

3 STATEMENT ON EXTRA-FINANCIAL PERFORMANCE (SEFP)

3.1 THE BOUYGUES GROUP'S CORPORATE SOCIAL RESPONSIBILITY POLICY

Chapter 3 of this document contains the Bouygues group's key CSR indicators and related information. Further information is available in the Group's corporate website at bouygues.com or in the CSR reports of certain Group business segments, which can be downloaded from their respective websites^a.

3.1.1 Group CSR policy

Delivering state-of-the-art, 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 the impact 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 its business models so that customers can be offered solutions that make life better for everyone every day.

The 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. 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, factors in the United Nations Sustainable Development Goals (SDGs) and pledges to attain them by:

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

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. Bouygues believes its priority is to increase its initiatives in favour of the following SDGs:



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

^a bouygues-construction.com, bouygues-immobilier-corporate.com, colas.com, groupe-tf1.fr, corporate.bouyguestelecom.fr.

In 2018, the Group adapted the presentation of its extra-financial reporting to the requirements set forth in the SEFP (Statement on extra-financial performance), following the transposition of the EU CSR Directive. These arrangements have updated the Grenelle 2 legislation, which had been in force in France since 2012. Certain themes from Grenelle legislation, such as that of food waste, are not dealt with in this chapter^a. The Group's existing CSR-related challenges have been merged with the revised requirements, as shown in the following table:

	Themes	Group CSR challenges	Level of materiality ^a	
			Construction	Media Telecoms
Human resources Section 3.2	Health, safety and well-being in the workplace Section 3.2.2	Ensuring health, safety and well-being in the workplace	■■■	■■
	Employment and equal opportunity Section 3.2.3	Attracting, recruiting and inducting employees while fighting all forms of discrimination through high-quality labour relations	■■■	■■■
	Development of careers and employability Section 3.2.4	Supporting employees throughout their careers by addressing changes in occupational roles and skill-sets early on	■■■	■■■
Environmental impacts Section 3.3	Climate/Energy Section 3.3.4	Rolling out a comprehensive strategy for reducing greenhouse gas emissions and adapting products and services to climate change, in line with public policies	■■■	■
	Use of resources Section 3.3.3	Making the circular economy a driver for transforming building and communications methods	■■■	■■
	Environmental impact of products and services in use Section 3.3.3.2	Helping customers and end-users save energy and make sustainable use of resources	■■■	■
	Environmental externalities Sections 3.3.2 and 3.3.5	Minimising the environmental impact of business activities; biodiversity and ecosystem protection as well	■■■	■
Social impacts Section 3.4	Social impact of completed projects, products and services Sections 3.4.2, 3.4.3 and 3.4.5	Meeting societal expectations in terms of integration, poverty alleviation and service accessibility and conducting dialogue with Group stakeholders	■■■	■■■
	Geographical, social and economic impact Section 3.4.1	Boosting the local foothold of projects and creating sustainable value and sharing it with stakeholders	■■■	■■
Human rights Section 3.2.1.3	Safeguarding human rights along the value chain	Ensuring that human rights and international conventions are upheld in all decisions and relationships with business partners	■■■	■■
Digital technology Section 3.4.4.3	Data protection	Safeguarding business data and customer/user privacy	■■	■■■
Ethics Section 3.4.4	Business ethics	Managing business relations transparently and responsibly	■■■	■■■

a On a scale of one to three, ranging from moderate to very high materiality.

The above summary is based on several analyses carried out within the Group. Because it is active in businesses as diverse as construction, media and telecommunications, the Group faces a wide array of extra-financial risks and opportunities.

Specifically, this work drew on:

- the Group materiality matrix (created in 2016);
- the research contributing to the 2018 and 2017 Integrated Reports;
- risk maps (see Chapter 4 on Risks and risk management), and;
- the recurrent requests from rating agencies and industry analysts.

We applied the materiality concept, whose elements will be disclosed publicly in 2020, to creating a new Group materiality matrix, which will be based on the materiality matrices specific to the construction, media and telecoms businesses.

Consequently, analysis of the CSR risks and opportunities will be progressively expanded to span the entire value chain (core activities as well as the challenges associated with products and services and business relations) and comprehensively cover environmental, social and HR-related matters (including human rights and anti-corruption measures)^b.

a Given the nature of the Bouygues group's activities, we believe the themes of food waste, the fight against food insecurity and of responsible, fair and equitable nutrition are not major CSR risks for us, and therefore do not warrant further development in this document.

b The themes of tax evasion and fiscal optimisation were covered in meetings between the independent auditor and the Group's tax department at the end of 2019. This theme has not required additional work to date. The Group's tax policy is available on its corporate web site: <https://www.bouygues.com/wp-content/uploads/2018/04/bouygues-group-tax-policy.pdf>

The policies and associated indicators are described hereafter. A table correlating the Group's most significant CSR challenges with quantitative indicators is provided in annex on pages 391-393.

3.1.2 CSR oversight

Within the Bouygues group, HR, environmental and social issues are handled separately by the subsidiaries, which are closer to the specific challenges pertaining to their operations.

Monitoring and overall coordination of initiatives is provided at parent-company 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 2018, it gave a favourable opinion on the launch or continuation of various patronage initiatives of an educational, medical or humanitarian nature. Feedback from the extra-financial statutory audit was also presented, together with findings from the monitoring of Group-wide CSR initiatives. (see section 5.3.5.3 of Chapter 5).
- The Sustainable Development Committee, chaired by Olivier Bouygues (Deputy CEO of Bouygues SA), has the Sustainable Development directors of the Group's five business segments as its members. It coordinates intra-Group policies and investigates ways in which underlying sustainable development trends can reshape business models and support innovation.
- Comprising representatives from the five business segments, the Extra-Financial and CSR Reporting Committee assists in the preparation of the Bouygues Universal Registration Document by identifying major Group-wide challenges 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.
- Finally, Martin Bouygues presents the most significant sustainable development targets, actions and indicators of the previous year to each Annual General Meeting.

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 rolling out practices able to meet sustainable development challenges.

Olivier Bouygues, Deputy CEO, is responsible for Group-wide sustainable development initiatives. The Group Sustainable Development-Quality Safety Environment (QSE) department works in close 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 department has made sustainable innovation a strategic priority.

All Group-wide thematic committees systematically consider sustainable development challenges 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 strategy is factored in at all governance levels within the Group.

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

- the Digital transformation, IT systems, Innovation and Sustainable development department (Bouygues Construction);
- the Communication, Marketing and CSR department (Bouygues Immobilier);
- senior management (Colas and TF1), and;
- the Innovation department (Bouygues Telecom).

Each business segment coordinates a network of liaison officers that, for example, sit on company-wide committees. Every two years, Colas holds awareness-raising seminars for its network of Environment officers in France and abroad. The next seminar will take place in 2020, in one of the countries where Colas operates. Additionally, meetings in the field are used to share experiences and implement and monitor action plans.

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. Each Group business segment implements its own strategy and monitors its CSR policies.

In 2018, Bouygues Construction published its CSR roadmap, which includes clearly defined targets ^a, entitled "Responsible and committed", which is integrated into its strategy and in which it refocused its goals around 12 priorities (health & safety; exemplarity of operations; ethics; energy and carbon; biodiversity; the circular economy; responsible sourcing; fundamental human rights; diversity and quality of life at work; employability and local foothold; social responsibility; openness to society).

Bouygues Telecom consulted internal and external stakeholders to assess the most significant challenges facing the company in social, HR-related and environmental matters, with the aim of updating its CSR roadmap and related targets in the coming year.

3.1.3 CSR reporting methodology

CSR reporting is one of the preferred ways in 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 challenges 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. Updated annually in consultation with each business segment, it incorporates the findings of the work carried out by the committees. 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 applied for each business segment are provided in the annexes of this handbook. It is available in full on [bouygues.com](https://www.bouygues.com).

^a See also <https://www.bouygues-construction.com/en/responsible-et-engage>.

Coverage rates of HR reporting indicators in 2019

To factor in the various challenges faced by the business segments as well as local constraints, human resources reporting currently has five different types of scope:

- **Global (1)**, which covers 100% of the workforce. In 2019, 24.2% of indicators had this scope;
- **Global excluding Bouygues Energies & Services Intec, Kraftanlagen, Flexy Moov, Keyyo and Nerim (2)**, which covers 94% of the workforce. In 2019, 17.2% of indicators had this scope;
- **France (3)**, which covers 51% of the workforce. In 2019, 41.4% of indicators had this scope ^a;
- **Companies employing over 300 people outside France excluding Bouygues Energies & Services Intec and Kraftanlagen (4)**, which covers fifty-two companies representing 34.7% of the Group's workforce and 71% of the workforce outside France. In 2019, 6.9% of indicators had this scope, and;
- **the France scope plus companies employing over 300 people outside France, Bouygues Energies & Services Intec and Kraftanlagen (5)**, which covers 85.3% of the workforce. In 2019, 10.3% of the indicators had this scope.

The number of reporting scopes is lower than in 2018. All the companies acquired in 2018 were able to report their indicators, except for Bouygues Energies & Services Intec and Kraftanlagen, which only disclosed indicators relating to headcount and the proportion of women within the Group. Entities acquired in 2019 reported the minimum number of indicators requested.

Environmental and social reporting in 2019

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, and
- indicators specific to a business segment or to a line of business therein.

Indicator coverage rate for Bouygues Construction

Companies that are fully consolidated and those in which the equity interest is 50% or more are consolidated on a 100% basis in the extra-financial reporting. In 2019, the coverage rate of Bouygues Construction's reporting is 85%. The remaining 15% is due to the following exemptions:

- companies in which the equity interest is below 50% and companies accounted for by the equity method (except for the projects of Bouygues Travaux Publics where it has formed a cooperation structure such as a construction project company in which its stake is higher than 30% – in this case Bouygues Travaux Publics is consolidated in the extra-financial reporting according to the amount of its equity interest);
- Kraftanlagen München and Intec, which have recently been acquired;
- companies acquired or created during the year under review;
- companies subject to specific rules defined for certain entities, such as:
 - Bouygues Bâtiment International: at the operating unit level, structures where the headcount is less than 10 and/or without a production activity are not included in the extra-financial reporting; consortium/construction project company/joint venture projects and contracts where Bouygues Bâtiment International is not the lead firm and operating and maintenance contracts are not included in the extra-financial reporting;
 - At Bouygues Energies & Services, structures whose sales are less than €10 million are not included in the extra-financial reporting, unless the sum of the sales figures of the excluded structures exceeds 5% of the total sales figure at Bouygues Energies & Services;
 - Bouygues Travaux Publics: projects meeting the following criteria are excluded: those lasting strictly less than six months, those that have been active for less than six months, those that are more than 90%-completed by October of the previous year, those construction project company/consortium projects in which the stake is less than 30% and the Concessions division (to be consistent with financial reporting).

Bouygues' CSR reporting coverage rate declined in 2019 (-13%) following the acquisition of Kraftanlagen München and Intec, two new operating units of Bouygues Energies & Services. This is because these two operating units were excluded from the 2019 extra-financial reporting. So that they may be included in the next reporting campaign, EY carried out two audits in the summer of 2019, which were able to give the state-of-play regarding the implementation of Bouygues Construction's policies and the definition of a plan to facilitate their assimilation.

Indicator coverage rate for Colas

Concerning the social, environmental and hazardous chemical areas, Colas indicators use a 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 companies with sales below €2 million even though they are not included in the financial consolidation.

Indicator coverage rate for Bouygues Immobilier

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

In 2019, at Bouygues Immobilier, the reporting coverage rate as a proportion of sales is 93.3% when overseas subsidiaries (Belgium, Poland and Spain) are excluded. This rate drops to 87% when the French subsidiaries (Loticis, Wojo, Patrignani, SLC and Urbis) are also excluded.

Indicator coverage rate for TF1

TF1's social and environmental indicators do not include the subsidiaries Newen and Unify which represent around 35% of TF1's headcount.

^a The France scope includes French overseas territories (French Polynesia, Saint Barthélemy, Saint Martin, Saint-Pierre-et-Miquelon, and Wallis and Futuna), mainland France and the 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.

3.1.4 Main components of the SEFP

SEFP Bouygues SA has been obliged to publish a Statement on extra-financial performance since the 2018 financial year. Colas and TF1 – although not covered by this obligation – have decided to publish their own SEFP in order to report in a more detailed manner on the specific nature of their activities. This current statement outlines and ratifies the Group CSR policy in keeping with the new legislation, which has four main pillars (each indicated by a SEFP pictogram outside of this chapter):

- a presentation of the business model (see section 1.1 of Chapter 1);
- a summary table of the key CSR challenges for the Group's diversified business activities (see section 3.1.1);
- a presentation of policies (see sections 3.2 to 3.4 below), and;
- a presentation of performance indicators (see sections 3.2 to 3.4 below).

3.2 HUMAN RESOURCES - PROMOTING EACH EMPLOYEE'S CAREER DEVELOPMENT

"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).

Because of how, why and where it operates, the Bouygues group's people are its most important resource.

Their dedication is what drives our performance. The Group encourages this dedication by supporting career development and valuing the contribution of all staff, regardless of background, education or profession. "Promoting the career development of all employees" is the first of four pledges made by the Group in 2019 aimed at better meeting the challenges of the future.

Bouygues was awarded Top Employer 2019 certification, covering both the parent company (Bouygues SA) and the five business segments, Bouygues Construction, Bouygues Immobilier, Colas, TF1 and Bouygues Telecom. It is the only French group to obtain this certification for all its businesses nationwide for three consecutive years.

The Bouygues group operates in over 90 countries. At end-December 2019, it employed 130,450 people, spanning a wide range of business activities and expertise.

Headcount by region at 31 December 2019

Scope ^a : Global	Bouygues SA ^b and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
France	443	21,617	1,782	30,981	3,301	8,524	66,648	68,496
Europe (excl. France)	20	13,906	120	10,055	317	384	24,802	24,664
Africa and Middle East	107	5,972	2	6,840	13	25	12,959	12,444
North America	1	1,055		7,734	40	4	8,834	8,707
Central and South America								
America	91	822		520	3		1,436	1,035
Asia-Pacific	75	14,777		907	12		15,771	13,929
International	294	36,532	122	26,056	385	413	63,802	60,779
France + International	737	58,149	1,904	57,037	3,686	8,937	130,450	129,275

a coverage rate: 100% of the Group's headcount (Scope 1).

b o/w Holding company: 188.

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).

The headcount at Bouygues Construction increased by 2% in 2019, primarily reflecting international operations (+3.3%). This was especially the case in Asia (+12.9%). The headcount in Myanmar rose by over 1,000.

At 31 December 2019, total headcount at Colas was down 1.7% versus end-2018. This was because it sold Smac, which at 31 December 2018 had 3,411 employees (2,840 in France/French overseas departments and 571 outside France).

In France, on a like-for-like basis, the headcount was relatively stable. In international operations, the headcount went up by a further 7% following the 13% increase in 2018. This mainly concerned Europe (excluding France), which had the highest proportion of employees outside France (38.6%). Here the 11% increase stemmed from the acquisition of Skanska's road-building activities in Poland (350 employees).

Asia Pacific and Central America/South America also experienced sharp rises in headcount, mainly reflecting activities in Indonesia, Chile and Peru. In the North American operations, there is a high proportion of site workers whose seasonal contracts do not include employment during the winter season.

On a like-for-like basis, the headcount at Colas was up by 4.5%.

The headcount at Bouygues Telecom increased because of business expansion in the Networks, Information Systems, BtoB and Digital operations, as well as the ramp-up of Tisséo Services (which installs fibre-optic cables) and the acquisition of Keyyo and Nerim.

Headcount: a growing share of employees outside France



3.2.1 People, the Group's most important resource

3.2.1.1 Basing labour relations on constant and constructive dialogue

The two priorities of the Bouygues group with respect to labour relations are ensuring high-quality exchanges with labour representatives and coordinating dialogue with employees.

Ensuring high-quality dialogue between labour and management

The 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 constant dialogue with these bodies lays the groundwork for constructive relations. High-quality labour relations is a particularly strong point for Bouygues' business segments in their various sectors of activity.

Last year in France, the remaining ESCs^a were set up in every one of the Group's business segments following the signing of a specific agreement. Furthermore, it was decided to increase the number of Health & Safety and Working Conditions committees to keep abreast of issues at the grass roots, irrespective of whether an ESC existed or otherwise. For example, Bouygues Telecom will be retaining a Health & Safety and Working Conditions committee for each regional hub, even though some locations are not required by law to have such committees because their headcounts fall below the threshold.

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 and ESCs 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. Moves to include three new countries (Germany, Italy and Portugal) were set in motion for 2020 at the most recent European Works Council meeting in October 2019.

With such vast representation of its employees (4,014 elected representatives and 354 bodies), the Group sees high turnouts at workplace elections (84.2% in 2019) – far higher than in France on a nationwide level (42.76% in 2017 according to France's National Council on Labour Relations).

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.

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 2019, 232 agreements were signed or renewed, underlining the dynamic labour relations within the Group. In total, 52% of these agreements governed labour relations, 30% remuneration, 10% worktime arrangements, 3% quality of life at work and diversity/gender balance, and 5% other issues.

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.

At **Colas**, employee representation in the French overseas departments is organised the same way as in mainland France, namely meetings, committees or both, as well as locally negotiated agreements. Labour and management remain in constant contact with each other. This was especially true in Mayotte last year, amid challenging conditions. An Economic and Social Committee will be set up on the island in the near future.

The same principle applied in New Caledonia, where close ties and regular dialogue offset some of the surrounding social tensions.

At international entities, particularly in Europe and Africa, employee representation at three-quarters of companies employing over 300 people was at a similar level to operations in France.

Labour relations are good in all countries of the northern and central Europe region. The main issue in this operating region was again the tight labour market.

At Colas UK, employee representatives meet twice a year at a forum to exchange information.

^a Economic and Social Committee.

In northern and western Africa (particularly in Benin, Ivory Coast, Gabon and Morocco), differences in legislation governing employee representation have led management to implement more direct methods for communicating with employees such as notices, memoranda and e-mail. In the context of the strategic plan, information meetings were also held with all managerial staff in these countries last year.

In southern Africa, labour relations – which can be tense in light of the economic conditions – are structured around quarterly meetings with trade unions.

In North America, labour relations are managed with the help of trade unions and industry bodies. Unions are the preferred channel for employee dialogue. The subsidiaries also hold staff information meetings to increase internal cohesion and broach issues such as safety and business ethics.

Coordinating dialogue with employees

The Yammer Bouygues collaborative network is available to all Bouygues group employees with an email address, providing them with access to an open and transparent discussion forum that can be used to stay up to date on Group news and share professional best practices through theme-based on-line communities.

Group senior management uses this tool to communicate *en masse* with employees (through the “Group newsroom” channel).

The five business segments also have their own collaborative networks. Because these networks all use Microsoft’s Yammer software solution, adoption of this new work resource was easier for all concerned. At all the Group’s locations throughout the world, widely-distributed interactive communication channels exist to facilitate dialogue (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.

In 2019, Bouygues SA, Bouygues Immobilier and Bouygues Telecom each conducted employee perception surveys.

To capitalise on the talent of new recruits and track employee development, the **Bouygues Construction** subsidiary in Morocco (Bymar) set up a Yammer collaborative group aimed at all employees seconded abroad.

Bouygues Construction’s subsidiary in Turkmenistan took the view that it was vital to strengthen dialogue between the CEO and the employees, especially given the sharp increase in the headcount.

- Q&A sessions and networking lunches or dinners were held throughout the year to make space for effective dialogue and ensure that employees understood how the entity worked and explain the various ongoing projects;
- Furthermore, 87% of this subsidiary’s employees took part in an employee satisfaction survey in 2019. Employees were able to respond anonymously at any time using voting consoles situated in the workplace. As a result, the teams responsible for the project could track employee perception about the company, including where it is already doing well and where it could do better.

Bouygues Immobilier surveyed its employees’ viewpoints as part of the strategic plan, in the second quarter of 2019. This took the form of an internal consultation discussing the following points:

- an assessment of the activity and market positioning;
- analysis of markets, underlying trends and customer expectations, and;
- identifying areas for innovation and new business models that can then be used to inform strategic decision-making.

In 2019, Bouygues Immobilier ran another session of Digital Makers, a programme aimed at speeding up projects. Volunteer employees were asked to team up and put forward value-adding projects that tie in with the strategic priorities.

At **Colas**, progress was made last year in implementing Knowledge Management through the launch of Colas Share, an intranet site hosting 13 expert communities.

In addition, the My Colas employee portal went live at all mainland France entities in the first six months of 2019.

It is available to all clerical, technical and supervisory staff and their managers (some 13,000 employees in total).

At **TF1**, Workplace, a social network, helps build dialogue among employees about best practices, results, projects and the latest happenings, all tailored to each group’s interests.

Specific communication initiatives exist in many of the companies controlled by Newen and Unify. For example, focus events are held regularly to keep employees up to date on projects and the company’s outlook, or to discuss other business highlights. Film-screening evenings and networking events are also held throughout the year. Aufeminin convenes its employees every second Monday to share the latest news about the company. Newen holds a weekly Q&A session, and My Little Paris holds a similar have-your-say event with management present, every Monday.

At **Bouygues Telecom**, all employees have an opportunity to talk directly to senior management several times a year. This can be about business in general, or events at the company or in the telecommunications sector.

3.2.1.2 Complying 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. The whistleblowing facility set up under the Group’s Code of Ethics can be used to report serious violations of human rights and fundamental freedoms. It should be noted that, outside France, an employee consultation body exists in the 70% of subsidiaries that have more than 300 employees.

Day after day, **Bouygues Construction** deploys the expertise of its employees in 80 countries. Consequently, the company has a duty to guarantee its employees living conditions that meet clearly defined standards. The toolkit for setting up worksite living quarters, of which all entities are now aware, is audited by the Group. Another more general toolkit, containing a guide to living-quarter standards, an assessment sheet, a scorecard and the list of standards applicable to subcontractors, has been made available. It is subject to internal audits by the Health and Safety department. The mission of Bouygues Construction’s Security department is to safeguard operations (e.g. worksite living quarters) and look after the daily welfare of employees worldwide. In 2019, remedial or preventive measures were implemented at specific sites in the Bahamas, Ivory Coast, Guinea and Hong Kong. Bouygues Construction’s security policy is active in all countries where it operates.

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. This is because the Group strongly believes that high-grade dialogue between labour and management is the cornerstone of harmonious relations in the workplace.

Existence of employee representative bodies in the international activities^a

Scope ^b : International, outside France (companies with over 300 employees)	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019	2018
							Group total	Group total
Existence of employee representative bodies in the international activities		64%		77%			70%	67%

a Bouygues SA and other, Bouygues Immobilier and TF1 are not covered by this indicator on account of its scope. Only companies employing over 300 people operating outside France (excluding Bouygues Energies & Services Intec and Kraftanlagen) are concerned.

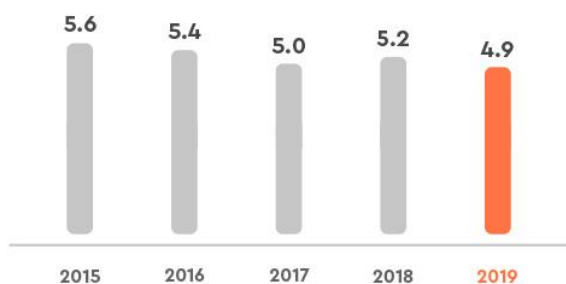
b Coverage rate: 34.7% of the Group's headcount (Scope 4)

3.2.2 Ensuring health, safety and well-being in the workplace

The Bouygues group aims to reduce the frequency and severity of occupational accidents to which it is highly exposed through its operations. In addition to the measures taken to ensure the safety of employees, the business segments also operate policies to improve employee health.

Workplace accidents

A DECLINE IN THE FREQUENCY RATE ^A



a Number of accidents involving time off work x 1,000,000/number of hours worked. The auditor indicates that it has obtained reasonable assurance for the 2019 indicator.

3.2.2.1 Boosting safety in the workplace

The Group works hard in the area of health and safety, particularly in its construction businesses (safety equipment, training, detection and monitoring of near-accidents). In France, health, safety and working-conditions policies are implemented in consultation with employee representative bodies. Implementation of a safety management system, part of which may have OHSAS 45001 certification, is the organisational bedrock at Bouygues' operating units in the construction sector.

Group entities are actively working to improve the safety of all persons working on their sites. As personal physical integrity is at stake, Bouygues group entities require their suppliers to be vigilant in terms of work safety 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).

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, best-practice sharing, cross-subsidiary challenges and half-yearly rankings.

Bouygues Construction has achieved overall consistency in terms of health & safety internal rules and related initiatives across all its entities, as enshrined in its 12 "fundamental principles".

Health & safety officers meet regularly within a permanent committee to ensure that policy is being rolled out consistently and comprehensively and to coordinate actions.

Special attention was given in 2019 to high-risk activities with the aim of reducing the number of serious accidents. The purpose of this joint action was to implement a full set of "life-saving rules" in January 2020, which will apply to all employees as well as temporary workers and subcontractors within each Bouygues Construction entity. The major risks identified are electrocution, fuel storage and traffic accidents in addition to on-site machine/pedestrian interaction, lifting and handling operations, and working at height.

Each entity organises awareness-raising campaigns and special action days, coordinated centrally to ensure consistency, to target these major risks.

With the aim of ensuring continuous feedback from high-risk activities, Bouygues Construction continued introducing systematic in-depth investigations and cause-finding analysis subsequent to every accident, near-accident or any other event deemed to be “serious” or “high potential”.

As part of its corporate strategy “Beyond - On the Road to 2023” Bouygues Bâtiment International is focusing prevention on controlling major risks, with the objective of achieving zero high-potential accidents by 2023. It also rolled out the #Safety Act app for tablets and smartphones, providing comprehensive guidelines on health & safety at the company. It is available in the main languages used on its international worksites.

Training modules from the “Safety Leader” course, aimed at instilling basic safety principles and types of behaviour, continued at a sustained rate of two to four sessions per month. In 2019, over 850 employees received this safety training.

The TopSite label (see the Environmental information section of this Chapter) continued to be rolled out after being introduced for the first time in 2018. Based on a new set of internal guidelines, it is being applied to all Bouygues Construction operations. This certification process, which is the same for all Bouygues Construction activities and entities, aims to harmonise the internal labelling process by allowing each entity to set quantitative and qualitative targets to be achieved. A working group made up of people from E-lab (the Bouygues group’s research, development and innovation unit) and Bouygues Construction’s own RD& Innovation unit is researching several issues such as load handling and reducing exertion during repetitive tasks. Equipment prototypes continued to be developed in R&D, such as the “Zero-G Arm”, a self-driving cart and the Exovest. New avenues are being explored, including improving safety through the use of artificial intelligence. Possible applications have been identified, for example SmartVid.io, or digital simulations for training or awareness-raising initiatives. SmartVid.io is a project sponsored by Bouygues Bâtiment International which analyses photos and videos from worksites to assign them a safety score, with the aim of reducing risks. In conjunction with the R&D department, the Equipment division continues to investigate and test hardware and equipment. Its focal points last year were vests connected to carts, virtual reality training on how to drive work platforms, crane simulators and devices to replace 125mm grinders.

Similarly, Bouygues Construction continued to implement its policy of removing ladders, stepladders and step stools in almost all of its operations. Where this is not applied (maintained-occupancy sites and certain clearly identified activities), specific risk assessments are conducted and appropriate protective measures taken. Safety culture audits are now carried out on the sites run by all of Bouygues Construction’s operating entities, in conjunction with the ICSI ^a. At Bouygues Bâtiment France Europe, on-site checks are carried out within each operating entity by teams and Safety officers to ensure the health & safety standards are complied with and to identify best practices, which in turn breaks down silos.

Health & safety policy at the worksites, quarries and plants operated by Colas is built around four priorities:

- respect for rules;
- training and informing;
- a safety-first approach to project and process design, and;
- follow-up of action plans.

Significant actions in 2019 included the following:

- OneSafety, launched in conjunction with DSS (DuPont Sustainable Solutions) at pilot subsidiary Colas Centre-Ouest in January. All managers, from the CEO down to team leaders, were coached in key management skills and how to adopt a collaborative approach when discussing safety with their teams. The scheme will continue to be rolled out at Colas Rail and the other French road-building subsidiaries in 2020 and 2021;
- the roll-out in Canada of the Goal Zero process, which is already in place in the US, in partnership with Caterpillar Safety Services;
- the Safety Culture programme launched at Spac together with ICSI;
- Safety Culture days in mainland France for all newcomers. Over 1,900 employees received such training in 2019;
- virtual-reality training on crushing-related dangers as part of the health & safety days for newly hired employees, and;
- hazard-avoidance projects, including a project with Volvo Construction Equipment whereby operators are alerted if a pedestrian enters a danger area close to machinery. The pedestrian also receives an audible warning. This system uses artificial intelligence to recognise when people are present. Other projects are also being trialled.

Training is provided to TF1 employees whose jobs involve travelling or working in high-risk countries. Apps have been installed on their smartphones so they can send alerts if they find themselves in danger.

Workplace accidents

	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Scope^a: Global								
Frequency rate ^b of workplace accidents among staff	5.14	3.59	3.15	6.19	3.39	5.46	4.88	5.18
Severity rate ^c of workplace accidents among staff	0.13	0.27	0.04	0.38	0.12	0.32	0.32	0.36
Number of fatal accidents among staff ^d				3			3	11

a coverage rate: 94% of the Group’s headcount (Scope 2).

b Number of accidents involving time off work x 1,000,000/number of hours worked. The auditor indicates that it has obtained reasonable assurance for the 2019 indicator.

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

d The auditor indicates that it has obtained reasonable assurance for the 2019 indicator.

Indicators tracking the Construction businesses showed a decline in the frequency rate.

At Colas, the workplace accident frequency rate fell sharply relative to 2018, dropping from 6.67 to 6.19. This marks the best performance ever achieved by Colas. The severity rate also improved significantly, decreasing from 0.46 to 0.38. Sadly, there were three fatal accidents, following which updated instructions were issued during “Safety pause” briefings. These are meetings between managers (foremen, quarry managers) and their teams held to provide support to employees following a fatal accident on a worksite or production unit.

a French industrial safety culture institute.

3.2.2.2 Working with temporary employment agencies and subcontractors

In France, the HR, Purchasing and Health & safety departments at **Bouygues Construction** convene representatives from tier-one temporary employment agencies in the first quarter of every year to disclose on key indicators, safety results and areas where progress can be made.

In 2019, when signing contract extensions with these companies, Bouygues Construction at the same time updated its health & safety roadmap. This included imposing stricter requirements regarding the wearing of personal protective equipment on worksites. Bouygues Construction has also set new pre-service training requirements and supplemented existing health & safety requirements with a condition giving precedence to those with specific PASI (temporary worker safety passport) training for temporary construction workers. The target is that every temporary worker will have followed by this training in 2020.

A recommendation on similar issues is currently being added to the contract extension agreements signed by tier-two temporary employment agencies.

