).

### Responsibility of the company

It is the responsibility of the Board of Directors to establish a Registration document including CSR Information referred to in the article R. 225–105–1 of the French Commercial code (*Code de commerce*), prepared in accordance with the protocols used by the company, composed of Bouygues group's human resources, environmental and social reporting protocol in its version dated September 2017, supplemented by the reporting protocols of its five business segments (hereafter referred to as the "Criteria"), and of which a summary is included in introduction to chapter "3.1.3 CSR reporting methodology" of the Registration document and available on request at the company's headquarters.

### Independence and quality control

Our independence is defined by regulatory requirements, the code of ethics of our profession as well as the provisions in the article L. 822-11-3 of the French Commercial code (*Code de commerce*). In addition, we have implemented a quality control system, including documented policies and procedures to ensure compliance with ethical standards, professional standards and applicable laws and regulations.

### Responsibility of the independent verifier

It is our role, based on our work:

- to attest whether the required CSR Information is present in the Registration document or, in the case of its omission, that an appropriate explanation has been provided, in accordance with the third paragraph of R. 225-105 of the French Commercial code (Code de commerce) (Attestation of presence of CSR Information);
- to express a limited assurance conclusion, that the CSR Information, overall, is fairly presented, in all material aspects, in according with the Criteria;

Nonetheless, it is not our role to give an opinion on the compliance with other legal dispositions where applicable, in particular those provided for in the Article L. 225–102–4 of the French Commercial Code (vigilance plan) and in the Sapin 2 law n°2016–1691 of 9 December 2016 (anti-corruption).

Our verification work requiring the expertise of a team of ten people took place between July 2017 and February 2018 for a total duration of eighteen weeks.

We conducted the work described below in accordance with the professional standards applicable in France and the Order of 13 May 2013 determining the conditions under which an independent third-party verifier conducts its mission, and in relation to the opinion of fairness and the reasonable assurance report, in accordance with the international standard ISAE 3000<sup>b</sup>.

### 1. Attestation of presence of CSR Information

#### Nature and scope of the work

We obtained an understanding of the company's CSR issues, based on interviews with the management of relevant departments, a presentation of the company's strategy on sustainable development based on the social and environmental consequences linked to the activities of the company and its societal commitments, as well as, where appropriate, resulting actions or programmes.

We have compared the information presented in the Registration document with the list as provided for in the Article R. 225–105–1 of the French Commercial code (Code de commerce).

In the absence of certain consolidated information, we have verified that the explanations were provided in accordance with the provisions in Article R. 225–105–1, paragraph 3, of the French Commercial code (Code de commerce).

We verified that the information covers the consolidated scope, namely the entity and its subsidiaries, as aligned with the meaning of the Article L.233-1 and the entities which it controls, as aligned with the meaning of the Article L.233-3 of the French Commercial code (*Code de commerce*), with the limitations specified in the methodology described in section "3.1.3 CSR reporting methodology" of the Registration document.

#### Conclusion

Based on this work, and given the limitations mentioned above, we confirm the presence in the Registration document of the required CSR information.

### 2. Limited assurance on CSR Information

#### Nature and scope of the work

We undertook interviews with about sixty people responsible for the preparation of the CSR Information in the different departments of the consolidated company and its five business segments, in charge of the data collection process and, if applicable, the people responsible for internal control processes and risk management, in order to:

- assess the suitability of the Criteria for reporting, in relation to their relevance, completeness, reliability, neutrality, and understandability, taking into consideration, if relevant, industry standards;
- verify the implementation of the process for the collection, compilation, processing and control for completeness and consistency of the CSR Information and identify the procedures for internal control and risk management related to the preparation of the CSR Information.

We determined the nature and extent of our tests and inspections based on the nature and importance of the CSR Information, in relation to the characteristics of the Company, its social and environmental issues, its strategy in relation to sustainable development and industry best practices.

