CONSTRUCTIONS INDUSTRIELLES DE LA MÉDITERRANÉE (CNIM)

Société anonyme having a Management Board and a Supervisory Board with share capital of €6,056,220

Registered office: 35, rue de Bassano - 75008 Paris

Paris Trade and Companies Register Number 662 043 595

Corporate Social and Environmental Responsibility Report

2016

Introduction

Since 2012, the CNIM Group has provided, in addition to its management reports, an annual report on the social and environmental impact of its activities, referred to as the Corporate Social Responsibility (CSR) Report.

A significant proportion of CNIM's activities and its future development is founded on its capacity for innovation in environmental matters: producing energy from waste or biomass, improving energy efficiency at its industrial facilities, cutting emissions of pollutants into the air and generating renewable energy. In these activities, the Group's current and future commercial success is therefore directly linked to the challenges of sustainable development and CSR.

With its strong commitment to health, safety and the environment, the Group is mobilizing all of its staff and making them aware of their responsibilities in the face of these major challenges, using corporate social responsibility as a means of adding momentum to its progress. By implementing a pro-active CSR initiative, CNIM aims to pursue its economic development, ensuring that balanced and sustainable relationships are maintained with all of its partners and stakeholders.

Gaïa Index bears witness to rapid advances in CNIM's CSR performance

For the second year in succession, CNIM is among the top 70 companies monitored by Gaïa Index, the EthiFinance subsidiary that specializes in analyzing and scoring CSR performance for SMEs and mid-sized companies in Europe. Gaïa Index gave CNIM a score of 86/100 for its CSR policy in 2015. For CNIM, this performance is proof of the commitment of our management and staff to the sustainable development of the Group's activities. Over 500 small-cap and mid-cap companies were assessed by Gaïa-Index in 2016. The data collected is used to score the transparency and performance level of the companies concerned. The top 70 performers make up the Gaïa Index.

1 THE PEOPLE OF CNIM

1.1 About us

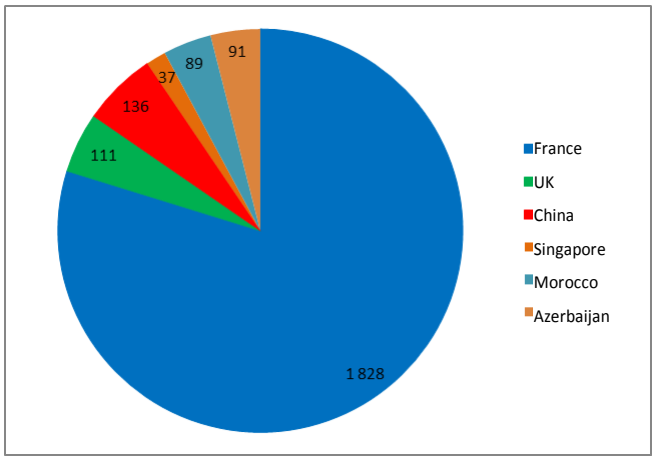
1.1.1 Total staff and breakdown of employees

Total staff* and breakdown of employees by company, by gender and by geographical area

	Men	Women	Total	
BERTIN IT	76%	24%	43	2%
BERTIN Technologies	64%	36%	533	23%
CBM	93%	7%	89	4%
CNIM AZERBAIJAN	91%	9%	91	4%
CNIM CENTRE France	100%	0%	23	1%
CNIM ENERGIE BIOMASSE	97%	3%	29	1%
CNIM Insertion	61%	39%	30	1%
CNIM OUEST ARMOR	97%	3%	30	1%
CNIM SA	80%	20%	977	43%
CNIM Singapore	86%	14%	37	2%
CNIM Terre Atlantique	100%	0%	16	1%
CNIM THIVERVAL GRIGNON	81%	19%	16	1%
LAB SA	79%	21%	83	4%
MES Environmental Ltd	92%	8%	111	5%
SUNCNIM	80%	20%	24	1%
VECSYS	76%	24%	25	1%
CNIM Transport Equipment	90%	10%	136	6%
Combined total	**79%**	**21%**	**2291**	**100%**

**Average total number of employees.*

On a like-for-like basis, staff numbers have fallen by 0.1% relative to 2015. The proportion of women in the workforce has risen by +0.4 percentage points since 2015, again on a like-for-like basis. More than 90% of the Group's total workforce is covered by the CSR report. Over 80% of the staff covered are based in France, with the rest distributed evenly between the UK, Asia, Morocco and Azerbaijan. 21% of the Group's staff are female, but it should be noted that this low figure is partly due to the subsidiaries which operate waste processing sites.