Concerning the service providers that Bouygues Construction used in 2019:

- the service agreements contain health & safety clauses that they agree to comply with;
- where required, subcontracting agreements entered into by operating entities with regard to their projects and worksites contain health & safety provisions adapted to the particular circumstances, and;
- subcontractors deemed “sensitive”, i.e. those most exposed to regulatory risks, are now notified about health & safety issues through the CSR Charter.

Bouygues Bâtiment France Europe continued the initiative it launched in 2018, working alongside its subcontractors in the areas of organisation, secure handling and access to workstations, which has now been rolled out across its subsidiaries. As a result, from the consultation phase, all partners can be involved in optimising worksite logistics and determine well in advance which resources to assign and which to share.

With its business partners, Bouygues Bâtiment France Europe continued its “Partner support” initiative to enhance the safety culture among subcontractors on all its worksites, in both the structural works and fit-out phases.

At **Colas**, in France last year, a working group of health & safety officers and legal experts was formed to draft a reference guide on accident prevention. This includes:

- safety training;
- safety induction at branches and worksites, including a traceability system;
- definition of and specific training for high-risk jobs.

Within the road-building division in France, the PASI^a scheme (an initiative of the EGF-BTP^b) provides a way for companies to recruit only those temporary workers who have received this specific safety training. PASI training is valid for ten years.

The other national operations that use temporary employment, such as Australia, Belgium, Denmark, the UK, Ireland, Slovakia and Switzerland, have set up internal prevention procedures.

3.2.2.3 Protecting health in the workplace

The Bouygues group endeavours to provide its employees with benefits, 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 covers the employees of Bouygues Construction, Bouygues Immobilier, Bouygues Telecom and Bouygues SA. Since 2018, extra services have been offered, designed to facilitate the following:

- healthier living (coaching to prevent backache, stop smoking, deal with stress, etc.);
- healthcare access for employees and their families through a free 24/7 remote medical consultation service reachable from France and abroad, and;
- an on-line service (deuxiemeavis.fr) through which patients with a serious, rare or debilitating illness can obtain a second opinion from leading medical consultants.

In 2019, the Hospiway service was launched, designed to help employees prepare for treatment by helping them find the right hospital or clinic and budget for the expenses.

Ensuring a common core of employee benefits outside France

A review of employee benefits, healthcare coverage, death and disability cover, retirement benefits and parental entitlements for employees of international units was conducted in 2018. This found that 73% of employees abroad enjoyed additional cover (relative to legal obligations) in terms of healthcare costs. For death and disability cover, the proportion was 67%.

In 2019, the Group launched a new programme called BYCare. This programme aims to ensure a common core of employee benefits for the whole Group that go further than the requirements of the local legislation in each country. Its aim is to make sure that Bouygues’ best practices are at least on the same level as a panel of benchmark companies. As a first step, our efforts will be focused on providing a minimum death coverage (all causes), from 2020, equivalent to 1.5 years of basic gross salary, which is on top of the legally required sum.

It should be noted that 100% of employees working in non-French entities with over 300 employees already have benefits.

a "Passeport Sécurité Intérimaire" (temporary worker safety passport).

b The association for French construction and civil works companies.

Furthermore, all business segments aim to forestall psychosocial risks (through surveys, early warnings and management training in best practices). One example is Bouygues Immobilier's BI Well stress-prevention plan. Bouygues Bâtiment France Europe has set up a network of "guardian angels" available to listen to and counsel employees in difficult situations and work with them to find solutions. In 2018, this initiative received the prize for the most original idea at Bloom at Work's workplace well-being awards.

For several years, an ergonomics initiative within **Bouygues Construction** has worked to reduce the level of arduous work in production-related professions. The policy now incorporates support services as well. The Ergonomics unit, part of Bouygues Construction's Health & safety department, provides expertise to operating units and supplements the work of the Health & safety officers.

The 2019-2021 Health Plan, which applies to all Bouygues Construction entities, has four pillars:

- ease of use and working environment;
- work/life balance;
- physical and mental health monitoring, and;
- work organisation.

In 2019, the Ergonomics unit focused on accidents related to manual handling, with the aim of defining rules for the implementation of storage and handling plans on worksites. Bouygues Construction uses ergonomic criteria when selecting equipment as part of a move towards standardisation. In 2019 it documented all the power tools and equipment in use. Ergonomists have been included in working groups convened to design a new form panel and floor formwork. R&D has a focus on ergonomic analysis that makes use of virtual reality, and on manual handling. The new Ergo'App database enables managers to:

- identify ergonomic solutions adapted to working environments and related constraints;
- to create an ergonomic score for each piece of hardware or tool;
- view user comments and reviews.

On worksites and in workshops, Bouygues Construction is boosting storage and storage-related logistics, drawing on Lean management techniques.

In France, Bouygues Construction runs Ergo'Training campaigns to teach employees the basics of ergonomics and show them how to avoid musculoskeletal disorders, delayed risks and aggravating factors. Workshops were again held on worksites to show employees how to stay healthy. Ergonomics training, for both employees and health & safety officers (who are trained in prevention methods), is now provided at most international sites, in several countries, focusing on diagnostics, action proposals and team awareness-raising.

It is now Bouygues Construction's regular practice to introduce pre-work warm-up exercises in small structures to meet the needs of small teams, especially within Bouygues Energies & Services.

Bouygues Construction has strengthened its corporate policy on fighting addictions, which is incorporated into the internal regulations of each operating unit (OU) based on a common template. To help the implementation process, internal regulations have been supplemented with five testing/control procedures.

Out of fairness and because office workers need to set an example, test campaigns cover all head office and branch employees, as well as employees in worksites, workshops and production sites.

Colas last year continued implementing specific health-related initiatives, including two schemes to protect against musculoskeletal disorders:

- training on how to avoid risking health through physical work and;
- providing "ExoPush" exoskeletons to help reduce strain for asphalt paving teams. Over 90 units have been introduced in France, Australia, Belgium, Denmark, central Europe and Switzerland. These exoskeletons were designed jointly by engineers, workers and Colas experts to help those workers laying the asphalt. This improves working conditions because they can work in a more upright position and exert themselves less, leading to a lower heart rate. Improvements are being made regularly to the exoskeletons based on feedback from users.

Last year Safety Week focused on noise-related hazards and hearing protection, which must be worn at all times on worksites (construction sites, quarries and plants). This Safety Week ran at all Colas sites worldwide, covering a headcount of 60,000. The film *Le Bruit* (Noise), which won a gold award at the Fimbacte festival in the "Responsible communication" category, was shown at all Colas locations, followed up with video quizzes presented by managers. The campaign also included a booklet for employees and specific posters. The purpose of the campaign was to remind all employees that:

- exposure to noise above 80 dB(A) is dangerous;
- noise has harmful effects on the human body, and;
- hearing loss is irreversible.

Colas operates policies to prevent chemical hazards at work, covering bitumen and ultraviolet radiation, dust, solvents and asbestos.

At **TF1** (excluding Newen and Unify), a committee to monitor long-term sick leave has been set up in conjunction with Human resources departments, the Disability Task Force and the occupational health expert, aimed at studying a full range of measures for keeping people in work or encouraging them to return.

Bouygues Telecom is making the IT used by customer relations employees more user-friendly by incorporating artificial intelligence that provides helpful user tips. New features have also been added to help employees find their way around the systems. This helps to reduce psychosocial risks, such as cognitive overload.

Number of employees with a recognised occupational illness

	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Number of employees with a recognised occupational illness ^a		80		120	5		205	217

a coverage rate: 51% of the Group's headcount (Scope 3).

The indicator is specific to France and thus excludes international data.

Absenteeism

Absenteeism rate^a

Scope ^b : France	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Absenteeism rate ^a	1.1%	3.5%	1.9%	4.9%	2.4%	4.5%	4.2%	4.3%

a Permanent staff.

b Coverage rate: 51% of the Group's headcount (Scope 3).

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].

Absenteeism fell for the fourth year running. The rate was lower than the national private sector average of 5.10% in 2018 (Ayming Barometer).

At Colas, the overall rate was 4.9%, breaking down as follows: 6.4% for site workers; 3.9% for clerical, technical and supervisory staff; and 1.8% for managers.

Number of days off work as a result of a workplace accident^a

Scope ^a : Global	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Number of days off work as a result of a workplace accident	98	29,453	119	42,086	649	4,126	76,531	83,332

a coverage rate: 94% of the Group's headcount (Scope 2)

3.2.3 Employment and equal opportunity

3.2.3.1 Attracting and recruiting future talent

In January 2020, trade magazine *L'Usine Nouvelle* ranked Bouygues fourth in its list of the 100 most active recruiters in France.

10,636

new hires in France in 2019

This underlines that hiring new employees is a key issue for the Group, enabling it to support business growth. Most of its business segments have set up special talent acquisition units. These units aim to support line managers and HR managers in achieving their ambitious recruitment goals. To do this, they make use of new digital resources to detect experienced professionals. In addition, the Bouygues group's business segments proactively recruit young graduates, creating gateways between the corporate world and leading academic institutions, both in France and abroad. This involves the Group's business segments reaching out via digital channels (such as social media and job boards) and prospecting on the ground (through job fairs and university forums), while, as far as possible, ensuring they have a common presence in all these areas.

All of the Group's job offers can be accessed from bouygues.com, which helps publicise the opportunities on offer from each business segment. At any given time, more than 1,000 job openings are available, both in France and abroad.

One of the main factors behind the Bouygues group's drawing power as an employer is that it has close relations with educational establishments and operates a sponsorship scheme to help attract future graduates.

The Group's business segments have particularly strong ties with CentraleSupélec, offering its students career opportunities in several different lines of business.

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. The three-year sponsorship scheme offers regular events and an individual coaching programme supporting students in their chosen career path.

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

This policy has paid off. Bouygues Construction, Bouygues Immobilier, TF1 and Bouygues Telecom were all listed in the 2019 Happy Trainees rankings of companies where interns and those on work/study contracts are most satisfied.

For the Bouygues group as a whole, employer brand initiatives help promote the Group and increase the appeal of some of its most promising activities amongst students.

- **Bytech:** in 2019, Bytech (the Group's IT and digital community) came up with a project to bring together the business segments for joint hiring and communication initiatives at fairs, forums and on social media. At Viva Technology 2019, this umbrella brand (Bytech) was promoted to attract applicants to join a community of 1,800 IT personnel.

- **Opportunity:** for the first time in 2019, a Group-wide initiative entitled Opportunity brought together HR and line managers from all business segments to take part in a job dating^a initiative.
 - The first day was reserved for Group employees and featured coaching workshops and assessment interviews, among other things.
 - The second day, devoted to students, led to over 500 internships or work/study contracts being offered.
 - A massive publicity campaign, conducted in higher-education institutions and on social media, led to 500 face-to-face interviews at the event venue (Challenger, the head office of Bouygues Construction), enabling students to discover the variety of professions and career opportunities on offer within the Group.

“Will you be the 1,000th work/study apprentice?”: **Bouygues Construction** has used this question as a hook line to attract future apprentices. In May 2019, its entities ran a large-scale event that they themselves had designed, pulling in 1,200 people at four different locations in France. Backed by a massive social media campaign, Bouygues Construction has reiterated its commitment to inducting and training students in all its professions, across all regions and to all levels of training.

In addition to initiatives to attract new talent, Bouygues Construction is working to improve staff retention and strengthen loyalty among its current employees. The “ByCup” day focused on the special relationship between mentors and interns or people on work/study contracts. This event provided an opportunity to thank mentors for their involvement, deemed vital for imparting skills and the Group’s values.

In 2019, Bouygues Construction’s Moroccan subsidiary (Bymaró) took part in the “Solar Decathlon”, a competition bringing together groups of students tasked with designing and building a house that harnesses new sources of energy. Bymaró acted as sponsor and provided the students with coaching and materials as well as getting some of the entity’s site workers involved in the event.

Bouygues Construction’s subsidiary in Turkmenistan last year visited architectural and engineering schools in Turkey, Russia and Kazakhstan to attract talent from the region.

The Talent Acquisition unit set up by **Bouygues Immobilier** aims to support line and HR managers with their recruitment drives. To do this, they make use of new digital resources to reach out to experienced professionals working in property development.

Concurrently, the 2019 Graduate Programme was launched. This comprehensive scheme is designed to produce a pool of home-grown talent. It lasts 18 months and admission is highly selective.

In France, where business trends have been improving for **Colas** since 2018 (especially in the Paris region, through the Grand Paris Express projects), recruitment must be calibrated to meet the needs of construction projects and demand for operational and support staff.

Colas has forged ties with engineering schools, university technology institutes and other two-year higher education programmes in civil engineering and civil works, as well as institutions like Centre d’Egletons, a training school for civil-works professions. Last year, it also introduced and continued various schemes to promote its employer brand such as a school ambassador scheme (consisting of male/female duos), after-work events and sporting tournaments.

In March 2019, Colas sponsored the ESTP^b graduation ceremony and entered into new partnerships with ENPC^c, Ensam^d, Centrale Lyon and ESITC^e Paris. The November higher education forum, held at Colas’ new Paris headquarters, was a resounding success. In addition, the subsidiaries hold regular worksite visits and visit schools in their local areas

In 2019, Colas continued three major employee advocacy^f programmes internationally to encourage its employees who are active on-line to raise the profile of its brand messages and share job offers on professional networking sites:

- “Follow-Me”, a programme providing tailored support on LinkedIn for managers in and outside France;
- Roadshows, which encourage business-unit managers and executives to share their brand messages on professional social networks. Last year also provided an opportunity to extend roadshow training to all employees with access to Colas Campus. This took the form of two video e-learning modules teaching employees how to develop their personal brand on LinkedIn;
- “BuzzClub”, a mobile-based social sharing platform open to support departments and recent graduates, providing a channel for employee referrals.

Colas also has a partnership with Yaggo, a job-application platform that manages contact with candidates:

- ensuring a 100% response rate to applications received;
- establishing a personalised relationship, both when responding to applications and when keeping track of applicants with potential.

Lastly, to strengthen its brand among potential applicants, Colas again ran its innovative advertising campaign, “My Job Story”, which shows employees’ commitment to their jobs through video stories that showcase the various professions that exist at all entities, both in France and abroad.

In 2019, Colas ran a campaign promoting the “Tour de France” recruitment programme with the aim of boosting its appeal and providing applicants with greater insight into the induction process at Colas. Young people completing or who had recently completed the induction process were able to tell their stories. In addition, the application process was updated to include video interviews so that applicants could introduce themselves and state personally why they wanted to join the group – from wherever they were in the world.

TF1 (excluding Newen and Unify) has forged partnerships with business schools, specifically Essec^g, where it sponsors the Media & Digital chair, and Edhec^h, through the “Explora” programme. TF1 also runs the #MonStageChezTF1 scheme, thanks to which 14 and 15-year old school students can find out about its professions and activities during a week-long placement.

At **Bouygues Telecom**, the rate of external recruitment increased in all parts of the organisation. Business development is fuelling the intake of extra staff, especially for rolling out fixed-line BtoB solutions.

a Job interviews conducted in a very short period of time.

b École spéciale des travaux publics, du bâtiment et de l’industrie.

c École nationale des ponts et chaussées.

d Arts et Métiers ParisTech.

e École supérieure d’ingénieurs des travaux de la construction.

f Corporate strategy to encourage employees to become true ambassadors of the brand to the outside world, especially through the use of social media.

g École supérieure des sciences économiques et commerciales.

h École des hautes études commerciales.

To keep up with this brisk growth, the Talent Acquisition unit, assisted by HR operational staff, is focusing on the expertise required to fill shortages, such as in security, development, IS architecture and networks, radio and FTTH^a, service platforms, marketing and digital. This unit has implemented extensive resources for this task, such as new job boards, targeted campaigns featuring paid ads on Indeed, as well as the LinkedIn Talent Pipeline and an employee referral system.

In 2019, Bouygues Telecom launched the first year of its engineering graduate programme, which over 18 months provides experience in several areas of the company. It has also strengthened ties with institutions with which it has long-standing relationships (e.g. sponsoring an IOT^b major at CentraleSupélec) and set up an "Architecture and Intelligence for Networks" chair in partnership with Télécom Sud Paris.

Recruitment and departures

External recruitment by job category

Scope ^a : Global	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
France	93	3,009	430	3,847	786	2,471	10,636	10,944
Managerial	65	1,071	234	580	425	560	2,935	3,232
Clerical, technical & supervisory	28	1,292	196	985	361	1,911	4,773	4,652
Site workers		646		2,282			2,928	3,060
International		15,655	17	18,610	122	307	34,711	29,028
Staff ^b		3,614	17	3,530	122	307	7,590	6,793
Workers ^c		12,041		15,080			27,121	22,235
France + International	93	18,664	447	22,457	908	2,778	45,347	39,972

a coverage rate: 100% of the Group's headcount (Scope 1).

b Supervisory, managerial and technical employees.

c Site workers.

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

The hiring trend remained brisk in France and increased sharply internationally (+20%).

Recruitment rose sharply at **Bouygues Construction**, especially in the Asia-Pacific region, Myanmar and Turkmenistan.

In 2019, new hires by **Colas** remained stable overall compared with 2018. Recruitment of site workers was stable in France but attained a high level in international operations. In North America, Africa and Asia, hiring levels vary widely, mainly due to seasonal factors.

The increased headcount at TF1 was due to the consolidation of Unify and its subsidiaries.

Number of departures

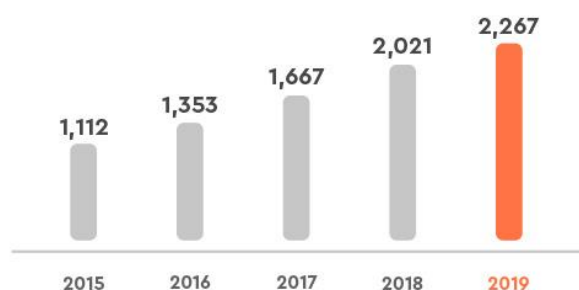
Scope ^a : Global	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Number of departures (all types of contract)	90	16,890	485	19,679	846	2,164	40,154	33,938

a Coverage rate: 100% of the Group's headcount (Scope 1).

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

The large number of departures is mainly attributable to trends in activity and, in the international operations, to single-project contracts.

Work/study: a sharp increase in intake



a Fibre-To-The-Home.

b Internet Of Things.

Work/study training contracts

Scope ^a : France	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Number of apprenticeship contracts during the year	1	411	61	566	69	112	1,220	982
Number of professional training contracts during the year	8	182	71	261	172	353	1,047	1,039
TOTAL	9	593	132	827	241	465	2,267	2,021

a coverage rate: 51% of the Group's headcount (Scope 3).

The indicator is specific to France and thus excludes international data.

All Group entities promoted the use of work/study contracts, the number of which rose 12% relative to the previous year. Use of work/study contracts underlines the Group's dedication to helping young people enter the world of work.

3.2.3.2 Develop a remuneration policy rewarding individual and combined efforts

The Bouygues group's remuneration policy, which is tailored to each employee and based on merit, is an integral part of its culture. Because remuneration underpins business development and performance, the Group wants it to be central to operations in all its entities, in every country. The remuneration policy rewards people when personal and team targets have been met or surpassed. It has four major components:

- giving employees a share in the company's profits;
- ensuring fair pay;
- offering a comprehensive system of remuneration, and;
- tailoring remuneration policies to professions, specific profiles and geographical areas.

Giving employees a share in the company's profits

A comprehensive system of remuneration applies to all employees worldwide, comprising a basic salary and, where appropriate, 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 life insurance.

This policy is supplemented in France by mechanisms giving employees a share in the profits of the Group's various entities. In total, 99% of France-based employees are covered by compulsory or voluntary profit-sharing agreements.

54,400 employee shareholders

Additionally, employee-savings incentives (e.g. company savings and collective retirement savings schemes) are regularly supplemented by reserved capital increases for employees, such as the Bouygues Confiance n°11 plan in 2019. Bouygues is the CAC 40 company with the highest level of employee share ownership, and, in 2019, was awarded the top prize from FAS^a in this area. 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.

In 2019, **Bouygues Construction** continued developing its Global HR system by incorporating new companies from outside France, especially in relation to pay review management. Global HR can also be used to track remuneration indicators and the careers of employees in key positions. Some 37,800 employees are covered by the pay review system within Global HR, representing a coverage rate of 63.27%. In 2019, a further 2,144 employees were added to the pay review.

The policy at **Colas** is applied through the annual guidelines issued by senior management, which take into account the economic environment, inflation, the job market and wage negotiations with employee representatives. It keeps remuneration aligned with responsibilities, ensures equal pay, and includes measures for young people, talent management and promotions. The policy, which aims to reward achievement, is applied at an individual level.

The variable remuneration policy applied by Colas is based on the overall performance of all its entities in France and around the world. The amount paid out by subsidiaries is based on three criteria:

- the results of the entire Colas group;
- the subsidiary's results, and;
- individual performance.

Variable remuneration for executives and managers takes more account of entity business performance and personal goal attainment than for supervisory staff.

A profit-sharing agreement was renewed on 6 June 2019. This group-wide agreement, first introduced in 2010, is based on a combination of two inseparable performance criteria (one financial and the other safety-related). Both criteria have been reviewed but the main changes involved safety considerations, which now include the accident frequency rate –for consistency with the new "Dupont de Nemours" framework in force at mainland France operations. The agreement will be applicable to 2019, 2020 and 2021.

a French federation of employee and former employee shareholders associations.

Ensuring fair pay

Decisions on pay are made by all parties involved: local management, the HR manager, employee representatives and senior management.

Internal wage levels are analysed throughout the year by business line to ensure equal treatment, especially regarding equal pay for women and men.

The remuneration systems of all business segments factor in performance criteria linked to results and potential.

Research into pay levels is regularly conducted by the five business segments. Where necessary, policies are adapted to reflect the specific features of each profession, profile and region.

In France, reference is also made to a database containing the pay levels of managerial employees throughout the Group's business segments. For example, TF1 relies on findings from the "General Industry", "Media" and "Executive" surveys carried out by Willis Towers Watson.

Bouygues Immobilier participates annually in Aon's national pay survey covering property development industry professions in France. Once again, last year's survey showed that overall remuneration at Bouygues Immobilier was in line with the market.

In the US, **Colas** uses local pay surveys, given the regional differences between its units in western states (Alaska, California, Colorado), central states (Arkansas, Illinois, Missouri, Nebraska, Ohio, South Dakota, Wyoming) and eastern states (Florida, Georgia, New York State, Pennsylvania, South Carolina, Virginia). Accordingly, employees are paid at levels in line with the local market.

In Canada, Colas sets pay levels according to local collective bargaining agreements. For unionised employees, pay is set through the collective bargaining arrangements applicable to their businesses.

In northern and central Europe, pay policy and employee benefits are coordinated in line with general policy at Colas. With full employment set to persist for at least another two years, pay is a strategic issue.

A salary benchmarking exercise is undertaken each year to assess the company's market position. Pay discrepancies are eliminated with the aim that wages are kept in line with the market and talent can be retained.

In Africa, subsidiaries in Benin, Ivory Coast, Gabon and Morocco rely on a market benchmark produced by Mercer for each country, as well as applying best practice. Each reviewed their remuneration process and position, making it easier to assess, guide and retain employees and to hire new talent, attracted by the fairer rules for rewarding performance. A performance review was undertaken for all managers. A similar exercise is under way for clerical, technical and supervisory staff.

In southern and eastern Africa (South Africa, Kenya, Namibia and Zambia), salaries are increased in accordance with local collective bargaining agreements.

Ensuring systematic feedback

The Bouygues 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.

Employees of Bouygues Immobilier, TF1 and Bouygues Telecom also have access to a personalised digital document summarising total benefits, i.e. salary and other advantages.

In 2019, **Bouygues Telecom** put in place extra support for managers by providing training about the various pay components. In the first quarter last year, 230 managers of department-head grade or higher were trained in this way. In the final quarter, some 700 local managers received this training.

Average annual gross salary in France by job category^a

Scope ^b : France €	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier ^c	Colas	TF1 ^d	Bouygues Telecom ^e
Managerial	83,476	60,512	71,218	63,316	68,639	61,756
Change vs 2018 ^f	0.7%	2.2%	0.4%	1.9%	-5.1%	-0.5%
Clerical, technical & supervisory	43,221	33,271	34,082	38,492	39,294	27,217
Change vs 2018 ^f	9.7%	1.1%	4%	3.1%	-3.8%	-0.8%
Site workers		28,715		27,701		
Change vs 2018 ^f		1.7%		2.3%		

a Permanent staff.

b coverage rate: 51% of the Group's headcount (Scope 3).

c Excluding sales staff.

d Including journalists.

e Including customer relations advisers.

f Change calculated based on 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 2019 in respect of 2018) and Percentage of employees promoted (France).

At TF1, the decrease can be explained by the inclusion of employee salaries from Unify, which were below the previous TF1 average.

Benefits granted to employees

€ million	2019	2018 restated	2017
Net profit	1,320	1,450	1,201
Cost of employee benefits excluding dividends	203	203	209
Profit before costs associated with employee benefits	1,523	1,653	1,410
Cost of employee benefits including dividends	(327) ^a	(280)	(281)
Dividends payable to non-employee shareholders for the year	(965) ^a	(633)	(601)
Appropriation to reserves	231	740	528

a Includes €342 million of exceptional dividend.

The net residual balance of 2019 profits after employee benefits and distribution to shareholders represents an amount of €231 million, which was allocated to reserves.

3.2.3.3 Promoting gender balance

Workforce by gender

Scope ^a : Global	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Women	24.6%	19.6%	51.2%	10.8%	56.1%	39.7%	18.7%	18.4%
Men	75.4%	80.4%	48.8%	89.2%	43.9%	60.3%	81.3%	81.6%

a coverage rate: 100% of the Group's headcount (Scope 1)

The proportion of women working at Bouygues was stable. Gender balance is chiefly an issue at Bouygues Construction and Colas.



The Bouygues group firmly believes that gender balance fosters creativity and cohesion, thereby significantly improving performance and accelerating the Group's transformation.

The Group's workforce counts more men than women, given the predominance of its construction businesses. Hence Bouygues operates a proactive gender balance policy, with a view to closing the gap, especially for jobs where they are currently under-represented. Bouygues last year launched its 2020 "Group gender balance" plan, which includes quantitative targets in terms of recruitment, promotions and career development.

The results from 2019 show that the increase in the proportion of women in the Group's headcount has been insufficient. Fresh measures will be carried out in 2020 to bring us closer to our target. These include raising awareness amongst the Executive Committees of the business segments in France and abroad and bolstering recruitment campaigns in order to attract more women to our activities and retain them (mentoring programmes, expansion of mixed and women's networks within the Group, equal opportunities, fighting gender stereotypes).

To fight against gender stereotypes, a campaign highlighting everyday sexist attitudes, using humorous cartoons by Antoine Cherreau, was run at Group level, then in each business segment starting in March 2019. Each business segment adapted the campaign to the specific features of its working environment. Colas also ran the campaign in its international operations, publishing a new cartoon every two months. Since March 2019, the Group has been appointing officers responsible for fighting sexual harassment and sexist behaviour across all its business segments in France, as is required by law.

ESC (Economic and Social Committee) officers are being selected and trained in each operating entity within **Bouygues Construction**. Over and above current legal requirements, officers responsible for fighting sexual harassment and sexist behaviour work in the interests of employees based both in France and abroad, not only remedying problems but also working hard in the area of prevention. A specific email address and awareness-building training were introduced in 2019. On this theme, Bouygues Construction ran a prevention campaign last year under the direction of senior management, providing employees with an opportunity anonymously to review their own attitudes in terms of gender stereotypes, sexism and sexual harassment using an internally developed application.

Colas has also selected, trained and coordinated a network of officers at a national level in this area.

TF1 strives to ensure that women are fairly represented on its TV channels and has pledged – through several successful initiatives – to promote women as expert commentators in the media. In 2016, the group launched "*Expertes à la Une*", an action plan designed to increase the contribution of female experts to its news output. Since then, over a hundred women have benefited from media training, and over 120 newsroom employees have attended training and awareness workshops on this issue.

Recruitment

The aim is to make the Group more attractive to women. Currently the worldwide gender breakdown is 18.7% women and 81.3% men; the Group is targeting 21% women by 2020 (on a worldwide scope). The situation varies markedly depending on Group business segment. Men are more represented in the construction activities whereas at Bouygues Immobilier, TF1 and Bouygues Telecom, 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 gender balance in construction, design, finance as well as in communications and human resources. The Group is also working to encourage young women to take up careers in technical professions. 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 various career opportunities among female secondary school students studying science and technology. In 2019, a

milestone was reached when the threshold of 150 female mentors was passed. Some 1,500 young women have received insights from female mentors employed by Bouygues Construction. Initiatives were carried out both in France and abroad (including Cuba, Hong Kong and Morocco).

Colas in France formed 15 male/female pairs of ambassadors. After a one-day training session at the head office, they are invited to speak at forums or during events at educational establishments to tell people about Colas, what it does and what career opportunities are available to both women and men. Colas also requests that internal recruiters and business partners – temporary employment agencies and recruitment firms – put forward applications from both sexes for all jobs, particularly in supervisory roles.

Bouygues Telecom, through its links with academic institutions, works hard to ensure strong female representation in its talent pools. In its latest agreement covering quality of life and gender equality at work, Bouygues Telecom has furthermore pledged to recruit more women into scientific and technological professions such as IT and telecommunications.

19.2%

women managers in 2019, up 0.7 percentage points from 18.5% in 2018.

Promotion and equal pay

The Group is intent on promoting equal access to career advancement and internal promotion. 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 had set a target that, by 2020, 20% of employees occupying the grade of department head or higher would be female. That target was achieved in 2019 (20.3% versus 19.7% in 2018). The proportion of women in executive bodies, which has been monitored for the last two years, rose to 20.4% in 2019 from 18.8% in 2018. The Group is targeting 23% by 2020 in France. The Bouygues group is aiming to achieve equal pay in all its business segments. Where there are gaps, specific amounts can be allocated.

In France, of the 21 Group companies with over 1,000 employees, 15 have a gender-equality score equal to or above 75. Six were unable to calculate the index because some sample groups did not contain a sufficient number of women.

In the space of four years, the percentage of women on the **TF1** Management Committee (150 key managers) has risen from 30% to 40%. For the second year running, TF1 was rated amongst the 100 best companies worldwide for gender equality in 2019, ranking 24th in a global comparison (source: Equileap-1), based on a score of 64% (higher than in 2018). TF1 was also the highest-ranking media group worldwide and the third-ranking French company, irrespective of sector.

Development

Support initiatives are offered in various forms within the Group to improve women's career prospects.

The annual Group-wide mentoring scheme for women (mentored by either a man or a woman) was run for a third time in 2019. A total of 95 women have been mentored through this scheme since it began.

Mentoring schemes are also operated individually by Bouygues Construction, Colas, TF1 and Bouygues Telecom. TF1 and Bouygues Telecom have extended their programmes in conjunction with Cisco and Ciena. Training courses in leadership for women are offered by TF1 and Colas.

Bouygues Construction, Colas, TF1 and Bouygues Telecom all run women's and mixed networks offering a wide range of activities, from conferences and mentoring workshops on how to market oneself, to informal chats.