For the CSR Information that we considered the most important<sup>a</sup>:

- At the level of the consolidated entity and its five business segments (Bouygues Construction, Bouygues Immobilier, Colas, TF1, Bouygues Telecom), we consulted documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, actions, etc.), we implemented analytical procedures on the quantitative information and verified, on a test basis, the calculations and the compilation of the information, and also verified their coherence and consistency with the other information presented in the Registration document;
- at the level of the two most contributing business segments to the environmental and human resources impacts (Colas and Bouygues Construction, representing about 90% of the workforce and consolidated greenhouse gas emissions – scope 1, 2 and 3), we selected a sample of representative entities<sup>b</sup>, based on their activity, their contribution to the consolidated indicators, their location and a risk analysis. We undertook interviews to verify the correct application of the procedures and undertook detailed tests on the basis of samples, consisting in verifying the calculations made and linking them with supporting documentation. The sample selected therefore represents on average 12% of the sales and 13% of the total workforce of the two business segments.

(a) Human resources information:

• Quantitative information (indicators): workforce (total headcount and trend), share of women managers (France) and share of women directors (International), frequency and severity rates of workplace accidents (Global), absenteeism and occupational illnesses (France), share of companies providing social protection (International), share of companies with a training plan and number of training days (International).

Environmental and social information:

<sup>•</sup> Qualitative information: employment, health and safety in the workplace, training policies, measures undertaken in favour of gender equality and anti-discrimination policies (TF1)

indicators (quantitative information): percentage of Bouygues Construction's activity covered by an ISO 14001-certified environmental management system, percentage of buildings with environmental labelling or certification in the yearly order intake when Bouygues Construction is the prescriber, percentage of order intake with an energy performance commitment, percentage of sites eligible for the Ecosite label, low carbon operations, percentage of projects handed over for which operators, users or local residents were involved from the design or construction stage, the share of Colas material production activities with a system for managing environmental impacts (environmental certification, Colas check-lists) or implementing initiatives in favour of local dialogue, the percentage of aggregate production sites activity working to promote biodiversity for Colas, the roll-out of the BiodiverCity label, the measures and commitments to support biodiversity in the building and civil works activities of Bouygues Construction, the surface area of Green Office\* and Rehagreen\* commercial property developments, the number of positive-energy/passive-energy housing units being built or handed over during the year, the number of Nextdoor sites and number of sites including a commitment for smart grid roll-out for Bouygues Immobilier, the recycling percentage for Bouygues Construction's non-hazardous waste and excavated spoil, the number of Bouygues Telecom handsets collected for recycling or re-use, the recycling rate of aggregates and asphalt mix for Colas, the share of permanent activities located in highly water-stressed areas, greenhouse gas emissions, the energy bill and total energy consumption for Colas, power consumption at Bouygues Telecom, employees trained in business ethics procedures at Bouygues Construction, the number of CSA (French broadcasting authority) interventions and expenditure targeted by CSR criteria at TF1

<sup>•</sup> Qualitative information: general environmental policy, certification initiatives, measures to improve energy efficiency and raw material consumption, greenhouse gas emissions, relations with subcontractors and suppliers (responsible purchasing policy and percentage of sales outsourced to local companies for Bouygues Construction), customer satisfaction rate, business ethics and initiatives in place to guard against corruption (code of ethics and compliance programme), measures to protect consumer health and safety (protection of personal data), diversity in TV shows and partnership or sponsorship initiatives for TF1

<sup>(</sup>b) For Colas, the entities Colas Nord-Est (France), Smac (France), Colas UK (United Kingdom); for Bouygues Construction, the entities Bouygues Travaux Publics – Mines RTA (Ivory Coast), Bouygues Bâtiment IIe-de-France Construction Privée (France), Bouygues Bâtiment Entreprises France-Europe – Grand Ouest (France), and Bouygues Energie & Services – Switzerland

• At the level of the three other business segments (Bouygues Immobilier, TF1 and Bouygues Telecom), supporting documents available at headquarters cover almost all activities.

For the other consolidated CSR information, we assessed their consistency in relation to our knowledge of the company.

Finally, we assessed the relevance of the explanations provided, if appropriate, in the partial or total absence of certain information taking into account, if relevant, professional best practices.

We consider that the sample methods and sizes of the samples that we considered by exercising our professional judgment allow us to express a limited assurance conclusion; an assurance of a higher level would have required more extensive verification work. Due to the necessary use of sampling techniques and other limitations inherent in the functioning of any information and internal control system, the risk of non-detection of a significant anomaly in the CSR Information cannot be entirely eliminated.

### Conclusion

Based on this work, we have not identified any significant misstatement that causes us to believe that the CSR Information, taken together, has not been fairly presented, in compliance with the Criteria.

Paris-La Défense, 21 February 2018

Independent Verifier Ernst & Young et Associés

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