The women's network run by Bouygues Construction, Welink, is expanding internationally year by year, especially in the UK. Several events were held in connection with the Women's Soccer World Cup, for example:

- a fourth women's soccer tournament pitting 20 teams from several subsidiaries against each other, including from outside France;
- participation in a group coaching event for female staff who are part of the network;
- Welink meetings in various regions, and;
- preparatory sessions ahead of annual appraisals.

Colas UK invests in gender equality by sponsoring the International Women in Engineering Day and organising visits to schools for girls. In North America, the Miller McAsphalt group belongs to the Women In Construction federation. At Standard General, a training programme in worksite equipment has been put in place exclusively for women.

The Bouygues group, through its partnership with the Women's Forum, brought together a mixed delegation that met for the first time in Paris during November 2019. It consisted of 17 staff members, both women and men, working in different Group businesses. The goal was to draw inspiration from current trends and best practices used in other companies around the globe. In addition, an international delegation from Bouygues Construction and Colas participated in the Women's Forum in Mexico and Singapore. The CEOs of local subsidiaries were present at these events and participated in the roundtable discussions.

Proportion of women in the Group

	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Scope ^a : Global								
Women with Staff status ^b	24.6%	27.3%	51.2%	21.4%	56.1%	39.7%	28.9%	28.7%
o/w women with Manager status ^c	18.3%	15.2%	26.7%	10.4%	47.7%	28.2%	19.2%	18.5%
Woman with Worker status ^d		9.7%		2.8%			5.8%	5.8%

a Coverage rate: 100% of the Group's headcount (Scope 1).

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.

3.2.3.4 Hiring people with disabilities

The Bouygues group's policy is that everyone should be actively involved in supporting people with disabilities. With this in mind, Martin Bouygues signed the national Manifesto for the occupational integration of people with disabilities in 2019. The Group has a four-pronged strategy in this area:

- recruiting through forums as well as membership of organisations or use of specialist recruitment agencies;
- keeping the disabled in employment by improving access via the adaptation of workstations and equipment as well as promoting career development through core expertise training;
- raising awareness and communicating clearly to encourage employees and managers to regard people with disabilities in a positive way. For example, the Disability Task Force at **Bouygues Telecom** visits customer relations centres all over France on a yearly basis to dispel common myths surrounding disabilities and explain its role, through presentations, discussions and information sessions, and;
- subcontracting to sheltered workshops and disability-friendly companies.

A structured disability-management policy is firmly established in all the Bouygues group's business segments in France. Each one has disability officers that coordinate actions and training for human resources managers and employees. Specific policies have been implemented to help retain disabled employees and adapt working hours to their needs.

In 2019, for the first time, training on how to keep employees at risk of incapacity in the workplace was held for all the HR departments of the Group's business segments, aiming to:

- find solutions for employees who are regularly on sick leave;
- forestall possible occurrences of incapacity.

In 2019, the Group focused its energies on two major events:

- in conjunction with Cap Emploi, it held a recruitment forum called "B.Youself" at Colas head office, aimed at recruiting personnel on fixed-term, permanent and work/study contracts, and;
- the Group's business segments took part in the European Disability Employment Week through a series of initiatives:
 - **Bouygues Construction** organised a forum bringing together around ten service providers from the sheltered sector;
 - **Bouygues Immobilier** used short films to raise awareness about issues;
 - **Colas** organised sessions with visually-impaired physiotherapists;
 - **TF1** screened in-house nine interviews conducted by a journalist with disabilities, who spoke to other employees (including managers) living with disabilities as well as members of the Disability Task Force and the Director of operational HR;
 - **Bouygues Telecom** organised an escape game^a on disability issues (to which 200 employees signed up), and its Disability Task Force ran an information stand to tell employees about what it does.

Outsourcing to the sheltered sector is also a way of encouraging disabled employment (see also section 3.4.5.3).

At its subsidiary on Reunion Island, **Colas** used an article in its in-house magazine to raise awareness about people with disabilities, with special emphasis on the theme of working while disabled.

Since 2017, Colas UK has been certified a Disability Confident Employer, in recognition of the initiatives put in place to support workers with disabilities.

Bouygues Telecom helps employees with disabilities obtain diplomas and certificates, in particular by assisting them to gain accreditation for work experience.

Bouygues Telecom also trains purchasing staff on outsourcing to the sheltered and disability-friendly sector. These sessions, held within a disability-friendly company, are run by an outside partner.

Employees with disabilities

	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Number of employees with disabilities ^a	6	568	36	874	90	286	1,860	1,918
Number of employees with disabilities hired during the year ^a	1	21	5	17	8	9	61	85
Sales with sheltered workshops and disability-friendly companies during the year	n.m.	€1,603k	€243k	€1,801k	€286k	€522k	€4,455k	€4,802k

a Coverage rate: 51% of the Group's headcount (Scope 3)

n.m. . non-meaningful.

The indicator is specific to France and thus excludes international data.

a A game in which a team of players must solve a puzzle in order to escape from the room before the time runs out.

3.2.3.5 Encouraging diversity

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 for all 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, published in 2008).

Bouygues 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 (for more information on occupational integration see section 3.4.1 of this document).

This diversity policy is promoted by the Diversity committee, which met four times in 2019 with business-line specialists to share best practices and define joint actions.

Hosting work-experience school students from priority education zones

Bouygues Construction, TF1 and Bouygues Telecom all take part in the "Tous en stage" initiative, started by the TF1 corporate foundation, which enables students from priority education areas to gain work experience in different lines of business. In 2019, 830 14-15 year old school students were hosted by the Group.

Bouygues Construction also hosts pupils from priority education networks in conjunction with several NGO partners, including the national network of companies for equal opportunities in education. Several entities within Bouygues Construction host 14-15 year old school students for work experience, thus helping them to think about what they want to do in life. Older pupils are also hosted for site visits, presentations of different professions or even for mock job interviews with HR managers. In 2019, more than 300 pupils visited facilities and met members of staff.

Introducing training to fight discrimination in all its forms

In response to a new legal obligation to provide training in non-discrimination, specific modules have been introduced in each business segment, for example the "Living together in diversity" programme at Colas and Bouygues Telecom.

Four of the Group's business segments have a discrimination whistleblowing system, managed by an internal counselling unit. For example, since 2014, TF1 has operated "Allodiscrim", an external and anonymous counselling unit, which informs and advises employees what to do if they believe they have been discriminated against or been the victim of unfair treatment within their company. Newen and Unify have set up a counselling unit, Allodiscrim, available to both permanent staff and occasional workers.

Example of international initiatives

In Hong Kong, **Bouygues Construction** subsidiary, Dragages, received three CSR awards in 2019 from the administrative region's Council of Social Service for its commitment to community service and its efforts to promote social cohesion.

In the UK, **Colas** is very active in the implementation of its diversity policy

through which it works closely with agencies specialising in the occupational integration of specific categories of individuals, most notably veterans, former offenders, people with disabilities and the long-term unemployed.

In Canada, where harassment is considered a form of discrimination, a range of policies have been put in place, such as the Harassment Awareness Policy, to fight discrimination and guarantee employees a welcoming environment at work.

In the US, Colas Inc. has set up an anti-discrimination hotline. In addition, a two-fold approach has been adopted:

- setting up of a women's network, the Women's Initiative (WIN), to strengthen dialogue and networking, and;
- participation in a forum for women engineers to facilitate recruitment from within this category.

The Group is committed to having all age groups represented in its workforce.

Workforce by age range

Scope ^a : Global	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Under 25	3.9%	8.9%	8.9%	6.7%	9.3%	11.9%	8.1%	7.1%
25 - 34	24%	28.4%	32%	20.9%	30.3%	33.3%	25.5%	26%
35 - 44	31.0%	27.5%	29.7%	26.3%	26.2%	31.8%	27.3%	27.8%
45 - 54	26.6%	22.8%	21%	28.1%	24.4%	19.3%	24.9%	25.6%
55 and over	14.5%	12.4%	8.4%	18%	9.8%	3.7%	14.2%	13.5%

a Coverage rate: 100% of the Group's headcount (Scope 1).

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

The increase in the proportion of employees under 35 reflects a proactive policy to recruit younger talent.

In France, each of the Bouygues group's business segments has a proactive policy of keeping older workers in employment or supporting them into retirement.

3.2.4 Developing careers and employability

To help its employees advance in their careers, the Bouygues group endeavours to create an environment in which they can develop their employability and enhance their job skills through support and training programmes.

Inducting, training and advancing careers are the three main ways in which this policy is implemented.

2,267

work/study apprentices in the Group. A two-fold increase in the space of five years

3.2.4.1 Inducting new employees

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^a and MOOC^b) 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.

Bouygues Construction uses In'Pulse, a single digital induction process, for all its entities. In'Pulse is the first stage in the induction of clerical, technical and supervisory staff, enabling them to find out about the culture, history, site locations and major achievements of Bouygues Construction as well as gaining a clear understanding of its values, strategic priorities and organisation. In'Pulse is accessible worldwide, in four languages, on the distance learning platform, ByLe@rn. The process is mandatory for all new employees, who automatically receive an email inviting them to participate soon after they join. Since September 2017, In'Pulse has been rolled out to some 11,000 new employees.

Bouygues Immobilier has developed its own induction process, BI Quest. In 2019, its content was updated to emphasise the new corporate strategy and its CSR targets. A new induction day, BI Campus, was created to train interns and apprentices in the fundamentals of Bouygues Immobilier's HR policy.

In France, a selected group of young managers joining **Colas** complete an in-the-field induction programme, for example allowing young site engineers to train alongside teams on construction sites before gradually being given responsibility. Induction takes place in various locations in France, involving three to four internships in different subsidiaries. Trainees may alternatively work within a single region for one subsidiary. In 2019 (at 31 December), 40 positions for this nationwide scheme were filled. Consideration is also being given to whether some stages could be completed outside mainland France.

New managers then attend the first Colas University seminar, usually during their second year at Colas. The aim is to develop self-reliance, responsibility, teamwork and knowledge of the Colas group. Career development towards management responsibilities is then achieved rapidly within the Group's various business lines.

3.2.4.2 Promoting career advancement within the Group

Encouraging staff mobility

Internal job mobility is positive for Bouygues group employees' careers 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.

The Group's Internal Job Mobility unit supports HR departments in the five business segments to help promote employee mobility.

For example, over 1,000 job vacancies can at any given time be found on the Mobylic extranet. Since 2019, Mobylic has also been available as a smartphone app, helping all employees take advantage of the opportunities on offer across the Group.

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

On its first day, the Opportunity forum welcomed 1,200 employees from all entities, generating over 600 interviews with HR managers from every business segment. During the forum, some 500 employees took part in theme-based career workshops, which helped them think about their personal career plans. They also received practical pointers. Similar workshops were offered once the Opportunity forum had concluded, with the aim of improving support for employees wanting to change career within the Group.

Talent incentives

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.

- Career committees are active within each business segment. Policies for retaining talent are operated by business-segment HR departments so that the specific development needs of their employees and operations can be taken into account.
- Group-wide committees bringing together HR staff and managers from every business segment have been meeting since 2017, resulting in broader career options for HR and IT personnel. In 2019, a Careers committee was also set up for the legal profession in the Group.

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.

The Group also strives to reward professional conduct and mindset among its best site workers through the Minorange Guild^a. Bouygues Construction and Colas have 16 such site worker guilds, active in the Group's main locations. Bouygues Telecom recognises competence 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.

Remote annual appraisals using the Global HR digital platform took place for the first time in 2019, with around 100 Minorange Guild members taking part in the trial.

In 2019, **Bouygues Construction** introduced its first-ever skills management platform, PEPS, to over 10,000 employees. This enables employees to complete a self-assessment of their skills and fill in details about their professional experience, thus continually adding information to the skills database. The goal of this platform is to draw on and promote the wide variety of employee profiles and career paths. It also provides a means for identifying employees who have specific skills that are in demand.

Bouygues Immobilier has introduced "nine-box", a new system for identifying talent by assessing existing skills and potential for the future. In conjunction with this, expectations in terms of managerial attitude and leadership have been redefined, leading to greater objectivity in decision-making.

Research into key jobs initiated in 2018 also continued at **Colas**. This will eventually provide for:

- an enhanced jobs database including all the associated skills, and;
- better visibility on career planning, allowing for more robust career paths, particularly within the framework of internal mobility.

The documents will be made available to all employees and their managers, with the aim of assisting them in career plans.

TF1 (excluding Newen and Unify) have developed Pep's, a tailor-made career development programme, which offers employees two access points.

- The first one, available to every employee via the intranet, is a gateway to a range of individual and group-based modules.
- The second aims to support teams in enhancing their remits and designing training plans in connection with this transformation.

Both processes enable employees to think ahead about their careers in practical terms, using a variety of formats: coaching, workshops, combined classroom-and-online training modules.

In 2019, nearly 360 employees used this programme.

3.2.4.3 Developing skills by offering a varied range of training courses

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. The Bouygues Management Institute (IMB) provides information and training for the Group's 500 leading managers, bringing them together around a range of shared values, assisting their personal development and facilitating the creation of inter-disciplinary networks. With backing from academic partner institutions, Bouygues Management Institute also runs seminars and international field trips.

All business segments have introduced digital training platforms.

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).

The Gustave Eiffel apprentice training centre (specialising in construction-related jobs), in which the Group has been heavily involved, has for several years offered in-service training as well as providing expertise in inducting and training people on work/study or occupational-integration contracts. In 2019, the Gustave Eiffel apprentice training centre hosted 400 young people. The exam pass rate was 89%.

Specific courses of study were set up for the Bouygues group: Bac Pro Melec (electricity and connected environments), BTS Fed (fluids, energy sources, home automation) with a cooling and air-conditioning option, BTS in civil works, and engineering management for construction projects.

Transforming learning and training methods

Since 2018, the Group's employees all have had access to the Netexplo online training platform, which enables them to learn more about issues relating to digital transformation and what this means for their job. The platform contains a digital passport, which can be used to accredit expertise. This programme, which was initially scheduled to run for 18 months but which has since been extended to 24, allows new employees to access the training. Over 8,900 Group employees have signed up since the platform went live.

Five business segments have on-line training platforms: Bouygues Construction (ByLe@rn), Bouygues Immobilier (BI Learn), Colas (Colas Campus), TF1 and Bouygues Telecom (e-campus).

The cross-disciplinary training programme on offer within **Bouygues Construction** is now available at all locations in France and internationally through a network of training centres.

In addition, since September 2019 the Information Systems Centres have been offering on-line classes (Welcome@it), which help employees better familiarise themselves with the IT environment used within their respective companies.

Since its makeover in November 2018, ByLe@rn has provided all employees of Bouygues Construction with a learning area to which all can freely contribute. Over 200 items of content have been shared in this way, in several languages. The number of connections increased over the twelve-month period, and the number of unique visitors in one month exceeded 4,000 for the first time in September 2019. New training modules include a range of on-line courses run by employees and training on BIM (3D simulations) aimed at technical departments, run with the help of Elephorm.

With support from the training centres, the Digital Learning Team was able to meet employees in their places of work, at information briefings held in France, the UK and Switzerland.

Bouygues Construction has continued its Digital Reverse Mentoring programme, whereby managers and executive officers with IT knowledge gaps can be coached by computer-savvy employees.

^a The Minorange Guild, founded by Francis Bouygues for the construction trades, and currently active in the Group's other business segments, contributes to highlighting exemplary behaviour by site workers in all the construction businesses.

This programme places interpersonal relations at the centre of the shift to digital. It had already been made available in 2018 to management committees at three of Bouygues Construction's five entities. In 2019, two further schemes were started abroad, in Morocco and the UK. Overall, nearly 120 mentor/mentee duos were formed through the five schemes.

In 2019, a new training programme for property developers was set up by **Bouygues Immobilier** to enhance the skills of employees working in what is a core area for the business.

The Corporate training department at **Colas** is involved in rolling out One Colas through a programme aimed at ensuring that management embodies its corporate values and the related commitments on a day-to-day basis. This training will cover a total of 2,000 employees between 2019 and 2020.

New content has been added to the Colas Campus training platform covering a wide variety of topics such as cybersecurity, non-discrimination and diversity. A catalogue of business-specific tutorials is also in the pipeline to help employees achieve operational excellence in areas of the business such as earthworks, industrial activities or asphalt laying. The first modules went live on the platform at the end of 2019. They can be accessed in all countries and will eventually be translated into all Colas' working languages.

In 2018, the four Colas University courses had 356 participants, guiding them through the key stages of their career development. Of these, 51 came from international subsidiaries. Apil University was set up in 2018 for English-speaking managers. Plans are in place to merge it with University 3 training in North America some time in 2020.

Colas Campus hosted over 6,000 French-speaking employees, equating to around 10% of Colas' total workforce.

Outside France, the main training projects were as follows:

- **French Overseas departments - Indian Ocean:** a safety e-learning module was launched for machinery operators and truck drivers;
- **Asia/Oceania:** leadership training for all managers, including a 360-degree interview, was introduced at Blanchard (Colas Australia);
- **US:** a specific training programme to disseminate the Colas safety culture was run within Branscome in conjunction with Caterpillar. A major leadership training programme aimed at local management (Supervisor Development Training) was implemented at Delta;
- **Canada:** in addition to the extensive range of training offered by Colas Canada Training, various corporate training academies were set up such as the McAsphalt Institute of Training and the Miller Institute of Excellence;
- **Morocco, central Africa and western Africa:** training policy is aligned with the Colas group in terms of overall direction and budget. In Morocco, training courses linked to personal development were launched, lasting between 4 and 12 days;
- **UK:** Colas completely overhauled its management training programmes in 2019;
- **Ireland:** HR teams implemented a policy of continuing professional development aimed at increasing management involvement in upskilling;
- **Southern Africa:** there was a significant push in the area of training in new technologies and techniques linked to Colas' core activities (basic road-building, bitumen as well as safety techniques), and;
- **Central and Northern Europe:** a new Contract Management programme was introduced, aimed at young engineers. In the **Czech Republic**, the Leadership Academy and Site Manager Academy trained 43 and 204 employees, respectively.

Additionally, the new Colas Campus space on Colas Share, the Colas knowledge management platform, is used by training managers to network, access the full range of training content, and share best practice and feedback.

In 2019, the **TF1 University** expanded its range of courses with the aim of fostering a culture of learning, sharing and imparting of skills within TF1 (excluding Newen and Unify). The training on offer is designed to meet strategic targets by pursuing the following objectives:

- adapting and developing core skills, especially in digital technology;
- enhancing management expertise and developing collaborative working;
- preparing for changes in business and helping staff retain their employability as a safeguard for the future, and;
- complying with HR and social commitments and as well as corporate obligations.

Existence of a formal training plan

Scope^a: France - International

(companies with over 300 employees)	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Existence of a formal training plan	100%	100%	86%	99%	100%	100%	99%	98%

a coverage rate: 85% of the Group's headcount (Scope 5).

Training

Scope^a: France - International

(companies with over 300 employees)	Bouygues SA and other	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total	2018 Group total
Number of employees trained	350	36,096	1,588	37,608	1,897	6,073	83,612	66,903
Number of training days	1,012	84,739	5,331	114,904	4,851	21,844	232,681	226,436

a Coverage rate: 85.3% of the Group's headcount (Scope 5).

Indicator available at bouygues.com: Training by type.

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 a part of their products and services. At the construction businesses, this is embodied by:

- environmental labels and certifications for their products (BREEAM[®], LEED[®], HQE[™], BBC-effinergie[®], BiodiverCity, Minergie^{®a}, E+C-^b, BBCA^c, etc.);
- promotion of the circular economy by helping create the BBCA label, which recognises circular economy criteria, such as selective deconstruction methods, throughout a building's lifecycle;
- policies for optimising and maximising recycling on worksites;
- 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 indicators

Indicators	Scope (activity or region)	Coverage	2019	2018	Remarks
R&D budget spent on CSR	Global	85% of Bouygues Construction's consolidated sales	34%	28%	In 2019, R&D refocused on priorities by thinning out its project pipeline. Mass production can now be trialled in the field. One such example is the Smartfabrik project. The proportion of expenditure devoted to R&D now equals spending on productivity. It has increased because more is devoted to researching new materials, especially low-carbon concrete (see section 3.3.4.4). Additionally, the R&D unit researching new construction methods, such as modular technology and 3D printing, has gained in importance. Bouygues Construction subsidiary VSL also contributed significantly to the increase in this overall percentage after allocating almost half its R&D expenditure to safety.
Buildings in the annual order intake with a commitment to environmental labelling or certification prescribed by Bouygues Construction	Global Construction activities	45% of Bouygues Construction's consolidated sales	58%	48%	Whenever Bouygues Construction acts as a designer/builder, its teams endeavour – wherever possible – to include environmental certification and/or labelling commitments that exceed applicable regulations. The increase in this percentage was primarily the result of a better performance from Bouygues Bâtiment France Europe, which undertook certification or labelling commitments on 82% of projects for which it had design/build responsibility (+14 points relative to 2018). This was the result of better performances from operating units controlling the entire value chain, from development to construction, while many customers are becoming more environmentally conscious.

a Minergie[®] is a pan-European performance label originating from Switzerland. It is mainly prescribed by Losinger Marazzi, Bouygues Construction's Swiss subsidiary.

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. The government broadly consulted with stakeholders in designing the methodology, which resulted in the publication of guidelines and a technical reference base, criteria of which are incorporated into the BBCA and Effinergie 2017 labels.

c The BBCA low-carbon building label certifies that a building has an exemplary carbon footprint.

Concerning Group operations (primarily worksites and fixed locations such as workshops and production sites), management of environmental impacts chiefly relies on the use of environmental management systems (ISO 14001) as well as certifications (HQE™, LEED®, BREEAM®).

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 their respective activities:

- Bouygues Construction's TopSite label (see section 3.3.1.2),
- Colas' self-assessment checklists and
- Bouygues Immobilier's Clean Worksite Charter. The Clean Worksite Charter applies to all of Bouygues Immobilier's commercial property developments (7.3% of its sales) and NF Habitat HQE™ housing developments, which represent 25% of its residential property activity (93% of sales).

As part of its internal processes, the Group implements an environmental certification policy governing the construction and operation of its own buildings. The headquarters of Bouygues SA, Bouygues Construction, Bouygues Immobilier and Colas as well as Bouygues Telecom's Technopôle, Printania (a customer relations centre) and data centre sites carry this certification.

Given the type of products and services offered by the Group, environmental-performance policies and initiatives 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™ Exploitation, LEED®, BREEAM® In-Use) prescribed by the business segments carry requirements in energy and resource management in the area of operations and 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 business segments' main environmental risks are identified in Chapter 4 of this document, in sections 4.1 Risk factors and 4.3 Vigilance plan.

Environmental management systems

As an integral part of CSR policy at Bouygues, implementation of an environmental management system is one of the four actions that the business segments pledge to improve the Group's environmental performance. Standards (ISO 14001, ISO 50001 and ISO 9001) and the environmental certifications (HQE™, LEED®, BREEAM®) 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™ certifications on its residential property developments (92.7% of sales), 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™).

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

Bouygues Construction indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Sales covered by an ISO 14001-certified EMS ^a	Global	85% of Bouygues Construction's consolidated sales	94%	95%	Management of environmental impacts in Bouygues Construction's operations is enhanced by a risk prevention policy based on an ISO 14001-certified environmental management system that is used almost universally.

^a Environmental management system.

At Colas, ISO 14001 certification is rolled out at more than half of 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 ISO 14001-certified sites per year, representing around 14% of sites in that geographical area, by specially trained internal auditors. The findings from these cross-audits are shared with the rest of the Colas group. Other regions are also trying out similar types of exchange (e.g. the Indian Ocean region and the US), often once the EO^a programme has started.

Internal procedures

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

- Under Bouygues Immobilier's Clean Worksite Charter (see section 3.3.1.1), an environmental coordinator must be appointed before the work starts, 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.

^a Environmental Officer.

- 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, concrete batching 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 3,000 production units all over the world.
- In 2019, Bouygues Construction continued rolling out its own TopSite label, which covers environmental, social and HR-related issues as well as innovation. There are several reasons why the proportion of sites certified with the label is rising. Certification is steadily being incorporated into processes and managed more consistently, as can be seen from the fact that the percentage of certified sites increased, even though the number of eligible worksites also rose in the reporting period.

20.1%^a

of worksites carry the TopSite^b label worldwide

TopSite: a label that is gaining ground

TopSite was created by Bouygues Construction to ensure that CSR standards are well complied with in the over 60 countries where its entities operate. Roll-out began in June 2018. It covers environmental, health & safety and quality standards, which were already covered by the now-superseded Ecosite and Chantier Bleu labels. However, TopSite goes further because it also imposes social and community-related standards on production sites, for example in terms of fighting illegal labour, customer satisfaction and the worksite's contribution to the local economy.

The scorecard applies both to building-related activities and to infrastructure, energy and services. All themes are weighted equally. Earning the TopSite label requires exemplary performance in every aspect of CSR. Group projects lasting longer than six months and with sales of at least €3 million are eligible for consideration. The worksite must meet 16 criteria on the scorecard and earn two bonus Innovation and Best Practices points (all themes combined) to obtain the TopSite label. To obtain the related TopSite Innovation label, it must earn five bonus points (at least one in each theme).

One year after launch, the TopSite label is being rolled out on Bouygues Construction's worksites:

- Bouygues Bâtiment International pledges to be a responsible corporate citizen in the regions where it operates, aiming for 100% of worksites to carry the TopSite label by 2023;
- the residential/commercial property development in Pontoon Dock, London, was in 2018 the first project worldwide to win the TopSite Innovation label. Developed by Linkcity and built by Bouygues UK, the worksite boasted a host of innovations: a website to keep residents informed, 3D scanning of the structures, an automatic system for monitoring dust, noise and vibrations and protecting the surrounding ecosystem, and innovations to improve well-being, health and safety on the worksite;
- TopSite has also been applied by Bouygues Travaux Publics to the Monaco offshore extension project and, more recently, to the worksite of the Fort d'Issy – Vanves – Clamart railway station, which also carries the TopSite Innovation label. This worksite was a venue for trialling the label and met all the conditions to achieve it: high-quality customer relations, strong collaboration with the municipal authority in Clamart to limit the impact on local residents as far as possible, and a strong score in terms of safety, society and community issues;
- Bouygues Energies & Services was awarded the TopSite label for the photovoltaic carport worksite in Corbas, in the greater Lyon area.

^a The percentage of worksites carrying the TopSite 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, except for the Bouygues Energies & Services head office, operating and maintenance contracts, call-off contracts/goodwill contracts and consortium contracts for which Bouygues Energies & Services is not the lead firm

^b Coverage: 85% of Bouygues Construction's consolidated sales. The auditor indicates that it has obtained reasonable assurance for the 2019 indicator.

Colas indicators

Indicator	Scope	Coverage	2019	2018	Remarks
Environmental certification of materials production sites % of sales before inter-company eliminations	Global	100% of sales (before inter-company eliminations) generated by materials production activities	65%	61%	The proportion, which was 4 points higher, remained at a satisfactory level given the range of contexts around the world in which Colas operates and the non-controlling interests held by Colas in many of these businesses. In some regions, however, managers have begun to question the usefulness of this approach, or would like to replace it with more practical and more pragmatic guidelines. The debate remains open, even though there is a strong tendency at subsidiaries to define the certified scope with greater precision. The upshot is that the consolidated 2019 target for subsidiaries of 75% was not met, in spite of good progress in the year, thanks to the environmental certification of McAsphalt (98%), which accounted for 9% of total sales (before inter-company eliminations) from materials production activities.
Rate of environmental self-assessment using Colas check-lists^a % of sales before inter-company eliminations	Global	100% of sales (before inter-company eliminations) of materials production activities for which checklists are applicable	79%	83%	The indicator decreased by 4 points but remained at a high level. The lower reading reflects first-time inclusion of Miller and McAsphalt group in the reporting scope. Although these large Canadian subsidiaries have many sites eligible for the indicator, the system only began to be implemented there in 2019. In Canada, the number of sites eligible for checklists rose by 87% but the number of completed checklists was up only 23%. Considering the size of Miller and McAsphalt group, the reporting scope for Colas increased by 9% but the number of completed checklists was a mere 2% higher. This automatically led to a 4-point decline in the second indicator, even though other regions continued to make progress (+1 point in France and +3 points international operations excluding North America). The consolidated target for subsidiaries in 2019 was 90%. Checklist assessments remain the cornerstone of the policy put into practice by Colas to circumscribe its environmental risk.
Materials production activities that use a tool to manage environmental impacts (environmental certification and/or Colas checklists) % of sales before inter-company eliminations	Global	100% of sales (before inter-company eliminations) generated by materials production activities	89%	84%	This combined indicator tracks both use of environmental certifications and self-assessments using Colas checklists, at materials production activities. It remained at a high level, having gained 5 points in 2019. The target is to reach 100%. This is an ambitious target given that other shareholders in subsidiaries might be involved, some of which are majority owners, preventing Colas from 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; concrete batching plants; fixed prefabrication plants; fixed recycling plants; bituminous membrane facilities; various fixed installations; fixed bituminous binder storage facilities. This excludes 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 89 sessions up to 2019 (with an average of 12 participants per session) since beginning in 2006.

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 six sessions held in 2019 brought together around sixty managers.

Lastly, since its launch in 2015, the collaborative intranet network, Yammer Bouygues, 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.

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 issues specific to the project in progress. One area of focus can be waste and pollution hazards.
- Bouygues Construction runs webinars on the E+C- (Energy+ Carbon-/Positive-energy building and Carbon Reduction) label to build and share expertise in this field. In 2019, specialists from Bouygues Construction's environment and eco-design department ran on-line classes (two per theme) to inform and educate employees about a range of issues, from biodiversity, carbon and building eco-design to the circular economy and the user experience. These "30-minute eco-design sessions" were specifically organised to provide answers and resources for operational staff looking to integrate sustainable development into their projects.
- European Sustainable Development Week (ESDW) and/or Mobility Week are other highlights in the internal communications calendar. For example, Bouygues Immobilier took advantage of the overhaul of its corporate travel plan to organise a talk on soft mobility so that it could present the travel alternatives on offer to employees. Meanwhile, employees at Bouygues Bâtiment France-Europe were invited to take part in several initiatives for safeguarding the environment. A week was devoted to this theme, during which they had the opportunity to view an exhibition on biomimetics and visit worksites scoring high on environmental criteria, such as the Biotopie building, which has now become headquarters of the Lille metropolitan authority. Bouygues Telecom conducts initiatives among employees and customers encouraging them to get involved directly. In 2019, the focal point was the theme of recycling used handsets, including a new in-store system for collecting used mobile phones and accessories.

276,280

handsets collected for recycling or re-use

Coverage: 100% of Bouygues Telecom's consolidated sales (France)

- Since 2018, TF1 has run a yearly "Staff engagement week" for its employees in April, representing the annual focal point of its CSR policy. During this week, specific themes relating to social responsibility or sustainable development are discussed via video content, masterclasses, inspirational examples or practical workshops. In 2019, "Staff engagement week" focused on the UN's Sustainable Development Goals (SDG). In addition, ten charities supported by members of staff receive a financial donation from TF1 during this week.

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.

TF1 raises awareness all year round through many different shows on its TV channels or websites, from weather bulletins and news reports to reports on Ushuaïa TV (a nature channel), campaigns aimed at children, the My Little Paris newsletter by Aufeminin and the *Impact Positif* podcast.

In June 2019, TF1 Publicité (the group's advertising sales unit) brought together all advertising industry stakeholders for a major event at La Seine Musicale venue on the theme of responsible consumption. The unit wants to contribute to corporate social responsibility, which as a theme is still largely unknown to the public, through several projects including:

- content eco-design, and;
 - master classes for companies to dialogue with consumers.
- In its terms & conditions for 2020, TF1 Publicité has added a clause which promotes products with a sustainability label.

At Colas, grass-roots dialogue with local residents, which includes information about environmental issues (including biodiversity), has led to higher acceptance of materials production activities. In Madagascar, Colas has since 2008 offered an educational and awareness-raising programme on protecting biodiversity. Last year, it produced a four-minute film in which an actor gave a humorous take on CSR as part of an exercise to set sustainability targets.

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, whilst strengthening the social fabric of local communities at the same time.

Bouygues Immobilier Indicator

Indicator	Scope (activity or region)		2019	2018	Remarks
		Coverage			
Number of volunteers in the Médiaterre programme supported by Bouygues Immobilier in its areas of engagement	France and subsidiaries	93.3% of Bouygues Immobilier's consolidated sales	230	114	The change is due to fluctuations in the number of available volunteers in the localities supported by Bouygues Immobilier's budget. In 2019 a strong commitment was made regarding the issue of waste management.

Several employees from Bouygues Construction gave courses on the circular economy at École des Ponts ParisTech and on lifecycle analysis (LCA) at ESTP^a.

a École spéciale des travaux publics, du bâtiment et de l'industrie.

Furthermore, Bouygues takes part in international events to promote its initiatives and innovations for making urban environments more sustainable and making progress become reality. For example, the Group and its business segments presented innovative solutions to visitors at the fourth Viva Technology event in Paris (16-18 May 2019).

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. Land-purchasing 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 are 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 practices (such as performance bonds, insurance, escrow accounts and provisions) that depend on national laws. Colas' provisions for site rehabilitation commitments totalled €184 million at 31 December 2019. 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 Minimising the environmental impact of business activities

3.3.2.1 Avoiding 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 building and civil works sites or related to the industrial activities at certain fixed locations.

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

Bouygues Construction handles these issues through its TopSite label (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.

These are all qualifying criteria to earn the TopSite label. Worksites must implement procedures for controlling environmental impacts on local residents.

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

- 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 major worksites, including the New Coastal Road project on Reunion Island, the Lens BRT^a in northern France and resurfacing projects in Madagascar;
- when tendering for projects involving environmental engineering, Colas calls in outside expertise to supplement its core road-building know-how.

The environmental certifications used by Bouygues Construction and Bouygues Immobilier also contain points to watch during the construction phase. For example, an HQE[™] project must ensure that all kinds of pollution (air, water and soil) are kept to a minimum. The Clean Worksite Charter aims to prevent and reduce air, water and soil pollution. Lastly, the quality benchmarks (HQE[™], BREEAM[®], LEED[®]) 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 Travaux Publics 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. Special arrangements were enacted to limit the effects of turbidity^b on the natural world, including a custom-made underwater screen that was installed to shield two nearby marine nature reserves. Suspended solids, water quality, terrestrial and underwater acoustics and reserve species are monitored regularly to assess the conservation status of the project's environmental criteria. This is a specific regulatory requirement of the Grand Paris Express major infrastructure programme.

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

a Bus Rapid Transit routes.

b Suspended material content.

3.3.2.2 Reducing 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 to local residents are among the points monitored by internal standards: TopSite, Clean Worksite Charter and Colas checklists.

One of the standards of Bouygues Construction's TopSite initiative addresses the management of noise pollution in consultation with project stakeholders as soon as this is established as a risk stemming from the worksite. Bouygues Construction also 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.

Procedures giving priority to the re-use of deconstruction materials are implemented, reducing the need for transportation as well as the related disturbances (see section 3.3.3).

- Colas is developing products that reduce traffic noise such as fractal-technology noise barriers, and noise-reducing asphalt mixes (Nanosoft®, Rugosoft® and similar), which can reduce traffic noise by as much as 9 dB. In 2019, 375,400 tonnes were produced compared with 393,600 tonnes in 2018, representing a 5% decrease. This reflected fluctuations in works contracts and was not driven by any specific factors. Additionally, this product range reflects the continuing investment by Colas on R&D over many years, for which it has received a number of industry awards.
- For Grand Paris infrastructure projects, Bouygues Travaux Publics is committed to cutting worksite noise pollution by installing sound barriers in sensitive areas and carrying out acoustic simulations, which are used to create a 3D image with colours representing noise intensity and range, based on data collected by sound level meters in the specific areas. Dragages Singapore (Bouygues Bâtiment International) has pledged to curb disturbance for local residents around its worksites. Teams hold meetings with residents to adapt solutions as the construction work progresses through various stages. The equipment for measuring and monitoring noise and other kinds of disturbance is powered by renewable energy.

Com'In, created by Bouygues in 2016 through the "Innovate like a Start-up" programme, is currently being ramped up thanks to funding from Bouygues Construction and Colas. This platform will analyse and manage noise, dust and mobility-related disturbances (traffic congestion, soiled road surfaces, etc.) in real time. Thanks to sensors fitted around worksites, a mobile app used by local residents to report disturbances and a self-learning algorithm, worksite supervisors will be able to use the solution to make the right choices in terms of works execution. Com'in is currently in the testing phase on five worksites in the Paris region (connected with the Grand Paris Express and Eole). In the coming months, this solution will be rolled out to other worksites. At the French national public works federation's Innovation Days event in November 2019, Com'in won the "TP 2019" award in the "Start-ups" category.

TF1 and Bouygues Telecom 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 (masts). 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 based on the first specific European directive obliging companies to evaluate their employees' exposure to electromagnetic fields.

3.3.3 Drawing inspiration from the principles of the circular economy

The construction industry generates 70% of the 324 million tonnes of waste produced in France. From 2020, France's energy transition law (LTE) – designed to encourage waste-reduction initiatives – requires that 70% of the waste produced by the construction and public works industry must be recycled. The Bouygues 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.

Aiming for zero final waste on worksites

In the field of waste recycling, Bouygues Bâtiment France Europe's goal is to achieve zero final waste. To attain this target, a results-driven experiment called Zero Final Waste Construction Sites was started in 2019, with a test project implemented in every operating unit within France. This campaign, which follows on logically from internal research on the circular economy, will enable each operating unit progressively to adopt the most suitable measures for reducing the environmental impact of the Group's construction activities.

Two main avenues will be pursued to aim for zero waste:

- The first is upstream of production, when the building is designed: this entails reducing wasted materials and packaging as much as possible.
- The second is downstream: separate sorting, which is already conducted for metals, could also be applied to other types of waste where technically possible and economically rational.

On the project at 185 avenue Charles-de-Gaulle, Neuilly-sur-Seine, led by Rénovation Privée (a subsidiary of Bouygues Bâtiment France Europe), priority has been assigned to re-using materials. Some 17,000 m² of carpet, 500 doors, 30 electrical cabinets and 20 tap-and-basin sets have been repurposed in this way. Marketplaces^a such as Cycle Up and Backacia have been tested as channels for selling on furniture and glazed partitions. To this end, a process for determining the amount and type of resources available is carried out from the marketing phase, including identification of and coordination with the various buyers. For example, in the gutting phase, ten material streams were sorted at source, with the result that an exceptional 94% of materials could be re-used, equating to the avoidance of 100 tonnes of waste and 80 tonnes of CO₂.

Another example is the redevelopment project for the Indes neighbourhood, located on the Sartrouville plateau, where UrbanEra[®] (the Major Urban Projects division of Bouygues Immobilier) has implemented a strategy based on three relevant areas of innovation for the region, including a major focus on the circular economy. In conjunction with Batirim, a Suez subsidiary, available resources were itemised and those carrying out the work were trained in the re-use and management of site waste, enabling a rich source of re-usable materials to be identified on site. These materials will gradually be re-employed in the various phases of the project. Furthermore, plans for re-using concrete in the structural components of future constructions are under way.

In 2019, Bouygues Immobilier also rolled out the first start-up incubator aimed at supporting the circular economy in urban environments, aimed at the construction and property sectors. Launched by Impulse Partners and Sinteo, with support from the French building technology research centre (CSTB), it reflects Bouygues Immobilier's policy to interact with and serve companies and other urban stakeholders. The incubator will be used to develop, test and implement innovative solutions designed by start-ups operating in the areas of construction, urban planning and the environment.

Other Group solutions further the aims of the circular economy by making 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;
- and from scalable building design principles that bolster reversibility as well as extensions and changes in use over the lifecycle of the building or infrastructure.

For example, Linkcity's Bâtiment K project in Lyon, situated in the new Eureka Confluence neighbourhood, aims to design a building capable of adapting to major urban changes at a lower cost using the dry-construction method^b. Initially designed as office space, the building can be transformed into housing units once the motorway running through the area has been downgraded to a thoroughfare.



For over 30 years, Colas Ile-de-France Normandie has assimilated the fundamental challenge of responsible management of spoil and materials from sites of all kinds, as well as their recycling and re-use. It has done this by primarily developing a network of around 40 facilities – recycling platforms, sorting platforms for commercial users and inert waste storage facilities – across its region.

Premys, Colas Ile-de-France Normandie's deconstruction subsidiary, which operates throughout mainland France, recycles structural waste from buildings made primarily of concrete. This subsidiary is working to optimise the re-use^c or recycling of waste from interior building materials such as gutting, and in particular from selective waste sorting (ferrous and non-ferrous metals, computer room floors, wood flooring, wooden beams, false ceilings, furniture, etc.) so that they become a source of raw materials or equipment. Premys is also testing solutions for selling products made from recovered deconstruction waste (such as doors and windows) to retail customers and tradespeople. Colas Ile-de-France Normandie was able to recycle more than 1.59 million tonnes of materials in 2019, including 290,000 tonnes of reclaimed asphalt pavement from the deconstruction of former road surfaces.

a BtoB e-commerce sites bringing together suppliers and purchasers.

b Construction method that does not require water, unlike the traditional "wet" method, resulting in lower energy consumption on worksites.

c According to Ademe, technically, re-use starts when the owner of a used item disposes of it, instead of giving it up for recycling (e.g. at a voluntary drop-off point or waste disposal site) or handing it over to a private individual. It is then classified as waste. It is then reprocessed so that it can be used again, thus giving materials a new lease of life.

3.3.3.1 Producing less waste^a : reuse, recycle and repurpose

Recycling and reusing construction-related waste

Environmental management systems (e.g. ISO 14001), as well as internal standards (TopSite label, Clean Worksite Charter and Colas checklists), make provision for responsible waste management. For example, one of the prerequisites for obtaining the TopSite label (which is awarded to Bouygues Construction's worksites) is sorting waste into at least three separate channels (inert waste, non-hazardous waste and hazardous waste) or more where required by local legislation. Bouygues Immobilier applies the Clean Worksite Charter^b, which makes on-site waste recycling mandatory using a waste management plan.

Bouygues group employees (from Bouygues Travaux Publics and Bouygues Immobilier) have helped produce a new instruction booklet on deconstruction and the repurposing of construction waste, in conjunction with Orée, an NGO. This booklet covers the entire deconstruction process and includes case studies and recommendations for each stakeholder concerned.

The business segments of the Bouygues group limit the production of waste arising from construction activities and promote recycling through several programmes.

Bouygues Construction rolls out programmes for reducing and recycling waste on construction sites, especially for civil works activities. Excavated materials are recovered for use as backfill or for the environmental rehabilitation of sites. Several of Bouygues Construction's operations re-use secondary raw materials directly on-site.

Energy renovation: Bouygues Bâtiment recognised

The Fuschia residence, in Paris and renovated by Bouygues Bâtiment Ile-de-France Habitat Réhabilité, received the special jury prize for renovation (Grand Prix Rénovation) at the 2019 Green Solutions Awards. The project involved energy renovation of 231 housing units, with a keen focus on re-using or recycling materials. Altogether, 80% of site waste was either re-used or recycled. Operating this circular-economy policy and running the worksite efficiently led to a reduced environmental footprint:

- 20 tonnes of sand were saved;
- 80 tonnes of carbon emissions avoided, and;
- 95 trees were protected at the site.

Bouygues Construction has also forged partnerships with various circular-economy start-ups and SMEs:

- Hesus is a networking platform connecting worksites offering spoil with those needing backfill, as well as connecting trading platforms for the sale and purchase of building materials;
- Circouleur recovers opened tins of paint from worksites to make fresh paint. The production of professional-grade paints that are 70%-based on recycled paint avoids the incineration of previously discarded paints and reduces the extraction of raw materials. As a result, these paint products have a carbon footprint that is 12 times smaller. Emissions of VOCs (volatile organic compounds) are also reduced, leading to improved indoor air quality. This solution is already being tested on the ABC project in Grenoble and on a selection of zero-waste projects run by Bouygues Bâtiment France Europe.

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. This platform, called TrEx, is aimed at firms that produce waste as well as transport firms and storage-site managers. Each digital form contains about 40 fields to fill in, including the quality of the spoil, the transport firm's identification number, the origin and destination of the spoil, etc. The platform has been available since January 2017 and is now required by Société du Grand Paris under the terms of all its civil engineering contracts.

Bouygues Travaux Publics and the BRGM^c are working on improving the understanding of trace-metal mobility in excavated soil.

For its worksites, Bouygues Travaux Publics has designed a tracing system called Ubysol. This supplementary traceability system is now deployed on packages T2A and T3A of Line 15 on the Grand Paris Express project. Ubysol uses vehicle geolocation to track the itinerary of waste plus type of waste, 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 Objenious LoRaWAN[™] connected objects network to connect devices with each other (see also the section on Bouygues Telecom in Chapter 2 of this document).

16%

of asphalt pavement recycled in order to reclaim bitumen, up by one percentage point versus 2018

Coverage rate: Colas' materials production activities worldwide

Recycling^d and the circular economy are of vital importance to Colas. As a leading producer and user of construction materials, Colas recycles and re-uses waste and site-demolition materials from its own road-building activities. It also recycles and re-uses waste and materials from other construction

a Preventing food waste: given the type of businesses operated by the Bouygues group, this theme 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.

b The Clean Worksite Charter applies to all of Bouygues Immobilier's commercial property developments and to residential developments that are NF Habitat HQE[™]-certified (see section 3.3.1.2).

c France's geological and mining research office.

d Any recovery operation whereby waste, including organic waste, is reprocessed into substances, materials or products to fulfil its original function or another purpose. Waste-to-energy, waste-to-fuel and backfilling operations cannot be classified as recycling.

and public-works professionals and even other industries. This includes mirror glass waste, broken porcelain and shoe soles. Roadworks account for the bulk of aggregates consumption, and aggregates are the most widely used material after water. Aware of the responsibility that comes with this, Colas has been developing its recycling techniques. Today, 800 Colas sites transform used materials, primarily reclaimed asphalt pavement, to turn them into civil works materials. This avoids production of bitumen from a refinery, the operation of around 20 quarries worldwide and an even larger number of landfill sites, as shown by procedures for recovering and reprocessing of asphalt pavement from roadway deconstruction. Amongst the products incorporating recycled materials is Ecomac^a, 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.

Circular economy: the example of the renovation of runway No.3 at Paris-Orly airport

From July to December 2019, Colas rebuilt runway three at Paris-Orly Airport. Following the principles of the circular economy, Colas agreed with ADP that they should recycle on-site all of the 185,000 m² of concrete slabs used for the former runway. As each slab was 40 cm thick, the material amounted to 235,000 tonnes of concrete, which was then crushed for re-use.

More than half of the concrete (125,000 tonnes) was treated with hydraulic binders. Another 49,000 tonnes were reprocessed to use in drainage channels. Most of the remaining concrete was re-used as coating concrete for tubing. The rest was re-used at other locations.

Colas teams set up three open-air plants on the site to process the used slabs, which limited the number of haulage operations and reduced the environmental impact of the project. Specifically, 13,000 articulated-truck trips were avoided (6,500 to clear the material and the same number to transport it to other locations).

Colas indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Recycled materials in relation to the volume of aggregates produced^a	Global	Asphalt mix and aggregate production activities, and railway worksites	9.8%	10%	In 2019, Colas recycled and recovered almost 9.2 million tonnes of material, equating to 10% of total aggregates produced. This represented a worldwide saving equivalent to the average production of 47 Colas quarries. The ratio of materials recycled was stable between 2018 and 2019 in spite of a 9% increase in the production of aggregates. This resulted from a marginally higher tonnage of recycled materials ^b . The biggest increases were outside France excluding North America (up 7%) and in mainland France (up 4%), bearing in mind that mainland France accounted for 60% of total production of recycled materials at Colas.
Asphalt pavement recycled in order to reclaim bitumen	Global	Materials production activities	16%	15%	The percentage of recycled asphalt pavement rose by 1 point in 2019. The quantity of reclaimed asphalt pavement increased by more than 2%, while asphalt production fell by 3% (particularly in the Middle East, western and northwest France, and Quebec). In contrast, the consolidated target for Colas' subsidiaries in 2019 was 17%. The percentage varies from one geographical area to another, depending on urban density, customer habits and the techniques used at asphalt mixing plants. Some subsidiaries achieved high percentages: Roadworks Ontario (42%), Branscome (30%) and Reeves (28%) in North America, and Colas Belgium (25%), Colas Suisse (23%) and Colas Rhône-Alpes/Auvergne (20%). Such progress is harder to achieve in less proactive countries. The total savings made were equivalent to the annual bitumen production of a medium-sized refinery.
Surface area of road pavement recycled in-place million m ²	Global	Worksites activities	7.3	3.3	The surface area of road recycled in-place more than doubled in 2019. This significant increase is linked to the incorporation into the reporting scope of Miller group (Canada), which uses this technique on many of its projects and accounted for 60% of total 2019 performance.

a The auditor indicates that it has obtained reasonable assurance for the 2019 indicator.

b The industry consensus holds that the maximum recycling ratio achievable for all asphalt mix excavated or planed off the road is between 20% and 25% in OECD countries, with this rate varying locally 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, France, Switzerland, 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

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Waste oil recovery rate	Global	All activities	68%	65%	The general consensus is that the optimum waste-oil recovery rate is around 80%, taking into account the oil that is consumed and burned by road and plant vehicles. At Colas, the recycling ratio rose by 3% in 2019. ISO 14001 certifications and annual self-assessments using checklists take account of all waste management.

Bouygues Construction indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Proportion of non-hazardous waste that is recycled (not disposed of in landfill)	Global	85% of Bouygues Construction's consolidated sales	48%	58%	This difference must be considered cautiously following a change in the way this indicator is calculated. The recycling rate measured by this indicator in 2018 only covered materials. It now also covers energy. Despite this wider scope, the decrease in the overall recycling rate is attributable to two subsidiaries, Bouygues Bâtiment International and Bouygues Travaux Publics, which respectively account for 47% and 37% of the total volume of waste collected. Their low recycling rates – Bouygues Travaux Publics 37% and Bouygues Bâtiment International 50% – are related to the progress and type of the current project, which in 2019 produced categories of waste that are hard to recycle (e.g. foundation work).
Percentage of non-hazardous waste recycled	France	67% of Bouygues Construction's consolidated sales	84%	n.a.	In 2019, the decision was made to limit the scope of this indicator to France alone (all operations) to allow for a finer measurement of this indicator in keeping with the target to recycle 70% of construction waste as specified in France's Energy Transition for Green Growth law. Bouygues Construction achieved a rate of 84% for France after boosting awareness among employees, most notably concerning the sorting of waste at source. It also worked closely with suppliers and subcontractors to improve the management of waste collected on worksites.
Percentage of spoil recycled	Global Civil works activity	19% of Bouygues Construction's consolidated sales	58%	73%	Spoil represents most of the waste produced by Bouygues Travaux Publics through excavation, tunnelling and earthworks. There was, however, a significant decrease in the volume of spoil produced in 2019 (-39%). The 15-point decrease in the spoil recycling rate in 2019 was due to several factors. First, encouraging more materials to be re-used on site (Bouygues Travaux Publics Mines RTA, Région France, Prader Losinger) automatically increases the proportion of hard-to-recycle spoil, which then lowers the overall recycling rate. Secondly, the type and state of progress of ongoing projects affected the categories and volumes of spoil produced.

n.a. : not applicable

In accordance with remarks by the auditor regarding 2018 and comments by the AMF, Bouygues Construction has increased the reliability of the process for collecting waste-related data. Meetings with the relevant departments (CSR and Purchasing) were held to identify where changes could be made and to review processes. Work was also carried out with suppliers to consolidate and tighten up requirements.

Consistency tests were implemented to minimise reporting errors. With these changes in methodology, the degree of reliability for France has improved. A decision was made to shift to two indicators. The first, covering France, measures the waste recycling rate, enabling the Group to meet targets under French regulations. The second, covering the entire reporting scope, measures the overall recycling rate for waste, including both materials and energy. Another reason for this decision was that the distinction between materials and energy recycling is not systematically made in international operations.

Soil decontamination

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 obtained in 2001, it has also been MASE^a-compliant since 2010. In 2018, Colas won the 2018 “BIM d’Or” award for decontamination of the Dunkirk refinery, marking the first time that BIM^b had been applied to subsoil issues anywhere in the world. The deconstruction and decontamination of the Dunkirk refinery is a large-scale task (surface area of 95 hectares, 35 km of underground piping, 200 vats and even unexploded WWII-era bombs). It also recognised the quality of the technical developments and the philosophy of collaborative openness that was central to the process.

BZ-Environnement is Bouygues Construction’s decontamination subsidiary, holding four patents for on-site waste treatment and five certifications (ISO 14001, ISO 9001, ISO 45001, MASE, and LNE Polluted sites and soils, areas B and C). Its expertise in decontamination has opened the door to both land and groundwater remediation. Since 2019, it has also been called in for air decontamination, using an internally designed process that cleans air using biofilters. After a successful trial in 2018, the company was awarded a four-year master service agreement to install 35 biofilters on industrial sites in the Paris region.

As well as offering decontamination services, BZ-Environnement has since 2017 operated a “biocentre” in Longueil Sainte Marie, north of Paris, which sorts and repurposes non-hazardous polluted soil collected mainly from worksites in the Paris region. At end-December 2019, this site will have processed over 108,000 tonnes of soil over the calendar year (219,000 tonnes since starting operations), 70% of which have been reclaimed and re-used in the circular economy, thus saving raw materials and avoiding disposal of the polluted soil at landfill sites. The “biocentre” also has a riverside quay, allowing 12% of the soil to be transported by water, which lowers the carbon footprint of the operations by preventing the emission of 3,900 tonnes CO₂ equivalent from road haulage.

Measures for preventing or re-using 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 Bouygues 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), and to Nodixia (since 2015). Since the start of these contracts, this initiative has collected 138,162 items of equipment (of which 17,351 between October 2018 and September 2019). Since it started, around 30% of the 1,083 tonnes of waste equipment collected was destroyed and 70% was re-used.

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, Bouygues Telecom’s first action is to analyse the on-site hardware closely and, where possible, assign it for re-use. Hardware that is not re-used is sold on after reconditioning. Items that cannot be sold on are recycled by specialists in Europe. This policy has been important in the dismantling arising from the network sharing agreement with SFR. Nearly 95% of the hardware from this dismantling has been re-used or recycled.

Mobile handsets: Bouygues Telecom commits to the circular economy

Bouygues Telecom took several measures in favour of the circular economy in 2019:

- In the area of used handset recycling, 2019 marked the tenth anniversary of its partnership with Recommerce, a leading refurbisher of smartphones in France, as illustrated recently by its inclusion in the French Tech Next 40 label.
- After all this time, the option of selling back handsets has become a normal part of business for Bouygues Telecom stores. This is promoted year round through Bouygues Telecom’s policy of offering a discount if a customer trades in their used device. More and more 1-for-1 events, whereby used handsets can be traded in for new devices, are being held throughout the year.
- After having started by offering this service on its website, in late 2018 Bouygues Telecom started offering refurbished handsets in store, in response to demand from existing and potential customers.
- On top of this, Bouygues Telecom helps customers keep their existing handset for longer by offering affordable repairs at WeFix points. The partnership with WeFix was signed in 2019. Launch of the service was planned for October, initially in selected locations.
- For devices that can no longer be used, Bouygues Telecom introduced a new in-store collection system for both handsets and accessories in late 2019, with the aim of offering existing and potential customers a recycling solution.

All these initiatives launched in 2019 will have a full impact in 2020.

a A manual on improving Health & Safety and Environmental issues within companies.

b Building Information Modelling.

Bouygues Telecom indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Number of handsets collected for recycling or re-use	France	100% of Bouygues Telecom's consolidated sales	276,280	270,521	This slight increase can be explained by a greater willingness among customers to surrender their used mobile handsets for re-use or recycling.
	From customers (Bouygues Telecom stores, general public and corporate websites, employees)		253,230	251,928	
Through the after-sales service			23,050	18,593	

3.3.3.2 Using resources sustainably and wisely

Energy, raw materials (such as timber and aggregates) and water 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 and specific lean management procedures are being steadily deployed in Group entities.

Selecting and managing raw materials

To draw less on natural resources, those business segments concerned have pinpointed two major avenues:

- optimisation of resource utilisation (through eco-design and recycling), and;
- giving priority to sustainably-sourced resources (e.g. certified products).

Additionally, the Group dialogues with customers to ensure that secondary raw materials, i.e. those derived from recycling or re-use, are used as much as possible in buildings and infrastructure.

Colas indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Volume of recycled materials millions of tonnes	Global	Asphalt mix and aggregate production activities, and railway worksites	9	9	The volume of recycled materials was stable in 2019.
Volume of aggregates from recycled pavement millions of tonnes	Global	Materials production activities	6.2	6	The percentage of reclaimed asphalt pavement was steady in 2019.

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

Bouygues Construction is trialling alternative construction methods and has developed its expertise in the use of timber – the material with the smallest carbon footprint – in its projects. Almost 100 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, aims to ensure that timber purchases do not threaten the world's forests, the individuals who depend on these forests and the biodiversity that they shelter. A new sustainable-timber buyers' guide, designed with the help of WWF France and Bouygues Construction's Innovation and Sustainable Development department, was published in 2019 to encourage and support employees in sourcing timber that is legally and sustainably grown or recycled (see section 3.4.3.1).

In 2017, Bouygues Immobilier signed an agreement with Karibati, a consultancy that helps companies integrate biosourced materials such as organic concrete, insulating panels and timber into their property development projects. Since the partnership began, 17 projects have been helped to use biosourced materials or to obtain the "Biosourcé" label.

Promoting eco-friendly alternatives to optimise use of raw materials

Bouygues Construction and Colas 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 helped design Seve®, an eco-comparison tool produced by the construction industry in France. Seve® is a software solution that is used in the tender process to conduct an environmental assessment of the various development and maintenance phases for road and earthworks projects. It

has seven quantitative criteria, including CO₂ emissions. It compares the standard solution with a design variant that can then be proposed to the client, showing its environmental benefits relative to the standard solution for each criterion.

Eco-comparison software that is pan-European

The road industry and the EU are working to see how Seve^a 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. In 2018, SustainEuroRoad enabled the creation of a new pan-European database and demonstrators at worksites and production sites across Europe (Germany, Spain, France and Hungary). Its aim is to support GPP (Green Public Procurement) in its efforts to introduce environmental criteria, on a voluntary basis, into public procurement. In 2019, experts working on the project pulled together technical specifications from each road construction project where there was potential to reduce environmental impact and created different scenarios modelling positive performance. SustainEuroRoad finished developing the software – a comprehensive decision-making tool, harmonised at European level, that can calculate and then lower the environmental impact of building and maintaining road infrastructure over entire lifecycles. The software is changing continually in response to users' comments so that it aligns as closely as possible with the reality on worksites.

The number of environmentally friendly alternatives on offer reflects the current state of the market and the difficulty of offering such alternatives. The proportion of greenhouse gas emissions avoided by the Group increased by 17% in 2019, while the number of environmentally friendly alternatives offered was 4% higher and the number of such alternatives selected increased by 23%. Within the industry, Colas is playing an active part in efforts to give new impetus to eco-friendly alternatives, especially considering the interest sparked by Seve^a (a French initiative) across Europe.

Considered an important avenue for differentiation in international operations, eco-friendly alternatives are 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 tool for calculating the greenhouse gas emissions of property development projects 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 operational managers about carbon compatibility, in turn promoting the selection of low-carbon materials and construction methods.

Eco-design

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.

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.

Given the increasingly rapid obsolescence of office buildings, and based on the growing need for housing throughout the country, Linkcity is investigating the idea of resilient urban environments and the concept of building reversibility. To keep up with swift changes in urban environments, Bouygues Construction has developed "Office Switch Home", a concept for easily repurposing buildings. One such example is WORK#1 in Lyon, to be handed over in 2020. This office space has been designed to become a residential building as and when the needs of the neighbourhood evolve. The project is part of Eureka Confluence, which is backed by SPL Lyon Confluence, the Lyon metropolitan authority, Linkcity, Bouygues Immobilier and many other partners.

Bouygues Telecom is lengthening the useful life of its Bbox router by adhering to eco-design principles and by operating a policy for repairing and re-using this hardware. Consequently, the average useful life of a Bbox router is between eight and ten years^a.

The EDA project, a low-carbon positive-energy building

Following a second call for bids as part of "Invent the Grand Paris Metropolitan Area 2"^b, in June Bouygues Immobilier was picked to develop the EDA project. The consortium, led by Bouygues Immobilier, will therefore build a Green Office building on a 3,557 m² plot of land located next to the Seine river in Paris. Currently, the land is used as a storage depot. The office space will include coworking spaces, a bicycle repair shop, a canteen that is also open to the public, and "pick & go" urban logistics spaces.

The floor area will be around 15,000 m². The building will comprise seven levels above ground and four basement levels and will be an 80% timber structure. The circular economy is an integral part of the project. For example, once the building is in use, grey water will be reused for watering green spaces. Urine will also be reprocessed as a natural fertilizer.

The EDA Green Office will produce more energy that it uses. A Climespace system (district cooling) will be installed in the basement to supply the neighbourhood with cool air and mitigate the heat island effect. Photovoltaic panels and rapeseed oil cogeneration will be used to transform and generate heat.

An energy-storage system using recycled car batteries is also planned, for channelling surplus energy into the building during periods of peak consumption or into the grid.

During the construction phase, structural works account for over half of total carbon emissions. By using timber, 2,700 tonnes of CO₂ can be avoided, thus reducing carbon emissions by 16% relative to a conventional concrete construction. Priority will be given to sourcing timber in France so that supply chains can be kept short.

a Based on after-sales data and the entire installed base.

b Europe's largest call for tenders in the field of property development, urban planning and architecture.

Once the building is in use, some 660 tonnes of CO₂ emissions will be avoided, thanks to its production of energy.

Promoting effective energy-saving solutions

Bouygues 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.

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 offers clients the possibility of applying EPCs to all its Green Office[®] developments.

The Bouygues group's business segments offer customers innovative but competitively priced services for optimising energy consumption. In addition to expertise gained in designing passive-energy and positive-energy buildings and carrying out rehabilitation work, Bouygues Construction and Bouygues Immobilier are strongly committed to various initiatives and labels such as BBCA^a and E+C-.

- **BBCA (low-carbon buildings):** with Sensations, the tallest high-rise apartment building in France that is 100% timber (handed over in 2019), Bouygues Immobilier distinguished itself by achieving an Excellence score under the BBCA label. Specifically, the energy consumption for heating is set not to exceed 15 kWh per square metre of living space. In July 2019, the Enjoy development received an award as the largest timber positive-energy office building in France. To date, two Group projects have received the BBCA label.
- **E+C-:** the pioneering E+C- label (more Energy, less Carbon) was launched in 2016 to help companies keep pace with future environmental standards under 2020 rules on energy and carbon performance. To get ready, Bouygues Immobilier set up an internal monitoring unit to gauge the performance of 30 developments against E+C- standards, including 11 projects that had received or applied for labels. A project-wide carbon assessment tool has been introduced to help operational teams, who will be trained in carbon-reduction methods in early 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[™], BREEAM[®] and LEED[®]).

Bouygues Construction offers Wizom Réhabilitation, for rehabilitating occupied or empty accommodation. It has three main aims:

- to help build harmonious communities;
- to enhance the value of property, and;
- to heighten the appeal of urban environments.

In the Jas-de-Bouffan neighbourhood in Aix-en-Provence, a worksite meeting house was opened as soon as the rehabilitation project began so that future occupants could come and share their expectations, which could then be better taken into account. There were several channels for communication during the two-year project, including group information sessions, a website dedicated to the development and to future tenants, and a worksite magazine.

Managing energy efficiency

In order to reduce consumption, Bouygues Energies & Services and Bouygues Immobilier have developed and marketed tools for measuring and managing energy performance for their customers (Hypervision[®], Flexom and Si@go[®]). Bouygues Construction's "Wizom Connected" service offers solutions for reducing a building's carbon footprint when it is already in use. Digital devices (such as smart thermostats) and a best-practice handbook sent to occupants both help foster changes in people's habits. "Wizom Connected" provides for more efficient energy use, for example consumption measurement, automatic leak detection and shutdown, and remote management. Since launch in 2016, Wizom Connected has been fitted to all kinds of buildings, from office space and housing to hospitals. In the summer of 2019, 118 homes for owner-occupiers were equipped with Wizom Connected services as part of the Chapelle International project.

The Group's business segments also offer energy-performance solutions for local authorities. Since running the IssyGrid[®] pilot project, Bouygues Immobilier has been capable of offering smart grids on all large projects. It also designs sustainable neighbourhoods to be smart-grid ready so that full-scale grids can be rolled out. For the Nanterre Cœur Université development, designed by UrbanEra[™], attention was focused on building design and optimised energy management, which led to the addition of a smart grid and a solution developed in partnership with EDF Optimal Solutions. In total, 60% of the neighbourhood's energy is provided by a warm-water loop harnessing ground-source heat. Other components in the energy mix are bio-fluid cogeneration, photovoltaic panels and grey-water heat recovery.

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:

- The Citycharge[®] solution, which installs electric vehicle charge points on lamp posts, makes it easier to roll out electric mobility solutions.
- Alizé[®] is a solution offering charge points for electric vehicles aimed at local authorities and businesses. With their smartphone, users can start charging their vehicles, see the location and availability of charge points in real time, and reserve a charge point. They also receive a text message once their vehicle has finished charging.
- France's first smart city was inaugurated in Dijon on 11 April 2019. Bouygues Energies & Services is responsible for the design, building, operation and maintenance of a connected control station that will remotely manage the urban infrastructure of the authority's 23 municipalities for a 12-year period.

a Certifies that a new or renovated building has an exemplary carbon footprint.

b The Major Urban Projects division of Bouygues Immobilier.

Bouygues Energies & Services is developing SoWATT, an innovative web platform that with a few clicks selects the most suitable LED-based street lighting. SoWATT can be used to choose, quickly and easily, the best configuration for an individual streetlight, thus adapting lighting to levels of road usage. This is supplemented by environmental performance indicators concentrating on light pollution.

Objenious, a Bouygues Telecom subsidiary that uses LoRa® technology to connect devices, works with its eco-system of business partners to offer a range of solutions for saving energy, reducing carbon footprints and supporting sustainable mobility.

- For instance, the Apt group of municipalities has extended remote meter reading to cover its entire area.
- The Municipality of Montpellier has introduced a smart-parking system to assist in finding spaces, preventing traffic jams and reducing carbon footprints and to offer inhabitants new services.

In Bordeaux, Bouygues Telecom ran the first real-life test for 5G in July 2018. Two specially equipped 5G masts were used to test the new possibilities afforded by this technology such as remote control of vehicles, telemedicine and remote maintenance. To identify new uses of smart technology, the Bouygues group has created a 5G “accelerator”, which houses under one roof all its initiatives connected with smart mobility, smart city, smart building and smart entertainment – fields in which it is extremely active.

Flexy Moov, a new shared electric-vehicle solution for businesses

Bouygues Telecom’s new subsidiary, Flexy Moov, born out of “Innovate Like a Start-up”, the Group’s intrapreneurship programme, offers a fleet of self-service electric vehicles located in company car parks.

Since May 2018, Flexy Moov has offered businesses the opportunity to put their free parking spaces to better use by adding a mobility service for their employees.

The first step is the installation of a “Flexy Centre” in the car parks of participating companies. Using a dedicated app, the company’s employees choose the mode of transport best suited to their planned journey: car, bicycle, moped or scooter (all electric-powered). Flexy Moov handles maintenance and insurance for the vehicles. It also provides assistance and supplies safety kits for users.

The benefits for companies and users are many, from a reduced need for parking spaces (as employees no longer feel they need to bring their car to work every day), lower business travel expenses and time savings.

Because it uses electric vehicles, Flexy Moov is reducing the number of fossil fuel-driven vehicles (which are increasingly less compatible with air-quality and climate standards) on the road. This service gives companies the opportunity to safeguard the environment, comply with legislation (corporate mobility plans, France’s new “LOM” law and WLTP standard) while enhancing their corporate image and improving quality of life at work for employees. The service has been rolled out at Bouygues Telecom’s Technopôle site in Meudon, just south-west of Paris.

Bouygues Immobilier Indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Surface area of Green Office® commercial property developments in operation during the reporting period	France and subsidiaries	94.8% of Bouygues Immobilier’s consolidated sales	79,767	84,398	In 2019, work was still ongoing for phases two and three of Nanterre Cœur Université, while Trigone Quartz Opale, Nanterre Spring phase B and Enjoy Batignolles were handed over, totalling a floor area of 79,767 m².
Number of passive/positive-energy homes being built or handed over in the full year	Global	100% of Bouygues Immobilier’s consolidated sales	732	374	The three developments Puteaux D and ABC (51 and 184 positive-energy dwellings, respectively), Oreka (17 positive-energy dwellings), Villa Clémence (19 positive-energy dwellings) were started, while work on Symbioz, Sensations and Ambitions continued.
Number of smart grids to be rolled out	France excluding subsidiaries	87% of Bouygues Immobilier’s consolidated sales	6	6	The six smart grids under development span a surface area of 617,400 m².

Reducing the energy consumption of business activities

The Group’s business segments are implementing programmes to help limit or reduce energy consumption arising from their operations (most notably TopSite at Bouygues Construction).

Bouygues Construction is testing out sensors measuring energy consumption by source on worksites. It is using Siconia sensors, supplied by Bouygues Energies & Services, to conduct predictive maintenance with an IoT application, and Qualistéo to display and manage energy flows, as a part of the Lean Energie initiative. The goal is to measure consumption for each type of tool, and then instigate remedial action to reduce energy use, leading at the same time to cost savings.

At Colas, 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 run between 2014 and 2017 to reduce the energy used by all operations at Colas, on construction and production sites as well as in buildings and logistics.

To reduce energy consumption, Colas is focusing its efforts on:

- measurement tools, with software deployed to monitor the output and energy consumption of asphalt mixing plants. This software, now entering its second iteration, can track energy consumption and asphalt mix temperatures in real time, and it can send alerts over the internet and to smartphones as well as providing reporting statistics. The software has been fitted to 31% of units, equating to 38% of sales before inter-company

eliminations. Colas equips its road and plant vehicles with energy consumption monitoring systems, which record and analyse the energy drain of some 48,000 vehicles, across 2,000 production units and 800 worksites, and;

- 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%.
- Additionally, it has been observed that, in addition to low-carbon alternatives, the following help achieve indirect energy savings:
- warm asphalt mixes, which save some 15% in production-related energy relative to hot mixes. In 2019, warm asphalt mixes produced by Colas accounted for 20% of total output. 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 increased 25% is equivalent to nearly 3,900 freight trains (with each train containing 44 freight wagons), which avoids using some 351,000 thirty-tonne trucks.

Colas indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Energy used per tonne of asphalt mix produced (KWh per tonne)	Global	Asphalt mix production activities	79	78	The indicator deteriorated slightly in 2019, notably due to the inclusion of Miller group in Canada, a country where this ratio is hampered by the climate.
Warm- and low-temperature asphalt mixes	Global	Asphalt mix production activities	20%	22%	Warm asphalt mixes, which save some 15% in production-related energy relative to hot mixes. The percentage declined slightly in 2019 due to the inclusion of Miller, which on its own accounted for 6% of total hot-mix production and does not produce any warm mix. All employees remain committed to expanding the use of these products across all regions, adapting production facilities and conducting ongoing research to develop new solutions that enable lower temperatures to be used, the main rationale being to reduce risks to people's health. In 2019, as in 2018, the US subsidiaries achieved the highest levels. Branscome, which produces asphalt solely from warm mixes, is exemplary in this respect.
Total energy costs € million	Global	All activities	450	427	The 5% increase is due to the inclusion of Miller and McAsphalt in the 2019 scope. On an unchanged basis, energy costs fell by 3%.
Total energy consumption millions of MWh	Global	All activities	7.9	7.6	The 4% increase in energy consumption reflected the inclusion of Miller and McAsphalt. Excluding this, total energy consumption was 7% lower.

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). At the data centre, a self-managing free-cooling system was installed on cooling units, drawing in fresh air from outside whenever the temperature drops below 9°C. Other best practices were also implemented, including regulating the air-conditioning units and shutting some off when weather conditions permit (40% of a data centre's overall electricity consumption relates to cooling).

Bouygues Telecom indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Total electricity consumption in GWh	France	100% of Bouygues Telecom's consolidated sales	648	555	Gross energy consumption on the mobile network increased, but in relation to data traffic (per terabyte carried) over the same period, power consumption fell 20% in 2019.

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.



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^a, was transformed into a positive-energy building during its renovation. The new Colas head office, Prism', has received Bepos-Effinergie® 2013 certification.

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

The first floating solar farm in France was handed over in late 2019 by Bouygues Energies & Services, in Piolenc (south of France). This power plant, comprising nearly 50,000 panels and situated on Lake Madone, can meet the annual energy demand of the municipality of Piolenc (i.e. 17 MW peak). Nature monitoring was conducted throughout the project to limit the impact of the installation.

Following the inauguration of the first agrivoltaic demonstrator in 2018, in south-western France, Bouygues Energies & Services signed a contract alongside Bouygues Bâtiment International to supply three new solar farms in Thailand (bringing the total number of farms built in that country to eight). Bouygues Bâtiment International will be responsible for the onshore work and for operating and maintaining the farms. Bouygues Energies & Services will oversee the design, the technical and legal assessments, and the offshore supply of the three facilities. These projects embody Bouygues Bâtiment International's strategy to develop – alongside Bouygues Energies & Services – its photovoltaic expertise as it seeks to meet the rising demand for solar farms in the Asia-Pacific region.

Wattway Pack: producing, providing and storing renewable energy

Colas took onboard feedback when developing its next generation of Wattway photovoltaic panels. These are more resilient and economical, achieving a 20% better performance than previously. Wattway Pack is a turnkey solution consisting of between 3 and 12 traffic-resistant photovoltaic panels that can be used to produce, provide and store renewable energy for roadside equipment, as a self-contained system. Wattway is particularly well suited to areas lacking a connection to the grid, but also in cases where connecting to the grid is technically challenging and costly. It can directly power charge points for electric bicycles or scooters, connected street furniture, CCTV and variable message signs. It represents a major step toward smart roads, whereby additional functions can be incorporated into road surfaces electronically. In April 2019, the Wattway Pack solution was certified by the Solar Impulse foundation.

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. 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 (TopSite and checklists).



Bouygues Construction and Colas are those most exposed to water-consumption issues in sensitive areas. 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, its subsidiary Bouygues Travaux Publics has put in place systems, wherever possible, for recycling wastewater from concrete batching plants and liquid mud plants in order to water grounds, clean tunnel boring machines and produce concrete.

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. 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.

The methodology used to assess the Colas operating regions concerned is based on the interactive Overall Water Risk – Baseline Water Stress map, published on the website of the World Resources Institute. The water consumption of Colas' permanent facilities in these areas in 2019 is estimated to be under 1 million cubic metres.

^a Challenger was the first building in the world to have achieved triple certification at the highest level in each case: HQE™ Passeport Bâtiment Durable - Exceptional level, LEED® Platinum and BREEAM® Outstanding.

Colas indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Share of permanent activities located in extremely water-stressed areas % of sales before inter-company eliminations	Global	100% of the sales before inter-company eliminations of the permanent activities	5%	6%	In 2019, the number of sites in areas experiencing extremely high water stress decreased due to a change in the baseline map. Worldwide they represented 5% of sales before inter-company eliminations. Most of these sites were quarries and gravel pits but this also included workshops, depots, binder plants, asphalt mixing plants, ready-mix concrete plants and recycling platforms.
Water self-sufficiency rate in extremely water-stressed areas % of m ³	Global	100% of the total sales before inter-company eliminations of the permanent activities in highly water-stressed areas	77%	73%	In addition to reducing water consumption in these localities, a key objective for Colas is to increase water self-sufficiency so as to minimise disruption of the water cycle and downstream water use. The water self-sufficiency indicator rose 4 points to 77%, implying that most of the water consumed was obtained internally as opposed to from the local water supply, thereby preventing water shortages for other users.
Share of sales in extremely water-stressed areas where an action plan has been implemented % of sales before inter-company eliminations	Global	100% of the total sales before inter-company eliminations of the permanent activities in highly water-stressed areas	60%	76%	By tracking its action plan progress indicators, as part of a continuous improvement process, Colas is able to monitor and reduce pressure on water resources in highly water-stressed areas. Implementation of action plans declined between 2018 and 2019 (as measured in terms of sales before inter-company eliminations and water consumption), mainly as a result of changes in scope arising from changes to the baseline map.

Colas has put in place a surface water and groundwater protection policy to guard against the impact of accidental or everyday pollution at its permanent production and maintenance sites. This policy follows strict guidelines, built upon Colas checklists, to ensure that these sites are or can be completely isolated from the surrounding environment.

Additionally, Bouygues Construction and Bouygues Immobilier actively promote building environmental certifications (*NF Bâtiments tertiaires - Démarche HQE^a* and *NF Habitat HQETM*), 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 Taking part in the fight against climate change

In January 2019, the CDP (Carbon Disclosure Project) placed the Bouygues group back on its Climate Change A List, which recognises the worldwide companies most active in the fight against climate change. Bouygues was previously ranked in CDP's A list in 2016. This achievement recognises the Group's carbon, climate and energy strategy. Special praise was given to the circular economy initiatives in the construction and telecoms businesses, the positive-energy eco-neighbourhoods and buildings, the timber construction methods, the development of solar farms and the work to improve energy efficiency in buildings.

In March 2017, the Bouygues group – alongside 80 companies and around 40 eminent people – signed the manifesto promoted by The Shift Project. The manifesto, containing nine proposals to decarbonise Europe, calls on European countries to act now and propose policies to achieve a level of greenhouse gas emissions as close to zero as possible by 2050. It was issued in the wake of the Paris climate accord and 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.

The low-carbon strategy was discussed at the Group Management Meeting^a in May 2019, during which the threat of climate change was underlined and solutions relating to building and infrastructure construction as well as energy efficiency were presented.

3.3.4.1 Measuring greenhouse gas emissions in order to assess the 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. To keep in step with regulatory changes and identify major sources of greenhouse gas emissions, particularly those generated by the use of its business segments' products and services, the Bouygues group annually takes steps to expand its carbon reporting to include scope 3b where appropriate and meaningful. Various methods are used in carbon accounting. Bouygues Construction uses its own CarbonEco system, while Colas relies on CO₂/sales ratios.

^a A meeting of the Group's top managers.



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

For example, the criteria of feasibility, relevance and coverage cannot be applied to Colas for the following two emissions sources: “Use of products and services sold” and “End-of-life of products sold”. Extending scope 3b to these two emissions sources in relation to transport infrastructure (either road or rail) is not feasible because of the complexity of calculating the CO₂ footprint with regard to the following:

- accounting for infrastructure usage;
- the lack of means to reduce or control this footprint;
- the low proportion of sales from the construction of new infrastructure;
- and the complex rules for allocating emissions in relation to usage and infrastructure end-of-life.

These two emissions sources are therefore left out of the carbon footprint calculation for Colas.

Bouygues group greenhouse gas emissions

	Bouygues Construction	Bouygues Immobilier	Colas	TF1	Bouygues Telecom	2019 Group total
Scope		France (exc.				
activity or region	Global	subsidiaries)	Global	France	France	
Coverage						
as a percentage of sales	100%	87%	100%	85%	100%	94.4% ^d
Scope 1	1.5%	n.m.	10.1%	n.m.	0.1%	11.6%
Scope 2	1.5%	n.m.	0.8%	n.m.	0.2%	2.5%
Scope 3a	12.7%	3.2%	64.3%	1.8%	3.8%	85.8%
Total Scope 1 to 3a	15.7%	3.2%	75.2%	1.8%	4.1%	100%
Total Scope 1 to 3a						
(Mt CO ₂ eq.)	2.7	0.6	13.1	0.3	0.7	17.4
Scope 3b						
(Mt CO ₂ eq.)	6.6	n.c.	n.c.	n.c.	0.1	6.7
Total Scope 1 to 3b						
(Mt CO ₂ eq.)	9.4	0.5	13.1	0.3	0.8	24.1

n.m. is for non-meaningful, namely all figures under 0.05% or 0.05.

n.c. is for not calculated, namely all figures which have not been calculated to date.

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.
 d The missing 5.6% of the coverage corresponds to activities that have been recently added to the Bouygues Construction scope.

The carbon audit is useful in providing ideas of scale and identifying areas for improvement but cannot be considered a reliable performance indicator because of the inherent uncertainties. In addition, this exercise is tightly correlated to the volume of business from one year to the next, which can at times limit the usefulness of its analysis in absolute terms. In 2019, a change was made to the presentation of the reporting to show the differences between Scope 3a and Scope 3b.

The carbon audit underwent a certain number of methodological changes within the Group's business segments in 2019, owing to which the data cannot be compared between years. The purpose of these changes was to fine-tune and extend the scope to the entire lifecycle of the Group's products and services beyond the audited scope. In 2019, Scope 3 as a whole represented 90% of total emissions, while Scope 3b represented 28% of all scopes.

As announced in 2018, **Bouygues Construction** expanded its reporting in 2019, which meant extending Scope 3b to cover "Use of products and services sold". This is part of a policy to provide a broader view of carbon impacts after assets have been handed over to customers. The high volume of this emissions source results from the chosen methodology, which takes account of greenhouse gas emissions from energy consumption by handed-over buildings and the renewal of materials over 50 years of operations. This emissions source covers 86.5% of the total floor area handed over in 2019 by the building activities.

Colas added Miller McAsphalt group, acquired in 2018, to its audit scope for 2019. This new acquisition accounts for a sizeable amount of Colas' emissions, especially under Scope 3a. Its effects can be itemised as follows:

- 21%: upstream contribution of cement (Scope 3)
- 16%: contribution to Colas' direct energy expenditure (Scopes 1 and 2)
- 13%: upstream contribution of bitumen (Scope 3)
- 8%: upstream contribution of freight (Scope 3)

Bouygues Immobilier made changes to its reporting framework in 2018 to align itself with the E+C- label and obtain a Scope 3a and 3b carbon audit allowing for deployment of an operations-related carbon strategy that includes end-of-life emissions from building materials.

At **TF1**, the emissions source "purchases of goods and services" under Scope 3a underwent a change in methodology, concerning programme purchasing costs. Previously this data was based on the number of hours of programmes broadcast, but in 2019 the calculation was based on programme purchase price. In addition, the "tonnes of CO₂ equivalent" value for all purchases was recalculated based on the 36 Ademe categories updated to version 8.2 (a more up-to-date version than previous years).

The result for **Bouygues Telecom** was stable relative to the previous year.

Based on an unchanged methodology between 2018 and 2019, total emissions would have dropped by 2%.

Generally speaking, the Group's business segments continue to work hard to develop the most accurate forms of carbon accounting possible, taking a broad-based approach. Offering low-carbon solutions to customers, through timber constructions, circular-economy initiatives and the sharing of telecoms infrastructure, is a priority for the Group in this area. Furthermore, Bouygues Construction and Bouygues Immobilier have detailed reduction targets in this field.

Greenhouse gas emissions by source

		Bouygues	Bouygues		Bouygues		2019
	Scope	Construction	Immobilier	Colas	TF1	Telecom	Group total
Simplified sources Bouygues group							
Energy consumption (on-site combustion)	Scope 1	1.5%	n.m.	10.1%	n.m.	n.m.	11.6%
Direct emissions excluding energy	Scope 1	n.m.	n.m.	n.m.	n.m.	n.m.	n.m.
Consumption of electricity, steam, heat or refrigeration	Scope 2	1.5%	n.m.	0.8%	n.m.	0.2%	2.5%
Upstream energy^a	Scope 3a	n.m.	n.m.	1.3%	n.m.	n.m.	1.3%
Purchases of goods (raw materials, construction materials, etc.) and of services	Scope 3a	11%	3.2%	49.1%	1.8%	1.3%	66.3%
Waste generated by operations	Scope 3a	0.3%	n.m.	2.5%	n.m.	n.m.	2.8%
Upstream and downstream freight transport	Scope 3a	0.9%	n.m.	6.4%	n.m.	n.m.	7.3%
Investments, fixed assets and leasing	Scope 3a	n.m.	n.m.	3.7%	n.m.	2.2%	5.9%
Travel of employees (business trips and commuting), visitors and customers	Scope 3a	0.5%	n.m.	1.3%	n.m.	0.3%	2.1%
Total scopes 1 to 3a		15.7%	3.2%	75.2%	1.8%	4%	100%

a Emissions related to the process of producing the energy (mainly the extraction and refining of gas and petroleum products) used (the combustion of these products is included in Scope 1). This corresponds to Source 8 in the Ademe method. These were recently included in Scope 1 by Colas.

Scope 3b

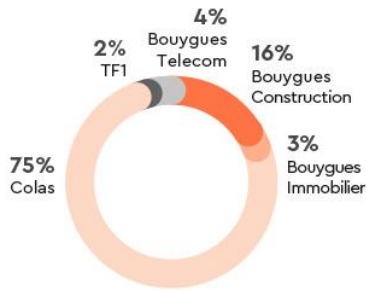
(Mt CO₂ eq.)

Use of products and services sold	Scope 3b	6.6	n.c.	n.c.	n.c.	0.1	6.7
End of life of products sold	Scope 3b	n.m.	n.c.	n.c.	n.c.	n.m.	n.c.
Total Scope 3b		6.6	n.c.	n.c.	n.c.	0.1	6.7

n.m. is for non-meaningful, namely all figures under 0.05% or 0.05.

n.c. is for not calculated, namely all figures which have not been calculated to date.

Greenhouse gas emissions by business segment (Scopes 1, 2 and 3a)



Carbon intensity of the Group (Scopes 1, 2 and 3a)^a

in tonnes of CO₂ equivalent per € million of 2018 restated sales



^a The Group's carbon intensity declined 3% from 502 tonnes of CO₂ equivalent per million € of sales in 2018 to 486 tonnes of CO₂ equivalent per million € of sales in 2019.

Carbon intensity by business segment (Scopes 1, 2 and 3a)

in tonnes of CO₂ equivalent per € million of 2018 restated sales



In line with its "Responsible and Committed" corporate vision, Bouygues Construction has pledged 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). Its approach is to highlight the CO₂ emissions avoided thanks to its policies and positive actions such as the expansion of timber construction, the use of low-carbon concrete and the reduction of energy consumption.

Bouygues Construction each year defines a "CO₂ to be avoided" target, calculated in reference to 2015, when the figure was 3 million tonnes of CO₂ equivalent (Scopes 1, 2 and 3a). In 2030, the target will be 20% of the 2015 carbon footprint. This methodological choice was made because the variability and diversity of activities and geographical locations make year-on-year analysis of Bouygues Construction's carbon footprint not very meaningful. Colas has a twofold commitment to reducing greenhouse gas emissions by:

- improving the energy efficiency of its operations and materials by implementing a program of reducing consumption; tight control over the energy consumption required for its activities;
- lowering the energy and carbon footprints of the products and techniques offered to customers.

To help reduce its own carbon footprint and that of its customers, Colas is drawing on its R&D policy to make more environment-friendly products:

To provide support in the places where it is located and to its customers as they strive to achieve low-carbon targets, Bouygues Immobilier has pledged to reduce greenhouse gas emissions in line with France's National Low-Carbon Strategy. For buildings, this strategy targets a 35% reduction in sector emissions relative to 2015 during the fourth carbon-budgeting period (2029-2033) and a decrease of 81% by 2050.

Correspondingly, Bouygues Immobilier has undertaken to reduce by 30% all greenhouse gas emissions from building construction and operation of these buildings (Scope 1, 2 and 3) between now and 2030, taking 2017 as the starting point. To prepare for the future 2020 environmental regulations (RE2020), progress will be tracked using the carbon intensity per m² indicator (the reference being 1,314 kg CO₂ eq/m² on average for residential and commercial property in 2017).

By 2050, carbon intensity per m² is due to be reduced by 80% versus the 2017 level. The targets for 2050 will be revised in 2030, based on the results observed over the next decade.

In 2019 the low-carbon strategy began to be rolled out, with each regional branch pledging a specific reduction in greenhouse gas emissions from its own production activities in 2020 and 2021. These commitments will be measured and recalibrated twice a year prior to submission to the Executive Committee.

To help teams on the ground, a carbon calculator compatible the E+C- thresholds has been given to employees. All operational staff will be trained in carbon-reduction methods in 2020. Finally, outside consultants and an in-house timber expert have been made available to teams should they require support.

Network equipment accounts for close to two-thirds of investments, equating to one-third of Bouygues Telecom's total carbon footprint. The solution enacted involves sharing equipment with other operators and encouraging its re-use.

3.3.4.2 Providing low-carbon solutions

The recognised expertise of its business segments (construction, media and telecommunications) has enabled the Bouygues group to design a full-service offer to help urban environments reduce their carbon impacts. 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[®] service package for commercial property (see section 3.3.3.2). The renovation of its headquarters, Challenger, into a positive-energy building, is a showcase of its technological expertise.
- **Low-carbon buildings** are economic and environmental profit centres. Bouygues and its business partners market scalable offers, beginning at the design stage and going all the way through to when buildings are up and running. These offers use:
 - traditional and bio-sourced materials that can be re-used or recycled;
 - smart systems for optimised building management (Bouygues Immobilier's Green Office[®] positive-energy buildings), as well as;
 - renewable energy coupled with storage systems.

Low-carbon construction is a major avenue of innovation and growth for Bouygues Construction and Bouygues Immobilier. Bouygues Energies & Services is part of the European research consortium working on the ELSA^a project. The energy storage solution ELSA recovers second-life batteries from Renault or Nissan electric vehicles and re-uses them in buildings to create energy-storage systems. It was awarded the Solar Impulse Efficient Solution label^b.

- **Eco-neighbourhoods:** Bouygues and its partners offer local authorities integrated solutions combining sustainable construction, energy efficiency, functional diversity, soft mobility, biodiversity and new technologies adapted to residents' needs. The Bouygues group has several exemplary eco-neighbourhoods to its name, both in France and abroad.

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.

UrbanEra[®] was selected to develop the Charenton-Bercy project (12 hectares including 3.6 hectares of green spaces), part of a call for bids entitled "Invent the Grand Paris Metropolitan Area"^c, which was organised by the Grand Paris metropolitan authority, Île-de-France regional authority and Société du Grand Paris. The project aims to re-use or recycle materials on site and recover rainwater, plus 50% of energy should be renewable. All buildings will be highly energy-efficient (*NF Habitat HQE*[™], LEED[®] or WELL^d certifications) while a smart grid will help improve the management of both the heating network and locally produced energy while increasing consumption of the latter. A resilience strategy will be put into place to guard against climate contingencies such as flooding and the urban heat island effect.

As part of an Energy Performance Contract entered into with Bouygues Energies & Services, the Municipality of Beausoleil (south-eastern France) wants to upgrade its street lighting network to make it 100% LED^e (1,098 streetlamps). Bouygues Energies & Services has pledged to reduce electricity costs by 77.4%. It is also in charge of the maintenance and management of the street lighting network as well as electric mobility, the development of the public Wi-Fi system and an app which allows residents to report any malfunctions.

a Energy Local Storage Advanced System.

b The Solar Impulse Foundation aims to select 1,000 economically viable solutions that protect the environment and promote them worldwide.

c Europe's largest call for tenders in the field of property development, urban planning and architecture.

d Quality standard for employee well-being.

e Light-emitting diode.

- **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 offers local authorities innovative urban services based on embedded sensors (via the Internet of Things) as well as augmented transportation solutions.

Mobility by Colas develops and offers practical and powerful digital solutions for meeting new mobility requirements:

- **Wattway** is the world's first photovoltaic road-surfacing solution that generates electricity from clean and renewable solar energy. After its launch in 2015 and real-life trials, the Wattway Pack was marketed for the first time in 2019 (see section 3.3.3.2).
- **Flowell**, developed by Colas R&D in conjunction with CEA Tech^a, streamlines traffic on existing roadways by giving priority to certain users at specific times. Several pilot sites have been set up to test the solution in real-life conditions. The goal is to obtain feedback from local authorities and users on how relevant and easy-to-use the applications are and how well they integrate into urban environments. For example, In Mandelieu-la-Napoule on the French Riviera, an intersection known to be hazardous was equipped with the solution. A marked change was observed, with calmer driving, greater awareness of risks, and thus enhanced safety for pedestrians. Flowell was also given the "Trophée Or" award in the habitat, buildings and urban planning category at the 2019 Deauville Green Awards.
- **ANAIS** is a made-to-measure solution intended for local authorities covering relatively large areas. It enables them to anticipate maintenance needs for their road networks and reduce infrastructure costs (see section 3.4.5.1).
- **Qievo** limits disturbances for local residents and road users by guiding trucks to follow specific routes as a way of reducing traffic congestion.
- **Moov'hub**, a digital solution for managing car parking spaces, is currently being developed on the Paris-Saclay campus.

New shared smart car parking service from Mobility by Colas

To cope with the shortage of car parking spaces, Mobility by Colas developed Park'In Saclay, which was officially launched on 17 September 2019. Park'In Saclay is a shared smart car parking service, using which drivers approaching the Paris-Saclay campus receive real-time information on where there are free spaces (in both public and private facilities) and can then reserve one.

Much more than just a system for detecting free car parking spaces, Park'In Saclay helps manage traffic flows and optimises space. Open-data processing enables the Paris-Saclay development authority (EPA) and the local authorities to make better use of their car parking facilities by monitoring their use within the campus. Park'In Saclay also serves as a monitoring solution for those managing the car parking spaces, providing a full range of data that includes occupancy and profitability indicators. Parking spaces can also be reassigned to a new purpose, depending on needs.

Car-park optimisation is a major sustainable-development issue in which innovation can make a difference by helping to prevent those traffic jams caused by drivers looking for free spaces. This solution aims to improve urban quality of life by limiting above-ground parking and directing vehicles to underground car parks, resulting in a positive impact on traffic and pollution.

In due course the application will become a MaaS (Mobility as a Service) platform, providing a comprehensive overview of a given area's mobility services, including soft mobility, reduced mobility access and electric charge points.

In response to the partnership agreement relating to self-driving vehicles and future road usage signed in 2017, UTAC CERAM^b asked Colas Île-de-France Normandie to build its new test centre, Teqmo. It opened in June 2019. Located within Linas-Monthéry vehicle test circuit, just south of Paris, Teqmo's 12km of track will be used to test the environmental, safety and durability characteristics of self-driving, connected vehicles.

3.3.4.3 Promoting solutions adapted to climate change

From an environmental perspective, climate change leads to:

- rising sea levels,
- an increased frequency of freak weather events (e.g. cyclones, flooding, and rapidly rising or falling temperatures), and;
- changes to ecosystems.

Coastal areas – which tend to be heavily populated – are at risk from the current change in the climate, considering that sea levels could rise, while climate change also produces more extreme weather, accompanied by possible erosion and flooding.

To gain popular support, protective structures in built-up coastal areas must blend in as much as possible. This is leading to the development of innovative concepts at the engineering department of Bouygues Travaux Publics.

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 domain of buildings. 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 demonstrator, based on the partnership with the municipal authority, will be inaugurated in 2020. The future tenants have already had a chance to familiarise themselves with the concept by visiting a showroom opened on 4 September 2019.

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[®] sustainable eco-neighbourhoods introduce nature into urban environments, thus reducing the urban heat island effect and improving water drainage.

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

^a The French Alternative Energies and Atomic Energy Commission.

^b A private group offering land-mobility services.

rigorous experimental approach to distinguish the thermodynamic properties of building materials and is participating in the full-scale measurement and experimental programmes launched by several municipal authorities.

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. The Group is pursuing E+C- labelling and actively promoting timber constructions (see section 3.3.3.2). Bouygues Bâtiment Ile-de-France is putting to use its expertise in timber through its new Habitat Réhabilité subsidiary. A head of timber activities has been appointed by Bouygues Bâtiment France Europe.

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

Bouygues Construction and Hoffmann Green Cement Technologies have entered into a contract covering technical and commercial collaboration, aimed at designing and testing concrete mixes incorporating a new technology, H-EVA, that Hoffmann Green Cement Technologies has developed. The carbon footprint of cement manufactured using H-EVA is 70% to 80% lower than with conventional Portland cement. The partnership represents a strategic alliance formed to respond to the impending climate emergency. Its consequences will help make the construction industry more environmentally responsible and sustainable. Cement accounts for 6% of all greenhouse gas emissions in France. Studies conducted jointly by the two business partners will qualify the product for the certifications necessary for its implementation in Bouygues Construction projects in 2020.

The full support of employees will be required to make this a success. Colas continues to require vehicle drivers and plant operators to reduce fuel consumption by 20% through:

- eco-driving techniques, and;
- not leaving engines idling.

This initiative is based on a three-way message: better for efficiency, better for safety, better for the environment.

The two main targets, to be achieved by the end of 2024:

- equip 50% of road and plant vehicles with on-board data collection devices;
- ensure that equipped vehicles and plant have their engines switched off when idling in at least 80% of cases.

Energy efficiency is already taken into account when choosing which machines to buy. The target to increase average utilisation by 2% results in the least efficient equipment being automatically removed from the fleet.

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 indicators

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Greenhouse gas emissions relative to the production of a tonne of asphalt mix Kt CO ₂ eq per tonne	Global	Asphalt mix production activities	19	18	The situation deteriorated slightly in 2019, notably due to the inclusion of Miller in Canada, a country where this ratio is hampered by the climate.
Greenhouse gas emissions avoided as a result of action taken by Colas^a (in tonnes of CO ₂ equivalent per year versus 2010)	Global	All activities	483,000	340,000	This indicator was completely recalculated in 2019 to take into account actions that are now fully factored in. The 2018 figure was recalculated on a pro forma basis. The sharp increase in the indicator is due to progress on alternative freight and recycling, resulting in particular from the integration of Miller and McAsphalt.

a Broadly speaking, action specifically involved limiting energy consumption by Colas at group level (fuel consumption by plant, vehicles and 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.)

Low carbon: the Group is in the top three French property developers

On 9 September 2019, the BBCA organisation announced the top ten low-carbon property developers based on data at 31 August, in which the Bouygues group was ranked third, with a total of five developments carrying the BBCA label. This was largely thanks to the contribution of Bouygues Bâtiment and Bouygues Immobilier. This ranking acknowledges efforts by the Group and its subsidiaries to reduce the carbon footprint of its buildings.

Bouygues Bâtiment has three BBCA low-carbon operations:

- Linkcity's operation to renovate the headquarters of Groupement des industries métallurgiques (GIM), in Neuilly-sur-Seine, was certified BBCA *Rénovation* for the construction phase, following handover in late 2018;
 - Les Hautes Noues (a social housing and office development in Villiers-sur-Marne, near Paris, handed over in November 2018) was awarded the BBCA Neuf, Performance level in the construction phase. This timber-based development also received the Clé d'argent at the Clés d'or ceremony held by EGF-BTP (the association for French construction and civil works companies);
 - the apartments built by Brézillon in Saint-Just-en-Chaussée, just north of Paris, have been awarded the BBCA *Rénovation*, Excellence level in the design phase.
- Bouygues Immobilier has two BBCA low-carbon operations:
- Sensations, which is part of the Îlot Bois programme in Strasbourg, is France's tallest 100% timber apartment building to date. This exemplary low-carbon construction was certified BBCA *Réalisation* 2018, Excellent level, thanks to its use of bio-sourced materials, and;
 - Enjoy, the largest timber-frame positive-energy office building in France. Located at the heart of the Clichy-Batignolles mixed development zone, the building generates more energy than it uses through 1,700 solar panels on its roof and its connection to the district geothermal power plant. It has been awarded the BBCA *Neuf* in the construction phase label.

Operating fixed and mobile networks is Bouygues Telecom's largest source of energy consumption. Even though energy consumption per site 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 (a metric which is rising exponentially). By installing smart meters, Bouygues Telecom is developing real-time measurement of power consumption at its mobile sites. Over 4,000 of the 15,000 sites now have this kind of meter in operation. Best practices are also implemented such as optimising equipment installation in technical rooms to manage air flows and prevent hot spots. Containment solutions that optimise air-conditioning energy efficiency are becoming more widespread as new equipment is deployed.

3.3.4.5 Building partnerships to search for solutions



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 carbon-free 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.

The Bouygues group is also a partner in Ideas Laboratory^a, 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^a in Grenoble, Ideas Laboratory^a 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. Ideas Laboratory^a is also developing a smart-thermostat solution specifically designed to help people in fuel poverty manage their budgets. The concept was tested in the homes of eight people living in social housing.

Bouygues Immobilier and Bouygues Bâtiment Ile-de-France, both members of the Low-Carbon Building Association (BBCA), are participating in the development of the BBCA label by promoting low-carbon buildings carrying this label.

3.3.5 Protecting biodiversity

The Bouygues group has pinpointed the potential 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 related to certain work procedures or land take.

Bouygues Construction and Colas both have in-house environmental engineering units with the requisite expertise to design solutions to meet all these challenges. The Group has undertaken measures to limit such impacts and sustain biodiversity in its construction businesses.

In 2018, two Bouygues subsidiaries, Bouygues Construction and Bouygues Immobilier, pledged to protect biodiversity by signing the Act4Nature charter. This charter, started in 2018 by EPE (a non-profit organisation representing companies working to protect the environment), aims to protect, promote and restore biodiversity by bringing together those capable of providing tangible solutions. Companies signing up to the charter agree to uphold ten shared commitments, then specify the scope of their action through individual pledges.

Bouygues Construction's biodiversity policy has three strands:

- innovating and bolstering technical expertise;
- offering new products and services;
- getting involved in collective action with all stakeholders.

^a The French Alternative Energies and Atomic Energy Commission.

Bouygues Immobilier is targeting four solutions:

- integrating biodiversity at every stage of a property development;
- expertise recognised by a label;
- raising awareness about nature in the city, and;
- an enlightened approach to urban agriculture.

Colas supports biodiversity in three ways:

- by actively participating in scientific research: Colas has been part of the strategic steering committee of the FRB^a since 2011 and in November 2018 awarded a prize to a young researcher in the category “Biodiversity and combating invasive species”

Colas is an unintentional local propagator of invasive exotic plant species as a result of its small-scale earthworks projects. It has initiated dialogue with the scientific community to make progress in analysing and preventing this problem. Thinking around this issue is gaining momentum thanks to the involvement of an increasing number of subsidiaries around the world.

Working with the start-ups Apilab^b and BeeOdiversity, Colas is endeavouring to protect the genetic diversity of bees and the use of beehives as a comprehensive bio-indicator. In 2016, Colas created a sanctuary for black bees in the Alpes-de-Haute-Provence department of south-east France, in partnership with Apilab. The sanctuary, which comprises 20 hives, is located at the Cozzi quarry, near Norante. This scientific project uses a protocol for the genetic analysis of mitochondrial DNA that was developed by the CNRS (the French National Centre for Scientific Research). This project is conducted in partnership with local beekeepers and the mayors of the towns neighbouring the quarry.

- 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).
- by developing Colas Génie Écologique, an entity that offers biodiversity solutions such as the creation of fish passages, waterways as well as quarry rehabilitation.

Colas Indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Share of aggregates production sites working to promote biodiversity as a% of sales before inter-company eliminations	Global	100% of the sales before inter-company eliminations the permanent aggregates production activities	52%	51%	Some 70 protected species currently live at Colas’ extraction sites; in addition some 50 sites are home to beehives. The biodiversity indicator rose by two points in 2019, reflecting the genuine progress made since this policy was first enacted in 2012 at the Colas Environmental Convention. This effort remains patchy, varying from one cultural context to another. While modest in the US and Canada (16%), it enjoys strong support in France and other countries where Colas operates (with a ratio ranging from 14% to 90%). Local residents always show support and interest whenever initiatives are deployed. There is evidence that the EOCE programme has contributed significantly to buy-in. The consolidated target for Colas subsidiaries in 2019 was 57%. The slower-than-expected progress in the year was notably due to the integration of Miller.

In 2019, Bouygues Immobilier was the first company to sign the Metropole Nature charter, sponsored by the Grand Paris metropolitan authority. The charter will in due course have its own label (Métropole Nature) through which signatories will be able to earn recognition for their planned initiatives in favour of nature in urban areas.

To take proper account of biodiversity in urban development projects, Bouygues Construction has contributed to the creation of the first-ever worldwide label for recognising construction and renovation projects that factor in urban biodiversity. BiodiverCity is currently managed by IBPC^c, an organisation bringing together builders, developers, users and trade federations. Bouygues Construction is also helping design new benchmarks within the label: BiodiverCity *Life* and BiodiverCity *Ready*. While the current label assesses the inclusion of biodiversity in projects during design and construction phases, these new benchmarks will broaden the spectrum to include existing buildings and biodiversity at the neighbourhood level.

Bouygues Construction and Bouygues Immobilier have already used this label with several certified structures.

So far, 8,455 Bouygues Immobilier housing units are covered by this label or have applied for it. As an active member of IBPC, Bouygues Immobilier is also working to develop the technical specifications of the BiodiverCity Ready label at the neighbourhood level. This collaboration has been recognised by the BiodiverCity Ready label, design phase, awarded to Nanterre Cœur Université, a neighbourhood development project, as part of a trial for the future label. 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. Bouygues Immobilier furthermore received the first-ever BiodiverCity label awarded in Poland for the Camélia housing project.

^a French Foundation for Biodiversity Research.

^b A laboratory specialised in environmental biomonitoring using bees.

^c International Biodiversity and Property Council.

Bouygues Immobilier Indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Surface area in m ² carrying the BiodiverCity Ready label or covered by a commitment to obtain it at 30 September 2019	France excluding subsidiaries	87% of Bouygues Immobilier's consolidated sales	481,000	205,000	In addition to the Annemasse and Divonne-les-Bains projects, Nanterre Cœur Université (floor area 76,000 m ²) and Fabriques XXL in Marseille (200,000 m ²) are also working towards obtaining BiodiverCity Ready.

Bouygues Construction indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Number of construction projects with the BiodiverCity label	Activities Global construction activities	45% of Bouygues Construction's consolidated sales	1	4	The Eole Evangile development project has received several labels such as BREEAM excellent, HQE Excellent, BEPOS-Effinergie 2017 and BiodiverCity. This eco-neighbourhood, which will be one of the first zero-carbon neighbourhoods, has over 6,000 m ² of green spaces, including public gardens, green roofs and allotments. The construction work is being carried out jointly by several operating units of Bouygues Bâtiment France Europe (Habitat Résidentiel, Construction Privée, Habitat Social and Brézillon). A multi-product project, it will comprise shops, offices, housing and sporting amenities, etc.



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.). In 2019, Bouygues Construction's R&D division conducted research into protecting marine biodiversity during its construction projects. The commitment to biodiversity has been conveyed by a host of different actions, including:

- development of internal expertise on biodiversity, e.g. the environmental engineering team at Bouygues TP and the Elan team within Bouygues Bâtiment France Europe;
- participation in the annual National Biodiversity Conference since 2012, and;
- support for charities working to preserve biodiversity such as the French Bird Protection League (through Club Urbanisme, Bâti et Biodiversité).

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, and;
- the offshore extension of Monaco's port area, where 500 m² of posidonia beds and 141 large Mediterranean clams were moved to protected sites (primarily the Larvotto marine reserve). Marine infrastructure in this location has been eco-designed through the addition of ecological adjustments to the caissons, rockfill and outfalls, including the addition of artificial reefs. These ecological adjustments aim to improve the potential for nature to reclaim the space, restore lost ecological systems and provide for habitats and ecological corridors.

Biotope, the new headquarters of the Lille metropolitan authority, is a shining example of a building shaped by nature. The project has brought together a wide range of stakeholders, ranging from environmental scientists and landscape architects to the local tree nursery, a botanical conservatory and local charities, in order to achieve a type of construction that is adapted to nature, not the other way round. Right from the design phase, a wildlife survey was carried out by a local environmental scientist commissioned by Linkcity (Eco'Logic) to appraise the site's ecological value. The project has become a stand-out example in its field, as testified by BiodiverCity label and BREEAM Excellent and Well Gold certifications.

With the help of the specialist consultancy, Bouygues Immobilier has started thinking about ways in which it can take better account of vegetation when conducting operations. With the firm belief that the link between landscapers and project managers needs to be strengthened, a series of training modules and awareness-building exercises will be run in the coming months to improve recognition of biodiversity in the design process.

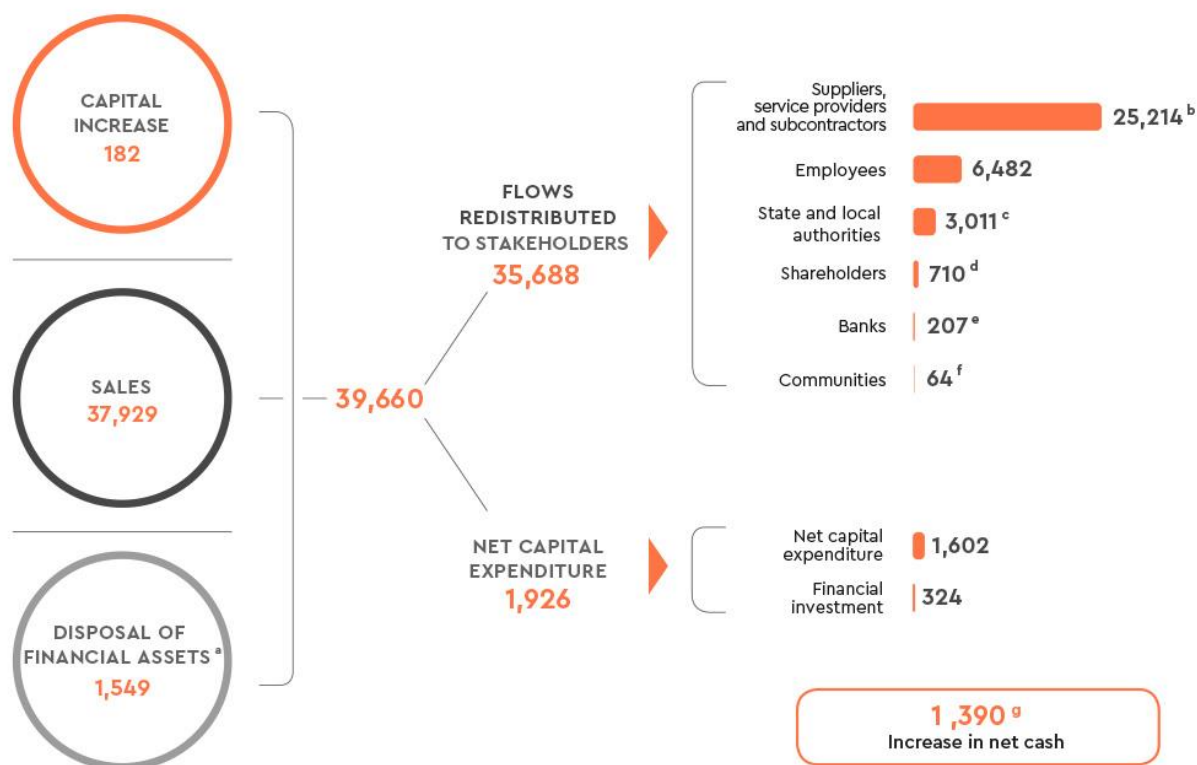
3.4 SOCIAL INFORMATION

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 2019

€ million

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 Includes dividends from Alstom.
- b Purchases and other external expenditure.
- c Income tax, social security contributions and other taxes.
- d 2018 dividends paid in 2019, of which €77 million paid to employees.
- e Cost of debt and other charges.
- f Donations, patronage and sponsorship.
- g After changes in the working capital requirement (WCR) 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 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.

3.4.1.1 Revitalising the economy

Facilitate personal travel

The urban cable car that became operational in Brest in 2017 (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.

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.

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-learning, 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 22 million premises marketed nationwide in France. Bouygues Telecom had nearly 12 million FTTH^a premises marketed at end-Q3 2019, up 4.6 million year-on-year. As well as laying fibre in urban areas, Bouygues Telecom distributes its services on Public Initiative Networks (PINs). Agreements with the PINs of Axione, Covage, Altitude Infrastructure, TDF and Orange have been signed.

Help French SMEs communicate

Additionally, TF1 Publicité has an offer especially for French SMEs to help them gain visibility and access the nationwide market – a further sign that the advertising slots on TF1’s main TV channel are not merely reserved for multinationals.

a Fibre-To-The-Home.

3.4.1.2 Housing people

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 (68% of block reservations in 2018) 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.

Fight fuel poverty

Bouygues Construction's programme that provides energy renovation for social housing, without the need to decant the occupants, helps social landlords reduce fuel poverty among low-income households. The company has signed the "EnergieSprong" charter, the purpose of which is to support the mass roll-out of energy renovations in social housing. This Europe-wide initiative is based on a high-grade level of specifications: zero-energy renovation^a guaranteed over 30 years; one-week renovations without decanting residents; cost overruns funded by the resale of renewable energy and energy cost reductions; and a focus on occupant satisfaction. Two pilot projects have been implemented (in Hem and in Longueau, both in northern France), one of which was handed over in summer 2019.

New socially responsible housing programme

The Socially Responsible Housing programme, which arose from an innovation partnership between the action tank "Entreprise et Pauvreté" and Bouygues Bâtiment Île-de-France Habitat Social, is committed to building affordable housing for low-income households and those which do not qualify for social housing in their local area. It is based on three pledges by its partners:

- the desire to bring together all sector players and encourage them to cooperate for the benefit of residents by reducing the overall cost of the project. The municipality of Stains, Plaine Commune, Plaine Commune Développement and Atelier Pascal Gontier (the architect), have participated in this phase of co-production;
- the pledge by Bouygues Bâtiment Ile-de-France Habitat Social to work at cost price only;
- the pledge by social landlord Seine-Saint-Denis Habitat to pass on the resulting savings to its tenants in the form of lower rents.

These three commitments mean that high-quality housing can be offered in exchange for rents that are 20% lower than for a conventional programme.

In keeping with the tenets of the social economy and sustainable development, these homes will be fitted with high-performance heating management systems, including solar panels. They will be built to PassivHaus^b standards and will also benefit from participatory design and management of the external spaces, in order to reinforce social bonds between the residents.

The project consists of two buildings with a total floor area of 3,600 m² containing 59 apartments of two to five rooms. Handover is scheduled for the third quarter of 2021.

3.4.1.3 Employing local people

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 57,037 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 all of France (59% of sales and 66,648 employees). As such, the Group operates at the heart of regional economies and is a driving force for local employment.



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;
- "and a training initiative on each major worksite subject to an occupational integration clause".

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.

Bouygues Construction also invests in helping people who have difficulty finding work. Bouygues Travaux Publics has been working in partnership with SAS Coluche since April 2018. This charity, founded by the Municipality of Calais, aims to identify young people who have dropped out of school and help them into work. Once they have rebuilt their self-confidence and trust, these young job seekers are assisted by Bouygues Travaux Publics, which offers them work on the Port of Calais extension project. This partnership enables Bouygues Construction to take action at grassroots level.

a Thermal renovation aiming for a passive energy score.

b A German building energy performance label.

Colas partners with GEIQ^a to combat discrimination in access to employment via actions applied locally. Around 40 people work at Colas subsidiaries in France under this type of contract. In addition, Colas subsidiaries have increased their involvement in the Hope^b project by hosting around 20 refugees. Each of them is given lessons in French, training in worksite health & safety and is offered a placement to see the company at work.

Finally, the TF1 Corporate Foundation focuses on diversity and helping young people find employment by recruiting, each year, people between the ages of 18 and 30 from underprivileged areas through a competitive process. Additionally, the foundation each year organises an inter-company internship scheme aimed at 14/15-year-olds. Lastly, the foundation encourages TF1 employees to take part in the "Stop Illettrisme" anti-illiteracy programme, whereby help in reading and writing can be given to the employees of service providers.

Bouygues Construction indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Number of hours devoted to occupational integration and the corresponding FTE ^a equivalent (France)	France	45.3% of Bouygues Construction's consolidated sales	1,078,625	1,250,596	After having defined and structured its goals in the fields of employment and occupational integration in 2017, Bouygues Construction continues to be firmly committed on this path. The company went over and above its contractual obligations in 2019 by carrying out tangible initiatives in all its operations.
Percentage of expenditure favouring local companies	Global	85% of Bouygues Construction's consolidated sales	90%	91%	This indicator was stable at a high level. Local purchasing equates to a purchase within the country. Purchases were made in 2019.

a Full-time equivalent

The Group endeavours to source site workers and supervisory employees locally, which strengthens its position in terms of direct and indirect employment, fosters the transfer of expertise and supports local communities.

Since 2012, subsidiaries of Colas Canada have been taking steps to integrate First Nations people into crews working on projects located on their ancestral land. A nationwide approach is currently being drawn up in order to define a more comprehensive strategy. 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.

3.4.1.4 Helping build harmonious communities

TF1 wants all its TV channels and websites to reflect the full range of diversity seen in society and avoid stereotypes. Quantified pledges are disclosed to the industry regulator annually. Furthermore, a memo is sent out every year to producers of news-related programmes, game shows, entertainment and reality TV shows at TF1's main TV channel to increase awareness about diversity in the shows they produce. All those responsible for making shows are given specific training on how to take account of diversity in all its forms (see also section 3.2.3.4 on the representation of women on air).

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.

In 2019, Bouygues published its second Integrated Report^c as a summary of the Group's vision, strategy (and that of its subsidiaries) and corporate culture, showing how it creates value for its stakeholders and specifying its four pledges. Following the publication of the first Integrated Report in 2018, a consultation with the stakeholders identified the report's strengths and areas for improvement.

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.

a French national committee for coordinating and evaluating groups of employers that promote occupational integration and vocational training.

b "Hébergement Orientation Parcours vers l'Emploi".

c Available at bouygues.com.

Being attentive to customers and satisfying them

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.

Worksite customers take pride of place in Bouygues Construction's TopSite label, which can only be granted with their approval.

Bouygues Construction makes it a priority to listen to the many different expectations of residents and place them at the heart of its projects. They are involved at all stages – before, during and after handover. A range of different solutions is offered to encourage people to work together, with special emphasis on reinforcing bonds (meetings, dedicated apps, co-designing projects with the residents). This is exactly what "Wizom Réhabilitation" has to offer. The latter has three main areas of focus: build harmonious communities, upgrading property in a sustainable way and making urban environments more attractive.

Colas Bâtiment gives out satisfaction surveys to residents during its occupied building rehabilitation worksites. These aim to measure satisfaction according to four criteria: information before the work commenced, the quality of the work, the clean-up afterwards and relations with the company. The survey results reveal that the "Relations with the company" criterion achieves the highest satisfaction rating.

A system for optimising feedback from customer advisers or sales staff in direct contact with customers was implemented by Bouygues Telecom in July 2018. Called "Be Progress", it helps manage the customer experience more effectively. The system combines all the previous arrangements into one simplified process so that complaints and errors affecting the customer experience can be sent and resolved more easily as part of a team effort.

For the second consecutive year, Bouygues Telecom also held an open day at each of its six customer relations centres, during which around 100 customers were able to learn about what being a customer advisor entails and listen in on a session. In 2019, Bouygues Telecom also appointed a new Customer Committee, which consists of 20 customers selected in accordance with certain criteria (gender equality, all ages represented, mobile and/or box customers, different lengths of time with the company, all social and professional backgrounds, across all regions). Since 2015, customers have had a say in the continuous improvement of its products and services thanks to the opportunity to voice their opinions through the Customer Committee. Its purpose is:

- to identify and prioritise expectations;
- to ensure the continuous improvement of service quality;
- to promote dialogue with specialists from all the activities and with the Executive Committee, and;
- to choose three favourites from the ten NGO projects selected by the Bouygues Telecom Corporate Foundation each year

At TF1, the news mediator receives opinions, queries and any complaints concerning news broadcasts on TF1 and LCI, via the Viewer Relations section^a on the LCI website. 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.

Constant dialogue

External social media are an excellent channel for exchanging ideas with stakeholders. Besides TF1, several of the Bouygues group's entities run blogs discussing current and future trends on which users can comment: *BouyguesDD* (www.bouyguesdd.com), *L'innovation partagée* (www.bouygues-construction.com/blog), the forward-thinking blog *Demain la Ville* (www.demainlaville.com), *Colascope* (blog.colas.com), *Le Mag* (blog.bouyguetelecom.fr) <http://www.bouygues-construction.com/blog>

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.

At Bouygues Immobilier, the quality-enhancement strategy is a constant way of exchange with customers, albeit indirectly. Satisfaction surveys linked to acquisition or delivery, together with the Net Promoter Score, give information about customer expectations and help apply continuous improvements in the quality of services and developments.

Through its "Les Experts" community composed of in-house volunteer experts, 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 (over 1.7 million visitors a month).

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.

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.

Forging ties with local residents to encourage social cohesion

Bouygues Immobilier is rethinking the concept of housing in pursuit of harmonious living. To achieve this goal, its new housing units are designed to respond to the growing need for shared spaces and services (an extra room, terrace, concierge service, delivery and nursery services). Through "Entre Voisins", a social media app using which neighbours can exchange services, Bouygues Immobilier is working to foster friendly atmospheres in its apartment buildings.

- Les Fabriques, developed by Bouygues Immobilier and Linkcity in Marseille, is an example of a neighbourhood integrating into an existing social and economic ecosystem. By promoting the usage economy, fostering ties, creating shared living spaces and connected services, Les Fabriques focuses on the circular economy, creativity and mixing the use of space, as well as on new lifestyles and ways of consuming. The first phase of this future neighbourhood is based on an economic model that prioritises technological and digital innovation, in what will be the largest makerspace in France.
- The participative arts laboratory in the future Nanterre Cœur Université neighbourhood, which is being developed by Bouygues Immobilier, is exhibiting various works of art throughout the construction site. All local residents are invited to share their visions of this urban project. Over 22 local organisations, NGOs, and primary and secondary schools have participated in the scheme. This helps to forge links with the local community in neighbouring areas, in turn helping to gain acceptance for this redevelopment project, which can cause major disturbances for local residents.

^a www.lci.fr/la-mediatrice-vous-repond.

Consultation exercises 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).

Bouygues Immobilier is developing consultation and co-design methods for its property developments. One example is Sollys, a collaborative housing project in Lyon Confluence. Ten families of prospective residents are attending workshops there in order to co-design their housing. The co-design methodology is based on a combined working group bringing together experts and users to design the project together. To help produce a consensus, design thinking^a methods are used. Co-design brings together buyers before the handover of a housing development so that they can work together, making this a method conducive to the creation of more shared spaces.

Shared concierge services are another useful way of forging ties within neighbourhoods. Services catering for various types of users (residents, employees or visitors) are available seven days a week, at all times of the day. Accessibility, ease of use and proximity are the watchwords. One example of a successful concierge service in action is in the Ginko residential development. It was created along with a café bar and a coworking space^b, providing residents with places to meet for both work and leisure.

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

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Materials production sites working to promote dialogue with local communities ^a as a% of sales before inter-company eliminations	Global	100% of the sales before inter-company eliminations of the materials production sites	44%	47%	A special indicator was introduced in 2006 to assess the extent of dialogue with residents, local elected representatives and the relevant authorities. In 2019, this indicator fell by three points while the consolidated objective for the subsidiaries stood at 50%. This relative fall is linked to the 7% rise in sales (before inter-company eliminations) generated by material production activities that had a local dialogue scheme, and the 14% rise in sales (before inter-company eliminations) generated by materials production activities. This is largely accounted for by the inclusion of Miller and McAsphalt group in the reporting this year, which led to a drop of 20 points in this indicator for Canada. A working group has been set up to implement tools enabling progress to be made on this issue, still with the target of crossing the 50% threshold in the next two years.

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. On selected urban-development or property-related projects, they also listen to local populations and stakeholders using methods such as interviews, digital co-creation platforms and recording vox pops with passers-by.

CityPlay, tools for urban co-construction

With CityPlay, a new approach to sustainable districts and urban environments, Bouygues Construction promotes co-construction initiatives with local eco-systems of business partners and residents.

By making the smart city for and by its residents, through the use of tools which involve them in the development of projects, Bouygues Construction is boosting the appeal of urban environments and fostering the well-being of their users.

Residents have an input at all stages (community survey, co-design, urban planning etc.), but they are also encouraged to become active members of their future communities (helping with business creation, participation in how the community is run, etc.). These tools have been brought together under the CityPlay label.

CityPlay has already made its mark on over 30 projects, including La Maillerie in Lille (urban planning), Les Fabriques in Marseille (creation of new activities within a 'makerspace'), Share in Tours ('serious game'^c), and the Smart City projects of Bouygues Energies & Services.

a Co-design methodology developed at Stanford University in the 1980s. The process (e.g. for designing a product) uses interviews to establish what end-users do, think, feel and say, with a view to moving from an idea to a prototype, and finally to the testing phase.

b Shared workspaces.

c Combines the fun aspects of video games (game), with more serious aspects (serious), such as training, communication or information.

As a signatory to the Operator-Municipality Guidelines (GROC) in 2006, Bouygues Telecom has developed relationships with local authorities based on transparency and consultation. Before installing masts, Bouygues Telecom enters into dialogue with local elected representatives and informs local residents about its plans. In accordance with the decrees enacting the Abeille law, in 2017 Bouygues Telecom increased its efforts to disseminate information in its municipality information pack and adjusted its method for calculating exposure to incorporate the new national ANFR^a guidelines.

Bouygues Telecom presents the pack to the relevant local representatives as soon as there are any plans to roll out a programme in their community. It collects together their recommendations regarding the location of future mobile sites to ensure the widest possible acceptance by residents.

Finally, with the aim of responding efficiently to the challenges of digital development in less densely populated areas where roll-out of infrastructure is made more difficult because of the terrain, Bouygues Telecom has developed partnerships with two associations dedicated to the specific needs of mountainous and rural areas in France, 'Association nationale des élus de la montagne' and 'Association des maires ruraux de France' (AMRF).

3.4.2.2 Patronage and partnerships

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

The three main areas of patronage policy at Bouygues SA are community and social projects, education, and healthcare. The Group's parent company helps and supports all kinds of initiatives, small-scale or otherwise. It gives priority to long-term actions and focuses mainly on projects sponsored by Group employees.

Each of the Group's five business segments also carries out its own patronage initiatives through foundations set up for this purpose.

Since 2005, the Francis Bouygues Foundation has been providing high-achiever grants to enable motivated school leavers from low-income backgrounds to pursue their studies. These young students are always supported by a mentor, who may be a current or retired Bouygues group employee or a former Foundation grant-holder now in working life. As well as providing advice and moral support, mentors can give their mentees help with finding an internship. Its fifteenth year marked a turning-point in the Foundation's history, because for the first time it took in 100 grant-holders, compared with 60 in previous intakes. Since its creation, it has supported 889 students, of whom 418 have graduated.

Group spending on patronage and sponsorship

€ '000	The Francis Bouygues Corporate Foundation		Bouygues Construction	Bouygues Immobilier	Colas	TF1 ^a	Bouygues Telecom	2019 Group total	2018 Group total
	Cash spending on patronage and sponsorship	1,336	1,753	4,812	1,898	6,601	4,093	605	21,098
Spending in kind on patronage and sponsorship (value)					233	42,371	103	42,707	35,168
TOTAL	1,336	1,753	4,812	1,898	6,834	46,464	708	63,805^b	53,622

a Spending by TF1 is calculated on a calendar-year basis; for the others, it is calculated on the 12-month rolling period from 1 October 2018 to 30 September 2019.

b The total amount of patronage spending (in cash or in kind) increased by 19% between 2018 and 2019, in particular because of a large increase for TF1 attributable to new donations in kind from the DTT channels and a rise in donations of advertising

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 gives airtime to a broad variety of causes and charitable organisations: Les Pièces Jaunes, Les Restos du Cœur, Sidaction, ELA (the European Association Against Leukodystrophies) and the Laurette Fugain association (a leukaemia charity). 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.

Bouygues Telecom organises voluntary work for employees throughout the year. In late 2019, for example, 45 employees volunteered via Pro Bono Lab to help a dozen or so charities.

Since the bill entitled "For a Digital Republic" 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. Donations from Bouygues Telecom customers since the beginning of this service total €456,000.

Since 2010, the Bouygues Immobilier Corporate Foundation has been a partner in the major "Les Médiaterre" project run by Unis-Cité, in which families living in underprivileged neighbourhoods are shown, over a period of six to nine months, how to develop eco-friendly behaviour in their day-to-day lives.

a National Frequencies Agency.

Bouygues Construction indicator

Indicator	Scope (activity or region)	Coverage	2019	2018	Remarks
Number of partnerships ^a during the year supporting integration, education and healthcare	Global	85% of Bouygues Construction's consolidated sales	336	444	Despite a slight decrease, Bouygues Construction remains committed to boosting the vitality of the areas in which it operates, by forging numerous partnerships with local charities.

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

Encouraging employee involvement

Several of the Group's business segments have made arrangements so that employees can take part in community action initiatives during worktime.

Since 2008, the Bouygues Construction Corporate Foundation, Terre Plurielle, has supported over 290 community projects promoting access to education, the labour market and healthcare. These are sponsored by 354 employees of the Bouygues Construction group, both in France and abroad. In total, 216 charities in 36 countries are supported through these initiatives.

Colas' patronage policy is based on three major avenues:

- cultural patronage: the Colas Foundation commissions paintings on the theme of roads and Colas en Scène supports new dance works and music festivals;
- community patronage: Colas Life supports educational assistance initiatives;
- scientific patronage: FRB^a, Institut France Ville Durable.

The Bouygues Telecom Corporate Foundation has over 1,165 volunteers from within the workforce. When they become charity volunteers, 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 2019 the Bouygues Telecom Corporate Foundation financially supported ten charitable projects proposed by the operator's customers, as it does every year. These projects make use of digital technology to serve the community. Out of these ten, the Bouygues Telecom Customer Committee chose four favourite projects that focus on helping people encountering social or medical hardship.

Following a hackathon^b organised on behalf of Surfrider Foundation Europe and involving several teams from Bouygues Telecom, employees came up with the *Ocean's Zero* app, which helps users learn how to reduce the amount of waste they generate each day. In June 2019, *Ocean's Zero* won a "Netexplo Change 2019" award in Paris.

The partnerships created by Bouygues Immobilier's corporate foundation with Unis-Cité over the past decade, and "Ticket for Change" since 2017, also involve employees (see section 3.4.2.2).

Committed to urban planning and urban environments

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

Bouygues Travaux Publics has been supporting the first "Sport dans la Ville" centre in Marseille by providing funding and human resources since its opening on 16 October 2019. The centre aims to help young people move from sport into work, by organising sports sessions and occupational-integration programmes.

Bouygues Bâtiment Ile-de-France has developed an app, "Naturellement Engagés"^c, to promote exemplary sustainable-development projects among customers and other stakeholders.

The Bouygues Immobilier Corporate Foundation, set up in 2009, aims to help make urban environments more people-friendly through forward planning and community action initiatives. In 2019 the Foundation maintained its commitment to developing social cohesion by supporting Unis-Cité's Médiaterre programme and the non-profit Ticket for Change. With the support of its "Demain la ville, le Lab." think tank, the Foundation also mounted the "Décloisonnons la ville!" ('Opening up the city') exhibition on the theme of social innovations in the city. Through its partnerships and own research, the Bouygues Immobilier Corporate Foundation is in constant dialogue with all types of stakeholders involved in shaping the city of the future.

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, participated in the Advanced Master in Smart Cities Engineering and Management offered by École des Ponts ParisTech and EIVP^d.

To develop training programmes in sustainable construction techniques, the Group co-designed the specialist masters-level course in sustainable housing and construction alongside ENSAM^e and ESTP^f

TF1 and Bouygues Telecom have run open innovation initiatives (such as hackathons and student project support) in the context of Le Spot Bouygues at Epitech IT school, where 120 m² of space is reserved for students working on some of the Group's innovative projects. Bouygues Telecom

a French Biodiversity Research Foundation.

b A short-term event attended by volunteer specialists who collaborate on a computer programming or digital creation project.

c www.naturellementengages.com.

d École d'ingénieurs de la Ville de Paris.

e Arts et métiers ParisTech.

f École spéciale des travaux publics, du bâtiment et de l'industrie.

collaborates with Webschool Factory, Epitech, ECE^a and Edhec^b on various initiatives, from helping organise innovation open days to sitting on judging panels, supervising final-year projects and organising challenges.

In June 2019, Bouygues Telecom and l'École Télécom SudParis, with the assistance of other partners (CNS, Nokia, SNCF Réseau and Spie), created a teaching chair called "The networks of the future for the services of tomorrow". The aim is to train engineers who are competent and open to change, capable of adapting to a network environment that is constantly evolving and of integrating themselves into all sectors of activity. Bouygues Construction is working on high-potential areas of innovation in conjunction with the universities of Cergy-Pontoise (mobility) and Aachen in Germany (production of a prototype asbestos-removing robot), ETH Zurich and NTU in Singapore (robotics), École Centrale de Lille (the "Construction 4.0" chair^c, worksite modernisation) and Stanford University in California (BIM).

In May 2018, Bouygues Construction and École Centrale de Lille signed the agreement governing the Construction 4.0 chair, in the context of which a team of doctoral students, young researchers and Bouygues Construction employees will research the following three fields:

- robotics and worksite automation;
- worksite optimisation, and;
- implementation of disruptive methods.

Bouygues Construction has also started a project called the worksite of the future based on new academic partnerships with several universities in France and abroad (Technical University of Munich, University of Texas at Austin and Harlington, Université de Sherbrooke and University of Alberta in Canada, and Lund University, Sweden).

Colas is developing several partnerships in France and abroad. Colas has forged academic partnerships with universities and other higher education establishments (e.g. University of Birmingham and of Alberta in Canada, École Centrale engineering school in France, MIT^d in the US, ESTP etc.) and scientific and R&D bodies and companies (Ineris^e, the CEA^f, ChemSud^g, FRB^h).

For additional information, see section 1.1.4 "A strategy of innovation for the benefit of users".

3.4.3 Partners, suppliers and subcontractors

Bouygues' overall performance is intrinsically linked to that of its partners, suppliers and subcontractors, which now number around 157,000. The selection of innovative products and services in technological, environmental and societal terms is essential to be able to offer the most state-of-the-art and responsible solutions. The implementation of a CSR policy for 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 several 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 accordance with the duty of vigilance law in France, this year the Group established its third vigilance plan for suppliers and subcontractors, which sets 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 details how these measures are monitored (see Chapter 4, "Risks and risk management", section 4.1). This policy embodies the Group's requirements as defined in the CSR Charter for Suppliers and Subcontractors, which is systematically appended to purchasing contracts and subcontracts.

Over 2019, 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 three main components:

- assessment of subcontractors and suppliers;
- careful selection of products and materials for their activity;
- responsible purchasing principles.

In accordance with remarks by the auditor with regard to 2018 and comments by the AMF, Colas introduced a new purchasing procedure taking into account responsible purchasing principles and laying down rules for selecting and assessing suppliers in October 2019.

It will be rolled out in 2020. An International Sourcing department, whose pre-selection criteria for suppliers will include CSR, is being set up. In November 2019, Colas set up a training program for English-speaking buyers containing specific modules on responsible purchasing. In 2020, suppliers concerned with calls for tenders relating to fixed assets (capex) will have to complete a CSR questionnaire drawn up by the Purchasing department and the Equipment department. CSR criteria will form an integral part of the overall assessment of suppliers. Scorecards for short-listing suppliers will be introduced in the course of 2020; these will take both financial and non-financial criteria into account.

Action plans relating to the duty of vigilance will gradually be rolled out in the various regions, starting in the second quarter of 2020. Bouygues Construction continued the roll-out of its new responsible purchasing policy in 2019. A total of 119 purchasing employees were trained in the important issues related to responsible purchasing. Ten associated targets covering all sectors were individually selected and set for them in their 2019 appraisals. Four were mandatory and six were optional. An international CSR purchasing committee was also set up in 2019 to complement the one that already operates mainly in France. Its remit are themes such as reducing plastic, socially-responsible initiatives and the circular economy. A

a École centrale d'électronique.

b École des hautes études commerciales.

c A research chair focused on increasing the productivity of the construction sector, bringing together doctoral students, young researchers and Bouygues Construction employees.

d Massachusetts Institute of Technology.

e French environmental safety institute.

f The French Alternative Energies and Atomic Energy Commission.

g European chair for new chemistry for sustainable development.

h French Biodiversity Research Foundation.

new tool called “Constellation” is also being rolled. One of its modules is dedicated to the assessment of suppliers and sub-contractors according to six criteria, one of which is CSR.

Bouygues Telecom has drawn up a plan to roll out eight responsible purchasing guidelines which the Group has prepared for the business segments to help them make progress on this issue.

Assessment of subcontractors and suppliers

Bouygues Construction, Bouygues Immobilier, TF1 and Bouygues Telecom map CSR risks by purchasing category and use external assessment tools to evaluate and monitor the social and environmental performance of their suppliers and subcontractors. All business segments conduct supplier CSR audits.

Since 2018, for example, Bouygues Construction has commissioned an external company, SGS, to carry out supplier CSR audits for countries and purchasing categories classified as high risk. The long-term aim is for these audits to cover all countries and purchasing categories. The Acesia platform is also used to evaluate the CSR performance of partner suppliers and allow them to access a progress plan from Afnor, the French standardisation body. Furthermore, Bouygues Construction UK has become a partner of the Supply Chain Sustainability School, a collaborative training institution.

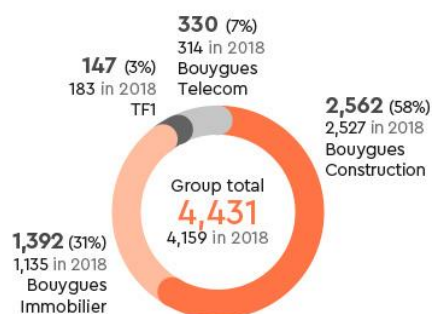
Bouygues Immobilier assesses most of its suppliers and subcontractors using a framework contract available on the EcoVadis platform. Small, medium-sized and micro businesses are assessed via a digital platform to improve monitoring of their CSR performance. The company wants all of its suppliers assessed using this platform by 2020.

2019 marked the tenth anniversary of Bouygues Telecom Initiatives, a venture capital fund which seeks to support open innovation by providing start-ups with equity capital and making it easier for them to launch their first commercial product, thus nurturing a spirit of shared partnership with suppliers and encouraging the co-creation of value. Bouygues Construction launched a quarterly newsletter called *Fournisseurs* (Suppliers) to share its ambitions and experience; the first issue, which was sent to nearly 20,000 external recipients, focused on responsible purchasing.

TF1 carried out an anonymous survey of 746 suppliers (25% response rate) to measure their satisfaction with the quality of the relationship generally and to identify the main areas for improvement.

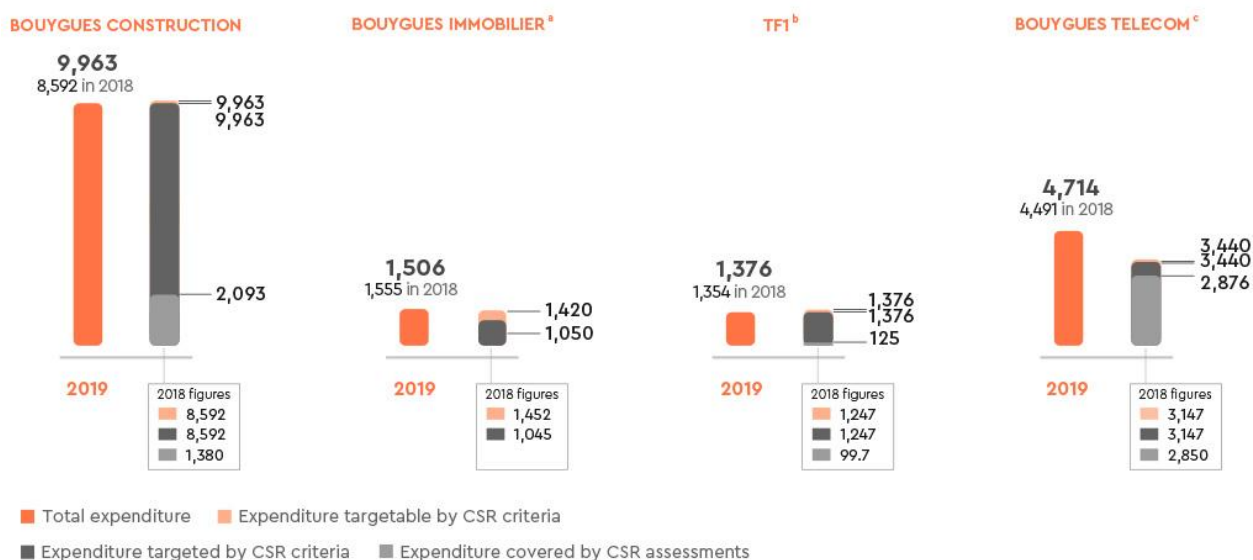
Number of suppliers and/or subcontractors that underwent a CSR assessment

over the past two years



Share of business segment expenditure targeted by CSR criteria or covered by CSR assessments ^{a b c}

€ million



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 targeted 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 identifying 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 fight the illegal timber trade, identify and eliminate all sourcing of threatened wood-based products, and increase the proportion of eco-certified timber purchases. This initiative, undertaken under its partnership with WWF France, led to the publication of a guide to purchasing sustainable timber (see section 3.3.3.2). Colas continues to work on including carbon footprints in all bids for purchases of binder production units, asphalt mixing plants, trucks and other vehicles. Furthermore, it has won several awards for its work clothes, made in accordance with fair trade principles. In 2019, Colas strengthened monitoring and broadened the process to include workwear manufactured for subsidiaries located in developing countries, most notably in Madagascar and Morocco.

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+. This concerns materials and products, listed in nationwide catalogues, in direct contact with indoor air.

Use of the disability-friendly and sheltered-workshop sector

The use of companies in the sheltered-workshop 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.

Responsible purchasing and meeting payment deadlines

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^d, and by Bouygues Construction’s conclusion of a charter for major accounts and SMEs as well as the SME Charter. The Bouygues group’s worker health & safety requirements at its locations apply equally to employees, subcontractors and suppliers (see section 3.2.2).

^a At Bouygues Immobilier, expenditure/costs arising from property sales (rental guarantees and notary fees) and financial expense (the “financial completion guarantee”(GFA) and capitalised interest) are exempted.

^b At TF1, expenditure related to acquisition of rights are exempted.

^c At Bouygues Telecom, the “Total expenditure” indicator is calculated on the basis of billed expenditure. The indicators “Expenditure targetable” and “Expenditure targeted” are calculated on the basis of budgeted expenditure. Furthermore, expenditure arising from leases and interconnections/roaming is exempted as well because it is related to the activity of a telecoms operator and has undergone a standard tendering process to select suppliers.

^d The Colas code is currently being drafted.

In March 2018, TF1 was again awarded the “Supplier Relations & Responsible Purchasing” label for a further three years. This label recognises those companies that have demonstrated sustainable and fair relationships with their suppliers. One of the key actions in 2019 was the appointment of an internal mediator (mediateur@tf1.fr) who can be contacted directly by suppliers and subcontractors.

Meeting payment deadlines was identified as an important objective by all business segments. The move to paperless billing was accelerated: the rate of electronic billing achieved by the top 101 suppliers managed by Purchasing at Bouygues Construction rose from 38% to 67% during 2019. At Colas, efforts were made to shorten approval procedures and deploy tools to promote digital documentation.

Lean management initiatives were conducted in several Bouygues Construction entities (Bouygues Maroc, Bouygues Energies & Services and Bouygues Bâtiment Ile-de-France) to improve payment times for suppliers and business partners. Since 2017, the proportion of invoices paid on time based on this scope increased by 15 percentage points to nearly 90%. The target is 100%. TF1 undertook to halve the percentage of invoices paid late by 2021. It has mobilised its Executive Committee and implemented related action plans, such as simplifying the ordering process.

Colas strives to ensure that the vast majority of its purchases are made locally, including aggregates, vehicle rental with driver, worksite subcontracting and equipment maintenance. Bouygues Construction aims to increase the proportion of purchases from local businesses to help in the development of the areas in which it operates. For France, this rate stood at 94% at the latest count. This is also a decisive criterion for worksites wanting to earn the in-house TopSite label. Bouygues Telecom uses companies with a strong regional presence to roll out its networks (fixed, mobile and transport).

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^a in this area in 2015.

- The initiative is run in each business segment by a team responsible for co-development projects with start-ups, based on an allotted annual budget. 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, NGOs, etc.), in 2015 Bouygues Construction founded Construction Venture. The purpose of this investment fund is to invest in and support strategic start-ups. So far, Construction Venture has invested in six start-ups.

In 2019 Bouygues Construction forged important new partnerships with two start-ups:

- Smiile, a Wizom Réhabilitation service, is a way of pooling resources and neighbourhood networks on the scale of an apartment block, a district or even a city.
- K-Ryole makes electric trailers that allow construction site workers to move heavy loads far more easily.

Bouygues Construction is also developing “Matching Up”. This programme supports and speeds up innovation projects. “Matching Up” enables operating units of Bouygues Construction to connect with start-ups that could meet their needs. Since 2015, some 200 start-ups have been tested in the field and around 15 of them have been involved in more ambitious cooperation. As part of “Matching Up”, a call for innovation on the theme of universities and campuses was launched in 2019 with the aim of identifying appropriate, practical solutions for the construction of future university campuses. At the end of this call for projects, which involved 142 start-ups and SMEs, around 30 start-ups were selected to develop a collaborative project.

During the 2019 edition of Bouygues Construction’s “New Value” intrapreneurship programme, four projects were supported for five months to develop a range of products and services, adapt them to the market and fine-tune them. The four projects of this second season, most of which were led by one or two people, were developed in response to a variety of issues, such as supplying solar energy, creating an innovative product to weatherproof and protect the surface of a building, and manufacturing a tool for taking complex measurements.

The Innovation Unit at Colas has partnered with RB3D, a robotics (collaborative robotics) specialist, to develop “Exopush”. This cobot^b, designed to help site workers with the manual application of asphalt mixes, has now passed on to the mass production phase. Colas, which now has around 30 Exopushes, has made this innovation available to the whole of the civil works sector. Colas has also teamed up with start-up Dawex to implement a data exchange platform. Other contracts have been signed with start-ups, particularly in the fields covered by BIM^c (e.g. Wisebim).

In 2015, Bouygues Immobilier founded Bird (Bouygues Immobilier R&D), a subsidiary investing in start-ups focused on the property development sector. So far it has invested in around ten. Bouygues Immobilier is also a founding member of Real Estech Europe, which runs a network of property developers and start-ups. It is also a partner of French PropTech, a network of about 40 French start-ups which aim to support the digital transformation of property development and construction. Additionally, through its Lyon regional branch, Bouygues Immobilier is a director of Centsept, a public-private association that supports the development of social innovation in the Lyon metropolitan area.

As a representative of the media sector on the start-up campus Station F, TF1 launched an incubator programme in January 2018 that will trial and mass produce innovative solutions and services, in line with new market practices and changes within the professions. During this six-month programme, start-ups are supported by professional experts and sponsors from TF1. For its third season, which started in June 2019, six new start-ups are being supported.

Bouygues Telecom has supported open innovation since 2009. Bouygues Telecom Initiatives, its decade-old incubator, has overseen around a hundred start-up projects. Half of them have become partnerships. Bouygues Telecom Initiatives has also invested in 12 start-ups, including two in 2019:

- Evina, a cybersecurity specialist, and;
- Xaalys, the first neobank for teenagers with parental control.

a For additional information, see section 1.1.4 of Chapter 1.

b A category of robot (non-autonomous): “a robot intended to physically interact with humans in a shared workspace (source: Wikipedia)”.

c Building Information Modeling.

In 2019, for the third consecutive year, Bouygues partnered Viva Technology (16-18 May in Paris), a global event dedicated to innovation and start-ups. The Group's business segments hosted and promoted over 30 partner start-ups. On this occasion, the Group organised a competition for start-ups on the topic of "How to manage a smart building and its services", with the opportunity for the winner to participate in Bouygues Immobilier's Sways^a project. An awards ceremony took place at the stand to recognise the eight best start-up/employee of the year collaborations out of all the business segments represented.

3.4.4 Responsible practices

3.4.4.1 Initiatives in place to guard against corruption

For many years, the Bouygues group has taken care to promote ethical conduct as a fundamental value in the course of its activity.

With this in mind, in 2006 the Group published a Code of Ethics which acts as a point of reference for all its employees. In particular, the Code states that the Group's activity, especially the negotiation and performance of contracts, must not give rise to corruption, influence peddling or similar offences. The Code of Ethics therefore calls on all senior executives and employees to comply with a set of principles which they must abide by under all circumstances and in all countries. To this end, the Code has been disseminated widely within the Group and is published on its corporate website^b.

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.

It is prefaced by Martin Bouygues, Chairman and CEO of the Group. The document states the Bouygues 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 be carried out within each business segment. It 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.

Prevention

The Group's Anti-Corruption compliance programme specifies that all senior executives who have operational responsibility for a Group entity (subsidiary, branch, department, etc.) must implement appropriate corruption prevention and detection measures and ensure that these measures are effectively applied, with the assistance of the business segment's ethics officer.

This compliance programme includes the following prevention measures in particular:

- Legal departments must ensure that information is properly disseminated and implement training that deals appropriately with the risk of corruption in the entity concerned.
- The Group has strict financial and accounting procedures in place, designed and implemented by its 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.
- 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 map should factor in the business sectors and geographical areas in which the entities operate.
- Each business segment must implement procedures to assess its customers, suppliers, service providers, intermediaries and, more generally, its business partners based on the corruption risk map. The business segment ethics officer, in liaison with the relevant line managers, must ensure that all the business segment's entities are able to run an assessment process before entering into a business relationship with a partner, as well as during the business relationship.
- Each business segment must carry out an audit of the business segment's compliance with applicable legislation and the compliance programme:
 - at the inception or end of all major projects;
 - when launching a new business activity, or;
 - when starting up in a new country, particularly if that country has a poor record on corruption.

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.

^a A new building which is both technological and services-based, located in Issy-les-Moulineaux.

^b See bouygues.com.

Bouygues Construction

Bouygues Construction has set up a corporate university called Bouygues Construction University, which designs, develops and dispenses cross-disciplinary training courses. As a supplement to the courses offered by Bouygues Construction University, a range of training modules on ethics and compliance or, more specifically, corruption, are ordered and/or developed and/or led by the legal and compliance department of Bouygues Construction or by the legal departments of its entities.



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 order to expand and improve training performance, a specific e-learning module called Fair Deal was launched in December 2015 by Bouygues Construction. It is available to 24,320 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.

After an initial mandatory phase, the training module can now be freely accessed by all Bouygues Construction employees so that they can decide on the best time for them to follow it. In 2019, 41% of employees were trained using this module. Bouygues Construction maintains its target for 100% of employees to be trained in business ethics by 2020.

Fair Deal also forms part of In'Pulse, Bouygues Construction's digital induction process (available in four languages). The aim is to make sure new employees are fully aware of the ethical standards within three months of joining.

In addition to these specific schemes, Bouygues Construction ensures that ethics is included in its general training programme so that all professions are aware of its importance. An ethics section has therefore been added to the training given to managers promoted to executive roles, as well as to the sales and purchasing professions and to employees likely to be posted abroad or to undertake assignments in other countries.

Bouygues Immobilier

Bouygues Immobilier has taken steps to ensure that an ethical business culture is promoted throughout the company.

First of all, line managers explain Bouygues Immobilier's rules of ethical conduct, and the need to comply with them, to every new employee. This knowledge is then tested at the end of the trial period. New employees are also required to complete e-learning modules on ethics before attending BI Quest induction seminars. These modules can be accessed via the on-line training platform, BI Learn.

The induction seminars provide an opportunity to remind all new employees of the importance of ethics in business. A member of the Executive Committee attends these seminars and stresses the company's commitment to ethical business conduct. The case studies presented at the seminars include questions on ethics. In 2019, 170 employees attended this seminar.

Modules specific to Bouygues Immobilier's areas of activity have been developed as part of the general training schedule. Classroom-based sessions relating to property development projects that involve public authorities have been provided by Bouygues Immobilier's legal department, for example. The objective is to raise employee awareness of the ways in which such activities may lead to breaches of probity. Similarly, all Bouygues Immobilier employees must take two compulsory e-learning modules on ethics, which can be accessed on the BI Learn platform. Systematic reminders are sent to employees who have not completed the two e-learning modules on ethics.

Colas

In 2019, the "Applied ethics and compliance" module, aimed at familiarising employees with core compliance principles at Colas and providing an overview of related procedures, was introduced in 2019 both in France and internationally, except in the US (which has its own specific procedures and training modules). In April 2019, Legal affairs managers responsible for overseeing this training at the local level were provided with common company-wide training materials. A total of 4,034 employees were trained between 1 November 2018 and 31 October 2019. In the US, 5,520 employees were trained (out of a total of 5,631 employees). Concurrently, "Ethics and accountability" training was provided to 70 managers.

In addition, Fair Play, a serious game, continued to be rolled out in 2019. It takes the form of an e-learning module. It is available to employees with a professional e-mail address and is designed to explore issues relating to ethical best practice. Following an initial campaign in 2018, it was run for a second time, in the second quarter of 2019. As at 15 September 2019, 4,402 employees had been trained using this module, resulting in a participation rate of 63.92%. This training will continue in 2020. The module is in the process of being translated into Czech, Croatian, Flemish, Polish, German, Romanian and Spanish.

TF1

Following on from its ethical initiatives of the past few years, TF1 continued to educate its employees on issues in 2019. A presentation of arrangements under the Sapin 2 law was given to members of the General Management Committee. It was then given to each management committee, emphasising TF1's policy on gifts and invitations as well as managing conflicts of interest.

During this exercise, several meetings took place within the various governance bodies of TF1 (executive Committee, general management committees, management committees, and business management committees) at the initiative of TF1's ethics officer and legal department.

Bouygues Telecom

In 2019, Bouygues Telecom pursued the training activities implemented over the past two years.

The on-line training courses launched in 2018 continued in 2019, thus increasing the number of employees trained and made aware of ethical matters. A total of 3,587 employees out of 8,000 took the "Anti-Corruption" module. The on-line modules will be run again in 2020 for the employees who have not taken and/or completed them. The reminder system was revised to enable wider dissemination and involve managers in monitoring the completion of these training courses by employees.

In 2019 there were also several targeted events run by the ethics officer and the Compliance department for senior management and the management committees of the Purchasing, Network and Marketing departments as well as of RCBT (the Bouygues Telecom store network). These events focused on risk mapping and the patronage/sponsorship process. The Human Resources department also received training on one of the main pillars of the Sapin 2 law: whistleblowing and the new protection for whistleblowers.

Finally, courses on ethics and preventing the risk of corruption were run at the entities recently acquired by Bouygues Telecom (all Nerim^a managers).

Group Ethics seminars

Since the early 2000s, the Bouygues group has promoted key values such as business ethics, respect and responsibility by organising 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 late 2018, a new seminar on business ethics, focusing on corruption and collusive practices, was held for corporate officers. This seminar was run on a large scale throughout 2019, with 13 sessions each lasting two full days being organised and 258 managers trained. The seminar will continue to be run in 2020. Seven sessions have already been scheduled.

The corporate whistleblowing facility

In the wake of recent legislation, the Group decided to upgrade its whistleblowing procedure to create an on-line platform specifically for reporting breaches and/or violations of the Group's compliance programmes.

The platform is on a website (<https://alertegroupe.bouygues.com/>) so that all employees (internal, external or occasional) can report a problem online, using a password and login. Whistleblowers must act disinterestedly, in good faith and have personal knowledge of the reported facts or events. They may choose to report their concerns to the ethics officer of the business segment, or, if it appears that the breach is wider in scope, to the Group Ethics Officer. These officers are subject to a heightened duty of confidentiality.

To ensure that this process is effective, the Group has carried out numerous communication campaigns such as publications on the Group's social networks, specific articles in the Group's in-house magazine, inclusion of the process in the internal training courses, and a special tab on the Group's intranet site (*ByLink*). The procedure for the receipt and processing of whistleblowing alerts is also published on the Group's corporate website as an appendix to the Code of Ethics.

Bouygues Construction

Bouygues Construction has a whistleblowing system which is described in the Group's Code of Ethics, as well as in the practical guide given to employees of Bouygues Construction during their induction, and available on its intranet site. There are two ways of sending a whistleblowing alert:

- by sending an email to the ethics officer of Bouygues Construction; or
- via the Bouygues group's whistleblowing platform.

This system is described on a specific intranet page accessible to all employees of Bouygues Construction.

Bouygues Immobilier

The method by which internal employees can issue a whistleblowing alert is accessible from the Ethics area of the Bouygues Immobilier intranet. A permanent notice about the whistleblowing system is on the intranet home page. The way it functions is also explained in the two on-line ethics training modules available to all Bouygues Immobilier employees.

Colas

A booklet containing Colas' compliance procedures was issued in April 2019, bringing together in a single document all internal processes introduced in application of the Code of Ethics, compliance programmes and the general principles of internal control. The procedures within it apply to all companies of which Colas directly or indirectly owns at least 50%. One section of the document covers procedures and rules for gathering and responding to whistleblowing alerts.

In September 2019, a communications campaign was initiated, aimed at all Colas employees, consisting of eight visuals displayed on employees' screen savers and the Colas intranet, on the subject of whistleblowing alerts, procedures, gifts and invitations, sponsorship and corporate patronage, and conflicts of interest. Prior to the campaign, a global message was issued by Colas CEO Frédéric Gardès in which he reiterated his commitment in this area.

TF1

TF1's whistleblowing arrangements are complemented by the use of the Bouygues group's whistleblowing platform. The aim is to work alongside the Group's ethics strategy and provide employees with additional methods of communication so that everyone can participate in maintaining ethical conduct and preventing the associated risks.

The arrangements for logging whistleblowing alerts were presented to employee representatives of TF1 and at sessions to raise awareness of the Sapin 2 law and business ethics. A specific message on this subject was also made to TF1 group employees via the corporate intranet, *VousFaitesTF1*.

Bouygues Telecom

Throughout 2019, various campaigns took place to raise awareness of the Anti-Corruption compliance programme and, more particularly, the corporate whistleblowing platform. Videos were made for this purpose and disseminated on internal media (by means of dynamic visual displays on all the screens at all the company's sites). They are regularly rebroadcast by the internal communications department. The visibility of the whistleblowing platform has also been optimised to make it easier to use (increased number of key words to facilitate access to the platform).

^a Nerim is a BtoB internet and telecommunications operator. Its acquisition by Bouygues Telecom was completed in March 2019.

Risk mapping

Pursuant to article 17.II.3, I of the Sapin 2 law, Bouygues ensures that each business segment maps its risks of exposure to corruption.

An efficient risk map calls for thorough knowledge of the internal processes of the Group's business segments. Each business segment has therefore drawn up its own map in conjunction with its operating entities in order to cover the specific features of each sector of activity.

This method, which is still being implemented, enables the Group to obtain an overview of current corruption risks and strengthen its prevention measures.

Assessment of third parties

Owing to the diversity of its activities and its international presence, the Bouygues group calls on the services of a very large number of third parties. In order to protect themselves from the legal, financial and reputational risks that may arise from a business relationship with a partner, the business segments have set up processes for assessing the integrity of counterparties when such a relationship is under consideration.

In 2019, tools were therefore introduced throughout the Group to enable all the business segments to assess counterparties presenting a risk. Each business segment adapts the tools supplied and/or supplements them with additional measures so as to take account of the specific features of its activity, especially the relationships it maintains with counterparties. A variety of digital databases and external service providers are consequently used to support the internal processes.

Once the assessments have been completed, the entity concerned may decide to enter into a relationship with a counterparty, continue with a current relationship or alternatively terminate it.

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.

Audit departments, assisted by the ethics officers, may be periodically asked to check that the activities comply with the principles of the compliance programme and the Internal Control Reference Manual of the Group and its business segments.

External audit firms 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.

It 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. 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 Security of personal data

The protection of personal data was strengthened following enactment of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (the General Data Protection Regulation, or GDPR).

Bouygues Construction

Bouygues Construction has developed a personal data protection policy geared primarily towards the processing of data produced by IT systems used by human resources departments.

Bouygues Construction has entrusted the governance of personal data protection to the IT and legal departments. This governance is based on a network of officers distributed throughout the entities of the business segment, drawing on expertise provided by the IT, legal and human resources departments.

Applications containing personal data are reviewed in accordance with GDPR principles, such as privacy by design and privacy by default, with the review also examining mentions of personal information. The management of requests for access rights is organised by means of e-mail addresses reserved for employees and external requests respectively.

Many classroom-based training courses have been held at Bouygues Construction in order to educate and support the IT specialists who process personal data, as well as the employees in the Human Resources and Legal departments.

Finally, given its many operations throughout the world, Bouygues Construction worked with CNIL^a to obtain certification for its Binding Corporate Rules (BCR). A request has been sent to CNIL and Bouygues Construction is awaiting a reply. The aim of this procedure is to apply a legal framework in those countries not subject to GDPR.

a French Data Protection Authority.

Bouygues Immobilier

In response to the new requirements on the protection of personal data, Bouygues Immobilier designated a DPO^a in February 2018 and implemented a compliance implementation plan. This plan made it possible to:

- strengthen Bouygues Immobilier's data security policy, in particular by introducing a more rigorous review of the system for authorising access to its IT system;
- inform the persons concerned, including clients and prospects, of their rights and how to exercise them, with the assistance of the Bouygues Immobilier website;
- inform, educate and train employees by means of compulsory on-line training modules, a specific section on the intranet and classroom-based courses run by the DPO.

An external audit took place at the end of 2018 to check the effectiveness of this plan. The various actions recommended have been implemented under the supervision of the DPO and a project team (consisting of members of the IT and legal departments).

Colas

Colas put in place a governance system for the protection of personal data, specifically by appointing a Chief Privacy Officer (CPO). Reporting to the CPO are 37 liaison officers located around the globe, covering the three core areas of HR, legal affairs and IT.

Several tools and models have been created to help meet obligations, covering:

- subcontracting;
- Privacy by Design;
- employee information;
- awareness-raising, and;
- data-protection register.

These resources are posted on a specific site, accessible to all employees, in English and French. So that new projects are set up in compliance with the GDPR, a special procedure accompanied by a self-assessment guide have been introduced. In addition, over 260 managers considered to oversee "sensitive" areas have been trained.

As a global company, Colas has also drafted Binding Corporate Rules (BCR), which are currently being reviewed by CNIL. Once approved, document will be sent to all subsidiaries.

TF1

In May 2018, TF1 designated a DPO and introduced a general GDPR policy, consisting of internal rules and business activity factsheets that every TF1 employee must comply with in relation to the protection of personal data.

Since March 2019, the DPO has been running a network of 54 data, operational and legal officers from each of the company's departments or subsidiaries, who are tasked with supporting the organisational and technological changes necessitated by compliance with GDPR.

In order to comply with the principle of responsibility, TF1 and its subsidiaries have also developed procedures for managing the rights of individuals and breaches of personal data, as well as various sets of standards, such as the one relating to data retention periods, the Security checklist and the privacy by design checklist.

The internal regulations, business activity factsheets, procedures and various standards are available on the corporate intranet under a section on GDPR in order to make it easier for employees to access the compulsory documentation.

Finally, a data privacy tool has been selected and will shortly be rolled out to enable:

- smooth implementation of compliance;
- standardisation of processing register updates;
- the management of access requests received by TF1 departments.

Bouygues Telecom

Since 2002 Bouygues Telecom has had an entity dedicated to compliance with the personal data protection regulations, as well as internal procedures for responding rapidly to customer requests and, where necessary, taking appropriate measures in the event of a security incident. The entry into force of GDPR prompted Bouygues Telecom to expand its arrangements, both within the company and with customers. Contracts with third parties contain clauses relating to the processing of personal data.

In March 2018, the company designated a DPO to ensure the cross-departmental governance of data processing in the company and ensure continued compliance. The DPO works closely with the teams tasked with ensuring data security, which is one of Bouygues Telecom's principal concerns. The company's documentation has been updated in response to the new requirements of GDPR, and the employees have been trained on GDPR rules.

Bouygues Telecom's BtoC customers, like its BtoB customers, are informed about how the company processes data by means of two privacy policies, which are accessible on the corporate websites.

Bouygues Telecom also runs campaigns to raise customer awareness of the risks of phishing and the importance of choosing strong passwords.

^a Data Protection Officer.

3.4.4.3 Ethical reporting

Upholding its public commitments in the area of ethical news coverage is a key concern for TF1, ensuring that its programmes as a whole meet broadcasting standards (the responsibility of the General Counsel and channel controllers), that it adheres to responsible practices, and its newsrooms are independent.

- The TF1 News department is tasked with ensuring that ethical principles common to the industry are followed in its newsrooms.
- Of the 240 journalists employed by TF1 in its newsrooms, approximately 75% are members of the TF1 Journalists' Association (set up shortly after TF1's privatisation), Presenters, Editors-in-chief and News directors are not members. The association's role is to create a space for dialogue in which all issues relating to the editorial line, ethical reporting and journalistic integrity and independence can be discussed.
- In France, the main journalist trade unions have adopted an ethical charter setting out professional standards for the industry. It can be consulted on the website of the SNJ (Syndicat National des Journalistes).
- The ethical charter specifically for TF1 journalists was signed on 28 January 2019. It was sent to all the company's journalists on 13 February 2019. Every newly employed journalist receives a copy of the charter when they sign their employment contract.
- In 2017, a committee of leading independent experts was set up to help ensure compliance with the principles of honesty, independence and diversity of viewpoints in news gathering and programmes on TF1 channels. This committee met in February 2019. Meetings between journalists and committee members took place in March 2019. Finally, in the summer of 2019 employees and third parties were made aware of the committee's referral procedure.

The TF1 News department pays extremely close attention to image sources and prohibits the use of amateur video clips when their origin cannot be accurately ascertained. When amateur videos that can be cropped and edited are used, it inserts the message "amateur video", specifying the date on which the images were recorded, if possible.

3.4.5 Product and service quality, safety and comfort

At the Bouygues group, respect for customers and users of its products and services 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 requirements 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.

In 2017, Bouygues Immobilier staff based in Toulouse helped design a special label attesting to indoor air quality in new housing: Called "Intérieur", it is backed by ImmoLab and was the brainchild of property and construction experts with help from healthcare professionals. Launched in early 2018, it was applied to Oreka, a development of 174 housing units located in the Séqué eco-neighbourhood in Bayonne. This development will be the first housing project carrying the label in France.

Electromagnetic fields

Bouygues Telecom contributes through the Ifer^a tax to the financing of electromagnetic-field measurement by companies certified by the French Accreditation Committee (Cofrac). This is carried out in accordance with 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^b 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 has signed a new mobile telephone charter with the Municipality of Paris to define a single ceiling for radiofrequency exposure in Paris^c.

a Flat-rate tax on network businesses (Ifer).

b French Agency for Food, Environmental and Occupational Health and Safety.

c This is set at five volts per metre at a 900 MHz frequency in indoor living spaces.

45%

decline in the road accident frequency rate at Colas between 2004 and 2019

Scope: Global

Road safety

Colas carries out R&D in several areas to meet road safety challenges, focusing on:

- producing a range of state-of-the-art 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), and;
- manufacturing road safety equipment (by Aximum, its road safety and signalling subsidiary).

As part of its Safer@Work research project, Colas and Volvo Construction Equipment are partnering to create a people-detection system which has been tested at two sites in Switzerland: an asphalt mixing plant and a quarry. The concept uses artificial intelligence to warn the plant operative when a person is detected near the machine. It incorporates different kinds of warnings, both for the driver and for people on the ground, thus reducing the number of accidents on worksites. In March 2018, the final trials relating to the third test cycle and demonstrations by Volvo Construction Equipment on excavators, wheeled loaders and articulated haulers were carried out at Colas worksites in Switzerland. In 2019, the trials continued, testing the concept on excavators at Colas' Swiss operations.

An increasing number of vehicles are set to be fitted with on-board data collection devices in the future, within the limitations of each country's laws and regulations (e.g. CNIL in France and GDPR in the European Union). Positive results, such as a significant reduction in speeds, have already been obtained at Colas Rail Ltd (UK) following data-supported discussions with drivers about the risks of speeding. Colas' cross-subsidiary objective of reducing the overall accident benefits employees, their families (through the sharing of best practice) and of course road users as a whole. The worldwide road accident frequency rate between 2018 and 2019 remained stable.

ANAIS, for preventive management of a road network

Increased road safety through the use of data is the underlying principle of ANAIS^a, a solution developed by Mobility by Colas in partnership with Michelin Driving Data Intelligence. By analysing data provided by volunteer drivers, the system contributes to road safety by identifying dangerous areas on the road network.

A range of on-board sensors, fitted neatly into a small box, track real-life driving experiences, providing data that are fed into the Anaïs database. The data are geolocalised, anonymised and cross-referenced with other criteria such as weather, vegetation and signalling. The aggregated information is then analysed to identify potential hazard areas, for example where road surfaces are worn or where there are potholes, or where there is a risk of skidding in bad weather. Each box measures deviations in vehicle trajectory, longer braking distances than normal and instances of emergency braking. All this information is cross-referenced and contextualised by ANAIS. The road network manager receives notifications so that maintenance can be targeted to the stretches requiring attention. These recommendations lead to improved infrastructure, lowering the risk of accidents through the installation of heavy-duty skid resistant surfacing, illuminated road signs, rumble strips and so forth.

In February 2019, ANAIS was awarded the 2019 Road Safety Innovation Trophy, in the Emergency interventions and road space development category. It has been operational since May 2019 in France's Eure-et-Loir administrative department, the first local authority to adopt it.

Elsewhere, as part of the Dijon smart city project, Bouygues Energies & Services has developed a road-traffic regulation system. This uses an instant warning system which enables the relevant municipal services to take effective action.

3.4.5.2 Product and service usage quality

The Bouygues group's aim is for quality and user comfort to be the distinguishing features of its products and services.

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 and urban biodiversity. To promote social cohesion, the Bouygues group has joined forces with the start-up Smiile to put in place neighbourhood networks that encourage interaction between residents through sharing, lending a helping hand or organising joint events.

In relation to the structures that it builds, Bouygues Construction also gives consideration to many different issues in advance.

Losinger, a Bouygues Construction subsidiary in Switzerland, has developed a method of neighbourhood design (known as MODD^b, which is based on the preferences of the social classes targeted. Following the success of the Swiss project, this approach is now being used in France under the name "Mixcity".

Mixcity seeks to define social strata in ways other than socio-professional categories (qualitative and quantitative) and to identify the preferences of each social class as regards accommodation and the neighbourhood (amenities, interaction with neighbours, presence or absence of nature, level of enthusiasm for technology, security), and to incorporate these into the design of the neighbourhood (urban morphology, public spaces, architectural elements). In 2019, the approach was used for three neighbourhood projects: Les Fabriques in Marseille, La Chocolaterie in Noisiel and La Distillerie in Villeneuve-d'Ascq. These projects will continue to be supported in 2020.

Bouygues Construction and Bouygues Immobilier both offer connected services to their residential customers.

a A French acronym for "Acquire, Digitise, Analyse, Inform and Make Safe".

b French abbreviation for "Methods and Tools for Sustainable Neighbourhood Development".

- Bouygues Immobilier’s Flexom service, released in 2016, can be used to manage household features such as lighting, shutters or heating, either from inside the apartment or remotely, using a smartphone or tablet. By the end of 2019 nearly 11,000 homes equipped with Flexom had been handed over.
- 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. In April 2018, Bouygues Construction unveiled its adaptable housing offer “Wizom for Life”, which provides support to occupants at every stage of their lives. The concept was shown to be effective and validated as a result of several trials, such as at the Azais residence in Sanguinet (south-west France), Les Résidences Vertes in Pulnoy (north-west France) and Ivry Confluences in Ivry-sur-Seine (Paris region).

Lastly, the Bouygues 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.

Bouygues Telecom operates a proactive policy to shield children and teenagers from inappropriate web content.

In February, Bouygues Telecom and its ad agency BETC Paris won the Top/Com Grand Prix 2019 (Campaign section) for “*Les bonnes pratiques du numérique, on en fait une affaire de famille*” (“Good digital practice is a family affair”), a campaign that ran in September 2018. After publishing two papers on French digital technology usage (produced by market research body Institut CSA), Bouygues Telecom introduced a series of initiatives to promote sensible use of digital technology among young people:

- a media awareness campaign in the daily and weekly press;
- a guide on digital best practices for children and their parents, distributed through Bouygues Telecom stores (and sent to the 88,000 subscribers to the youth magazine *Okapi*);
- a special offer for young teenagers, available for one month, to help them manage usage and costs, that included capped calls and one year of premium parental control, and;
- on the bouyguetelecom.fr website, a special “back to school” button on which parents can click for advice and answers to questions such as whether they should purchase a capped call plan for their teenager or whether plans with a high data allowance are suitable.

3.4.5.3 Accessibility of offers and services

The Bouygues group aims to make its products and services widely accessible, especially those of its media and telecoms businesses.



To help narrow the digital divide, the French government and mobile phone operators, including Bouygues Telecom, in January 2018 signed an agreement outlining a “new deal” for the mobile industry, which aims to speed up roll-out of 4G in areas where network coverage is poor, focusing on so-called not-spots. In these zones, each operator has agreed to build at least 5,000 new sites, some of which will be shared. In addition to this agreement, Bouygues Telecom in May 2018 reaffirmed its commitment to all parts of the country, especially rural areas. It signed a partnership with a not-for-profit body representing rural mayors of French municipalities with less than 3,500 inhabitants. This contained an undertaking to improve digital coverage.

Crozon: the positive impact of sharing

Crozon is a project whereby Bouygues and SFR agreed to share their mobile access networks in the less densely populated areas of France. It was launched in 2015 and completed in 2018. Its purpose was to achieve a significant increase in the quality of the 2G/3G/4G mobile networks in these areas, which are home to 57.2% of the French population.

The project has resulted in better network coverage thanks to the positive impact of sharing resources:

- Bouygues Telecom’s national 4G coverage has increased from 70% in 2014 to 99% today. Data traffic in rural areas has doubled each year. It has thus overtaken that of customers in very densely populated areas; and
- these operators have cut the number of mobile sites by 33%, from 18,400 to 12,300, which helps reduce visual clutter from the landscape.

In the Arcep^a survey on the quality of mobile services, published on 22 October 2019, Bouygues Telecom was ranked first for rural areas (mobile network). For the second consecutive year, Bouygues Telecom came top for towns and villages with under 10,000 residents. Nationally, Bouygues Telecom came second for the quality of its network in large towns, along transport routes and at tourist sites.

On 18 June 2019, Bouygues Telecom won the “Best Client-Centric Team” category of the CX Awards d’Or for its “Internet Garanti” (“Keep Connected”) service. Launched in April 2018, “Keep Connected” is an innovative service which guarantees Bbox customers an internet connection at all times, right from the start of their contract. New customers are provided with a 4G dongle in the shop, enabling them to connect all their devices to Wi-Fi immediately.

Since 2005, Bouygues Telecom has been working to help disabled people access electronic communications services. It has, for example, made customer services accessible to people with total or partial hearing loss, and now offers information and invoices in Braille and large print. Since 8 October 2018, Bouygues Telecom has ensured that its telephony services and interpersonal communications are accessible to people with total or partial hearing loss, impaired sight or aphasia. The mobile app Rogerveoice, a Bouygues Telecom partner, enables people who are deaf, hard of hearing or aphasic to use the telephone by relaying their calls. Bouygues Telecom credits such customers with one hour of communication per month. As part of its drive for continual improvement, Bouygues Telecom engages with associations that represent persons with disabilities in order to achieve a better understanding of their expectations and take account of their needs when designing new services.

a Arcep, the French telecoms regulator, is the independent administrative authority responsible for regulating electronic communications in France.

The TF1 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. To improve accessibility to digital content, the company introduced "FACIL'iti" on its MYTF1 and LCI websites. This solution enables internet users to read web pages in a format adapted to their disability based on data they have supplied on the FACIL'iti website.

3.5 INDEPENDENT VERIFIER'S REPORT ON THE CONSOLIDATED STATEMENT ON EXTRA-FINANCIAL PERFORMANCE PRESENTED IN THE UNIVERSAL REGISTRATION DOCUMENT (YEAR ENDED 31 DECEMBER 2019)

This is a free translation into English of the original report issued in the French language and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the General Assembly,

In our quality as an independent verifier, accredited by Cofrac under the number n° 3-1681 (scope of accreditation available on the website www.cofrac.fr), and as a member of the network of one of the statutory auditors of your entity (hereafter "entity"), we present our report on the consolidated statement on extra-financial performance established for the year ended on the 31 December 2019 (hereafter referred to as the "Statement"), presented in the Universal Registration Document pursuant to the provisions of Articles L. 225 102-1, R. 225-105 and R. 225-105-1 of the French Commercial code (Code de commerce).

Responsibility of the entity

It is the responsibility of the Board of Directors to establish the Statement in compliance with the legal and regulatory provisions including a presentation of the business model, a description of the main extra-financial risks, a presentation of the policies applied regarding these risks, as well as the results of these policies, including key performance indicators.

The Statement has been established by applying the procedures of the entity (hereinafter referred to as the "Criteria"), the significant elements of which are presented in the Statement and available on request at the entity's headquarters.

Independence and quality control

Our independence is defined by regulatory requirements pursuant to the provisions of Article L. 822-11-3 of the French Commercial Code (Code de commerce) and the Code of Ethics of our profession. In addition, we have implemented a quality control system, including documented policies and procedures to ensure compliance with applicable laws and regulations, as well as ethical and professional standards.

Responsibility of the independent verifier

It is our role, based on our work, to express a limited assurance conclusion on:

- the compliance of the Statement with the provisions of Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided pursuant to paragraph 3 of I and II of Article R. 225-105 of the French Commercial Code, namely the results of the policies, including key performance indicators, and the actions related to the main risks, hereinafter the "Information".

It is also our responsibility to express, at the entity's request and outside the scope of accreditation, a reasonable assurance that the information selected by the entity and identified by the sign * in Appendix 1 (hereinafter the "Selected Information") has been prepared, in all material respects, in accordance with the Criteria.

Nonetheless, it is not our responsibility to express any form of conclusion on the compliance by the entity with other applicable legal and regulatory dispositions, particularly regarding the vigilance plan and the fight against corruption and tax evasion, nor the compliance of products and services with applicable regulations.

1. Limited assurance report on the compliance and fairness of the Information

Nature and scope of the work

Our work described below has been carried out in accordance with the provisions of Articles A. 225-1 et seq. of the French Commercial Code, as well as with the professional guidance of the French Institute of Statutory Auditors applicable to such engagements and with ISAE 3000:

- we took note of the activity of all the companies included in the scope of consolidation, the statement of the main risks;
- we assessed the suitability of the Criteria in terms of its relevance, comprehensiveness, reliability, neutrality and understandability by taking into consideration, if relevant, the best practices of the industry;
- we verified that the Statement covers each category of information provided in III of Article L. 225-102-1 of the French Commercial Code regarding human resources and environmental matters, as well as the respect of human rights and the fight against corruption and tax evasion;
- we verified that the Statement provides the information required under article R. 225-105 II of the French Commercial Code, where relevant with respect to the principal risks, and includes, where applicable, an explanation for the absence of the information required under article L. 225-102-1 III, paragraph 2 of the French Commercial Code;

- we verified that the Statement presents the business model and the main risks related to the activity of all companies included in the scope of consolidation, including, when relevant and proportionate, the risks related to its business relationships, products or services, policies, actions and results, including key performance indicators associated to the principal risks;
- we referred to documentary sources and conducted interviews to:
 - assess the process used to identify and validate the main risks as well as the consistency of its outcome, including the key performance indicators used, with respect to the main risks and policies presented;
 - corroborate the qualitative information (measures and outcomes) that we considered to be the most important presented in Appendix 1. Concerning the risk related to corruption, our work was carried out at the level of the consolidating entity. For the others risks, our work was carried out on the consolidating entity, on the five business segments and on a selection of entities listed hereafter: Colas Midi Méditerranée, Mc Asphalt, Miller Group, Colas République Tchèque, Colas Australia Group, Colas USA, Bouygues Bâtiment International Turkménistan, Bouygues Travaux publics Dragages Hong-Kong (civil works activity), Bouygues Energies & Services ZGF France, Bouygues Bâtiment France Europe Habitat Résidentiel and Bouygues Bâtiment Sud Est;
- we verified that the Statement covers the scope of consolidation, i.e. all the companies included in the scope of consolidation in accordance with Article L. 233-16 of the French Commercial Code, with the limitations specified in the Statement;
- we took note of internal control and risk management procedures the entity has put in place and assessed the collection process aiming at completeness and fairness of the Information;
- for the key performance indicators and other quantitative results that we considered the most important presented in Appendix 1:
 - at the level of the consolidated entity and its five business segments (Bouygues Construction, Bouygues Immobilier, Colas, TF1, Bouygues Telecom), we implemented analytical procedures on the quantitative information to verify the proper consolidation of data collected and the consistency of any changes in this data;
 - at the level of the two most contributing business segments in terms of environmental and social impacts (Colas and Bouygues Construction), we undertook detailed tests on the basis of samples, consisting in checking the correct application of definitions and procedures, and reconciling the data with supporting documents. This work was carried out with a selection of contributing entities listed above and covers between 12% and 47% of the consolidated data relating to the key performance indicators and outcomes selected for these tests (26% of revenues and 18% of the workforce);
 - at the level of TF1, we carried out detailed tests with the Newen entity and TF1 headquarters, which cover 77% of the workforce in the business segment;
 - at the level of the two other business segments (Bouygues Immobilier and Bouygues Telecom), supporting documents available at headquarters cover most of the activities;
- we assessed the overall consistency of the Statement with our knowledge of all the companies included in the scope of consolidation.

We consider that the work conducted by exercising our professional judgment allows us to express a limited assurance conclusion; an assurance of a higher level would have required more extensive verification work.

Means and resources

Our verification work mobilized the skills of thirteen people and took place between July 2019 and February 2020 on a total duration of intervention of about twenty-five weeks.

We undertook interviews with about thirty persons responsible for the preparation of the Statement representing, in particular, the following functions: senior management, administration and finance, legal, tax, human resources, health and safety, environment and purchasing.

Conclusion

Based on this work, we did not identify any significant misstatement that causes us to believe that the statement on extra-financial performance does not comply with the applicable regulatory provisions and that the Information, taken together, has not been fairly presented, in compliance with the Criteria.

2. Reasonable assurance report on the Selected information

Nature and scope of the work

Concerning the Selected Information chosen by the entity and identified by the sign* in Appendix 1, we carried out work of the same nature as those described in paragraph 1 above for the key performance indicators and other quantitative results that we considered the most important, but in greater depth, in particular with regard to the scope of the tests.

The selected sample thus represents between 55% and 100% of the Selected Information.

We believe that this work allows us to express a reasonable assurance on the Selected Information.

Conclusion

In our opinion, the Selected Information has been established, in all material respects, in accordance with the Criteria.

Paris-La Défense, 19 February 2020

Independent Verifier

ERNST & YOUNG et Associés

French original signed by:

Jean-François Bélorgey

Partner

Eric Mugnier

Partner, Sustainable Development

Annex 1: information that we considered the most important

Human Resources information

Quantitative information (including key performance indicators)	Qualitative information (actions or results)
Total headcount	Health and Safety policy
Percentage of women with manager status	Promotion of diversity and equal opportunities particularly via recruitment, career management and closing the pay gap between men and women
Frequency rate of workplace accidents among staff (excluding occasional workers for TF1)*	
Severity rate of workplace accidents among staff (excluding occasional workers for TF1)	Development of skills and internal job mobility policy
Fatal accidents among staff (excluding occasional workers for TF1)*	

Environmental information

Quantitative information (including key performance indicators)	Qualitative information (actions or results)
Greenhouse gas emissions	Management of energy and the fight against climate change
Materials production activities that use a tool to manage environmental impacts (environmental certification or Colas checklist)	Certifications and labels
Total energy costs	The circular economy
Total energy consumption	The protection of biodiversity
Quantity of recycled materials	The roll-out of the Topsite label
Recycled materials in relation to the volume of aggregates produced*	
Quantity of asphalt pavement recycled	
Asphalt pavement recycled in order to reclaim bitumen	
Share of aggregates production sites working to promote biodiversity	
Proportion of non-hazardous waste that is recycled (not disposed of in landfill)	
Percentage of non-hazardous waste recycled	
Buildings in the annual order intake with a commitment to environmental labelling or certification prescribed by Bouygues Construction	
Number of construction projects with the BiodiverCity label	
Share of worksites carrying the Top Site label worldwide*	
Sales covered by an ISO 14001-certified EMS	
Handsets collected for recycling or re-use from customers (Bouygues Telecom stores, general public and corporate websites, employees)*	
Handsets collected for recycling or re-use through the after-sales service*	
Total electricity consumption	
Surface area of Green Office ^o commercial property developments in operation during the reporting period in m ²	
Surface area (m ²) carrying the BiodiverCity Ready label or covered by a commitment to obtain it	

Social information

Quantitative information (including key performance indicators)	Qualitative information (actions or results)
The percentage of employees enrolled on Byle@rn who have taken the on-line training course "FairDeal"	Responsible purchasing
Materials production sites working to promote dialogue with local communities (as a % of sales before inter-company eliminations)	Initiatives conducted to prevent corruption
The number of partnerships aiming to support occupational integration, education and healthcare conducted during the year	Dialogue with locally elected representatives, and transparency
Percentage of expenditure subcontracted to local companies	Business ethics
R&D budget spent on CSR	Journalistic integrity
	Social responsibility