Proportion of executives, employees and blue-collar workers in the average total number of employees

	Engineers and Executives (Managers)	Employees, Technicians, Supervisors (White-collar staff)	Workers (Blue-collar staff)
BERTIN IT	97%	3%	0%
BERTIN Technologies	69%	29%	3%
CBM	16%	21%	62%
CNIM AZERBAIJAN	25%	31%	44%
CNIM CENTRE France	13%	43%	43%
CNIM ENERGIE BIOMASSE	7%	67%	26%
CNIM Insertion	1%	3%	96%
CNIM OUEST ARMOR	19%	47%	34%
CNIM SA	57%	24%	19%
CNIM Singapore	12%	21%	67%
CNIM Terre Atlantique	6%	6%	87%
CNIM THIVERVAL GRIGNON	11%	56%	33%
LAB SA	87%	13%	0%
MES Environmental Ltd	12%	10%	78%
SUNCNIM	73%	23%	4%
VECSYS	45%	55%	0%
CNIM Transport Equipment	24%	20%	56%
Combined total	**51%**	**25%**	**24%**

The CNIM Group is mainly made up of engineers and executives, but substantial variation exists: companies such as LAB and Bertin IT are made up of over 80% engineers and executives, while others, particularly the operating divisions, have a lower number because of the nature of their business. Almost one worker in four is a manual worker, which demonstrates the importance of industrial relations to the Group.

Proportion of staff employed under fixed-term / permanent contracts*

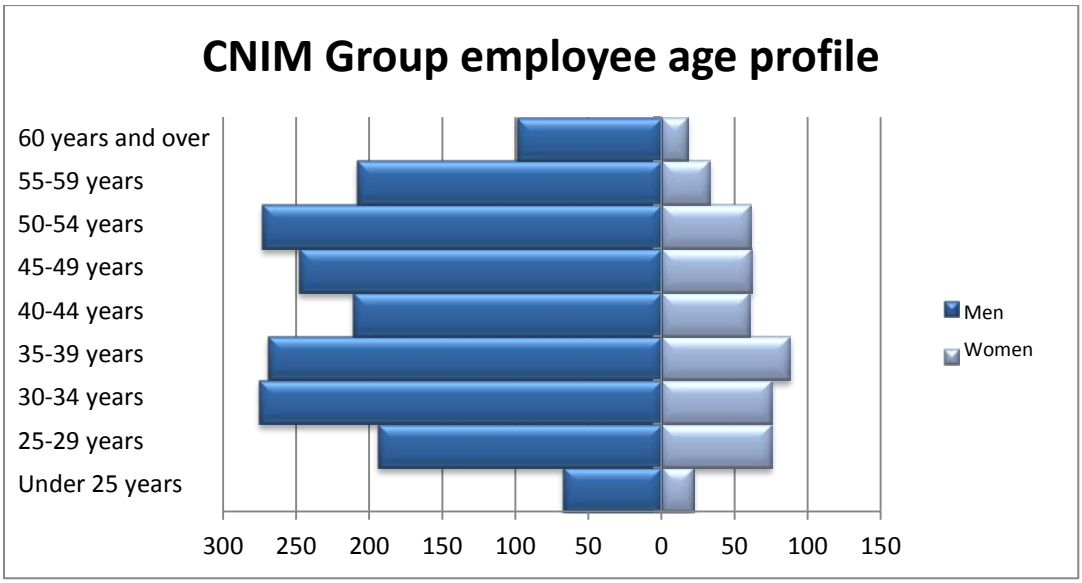
	Fixed-term	Permanent
BERTIN IT	6%	94%
BERTIN Technologies	3%	97%
CBM	0%	100%
CNIM AZERBAIJAN	16%	84%
CNIM CENTRE France	0%	100%
CNIM ENERGIE BIOMASSE	0%	100%
CNIM Insertion	97%	3%
CNIM OUEST ARMOR	0%	100%
CNIM SA	3%	97%
CNIM Singapore	0%	100%
CNIM Terre Atlantique	0%	100%

CNIM THIVERVAL GRIGNON	6%	94%
LAB SA	4%	96%
MES Environmental Ltd	4%	96%
SUNCNIM	4%	96%
VECSYS	0%	100%
CNIM Transport Equipment	43%	57%
Combined total	**7%**	**93%**

**Statistics for December of the year in question, in accordance with French legislation on human resources reporting.*

Seven per cent of CNIM Group employees are employed on fixed-term contracts. This proportion is mainly due to CTE and to CNIM Insertion, which offers fixed term employment integration contracts to almost all its staff. When these subsidiaries, which have specific operational functions, are excluded, the percentage of fixed-term contracts falls to 3.5%. By comparison, the rate of fixed-term to temporary contracts in France (Source: INSEE, Q3 2015) is 7.4%.

Average age and employee age profile



The Group's employees have an average age of 42 years.

1.1.2 Turnover

A. Hiring

	Men	Women	Total	
< 25 years	8%	4%	73	12%
25-29 years	14%	4%	83	18%
30-34 years	13%	4%	67	17%
35-39 years	10%	3%	31	13%
40-44 years	9%	2%	47	10%
45-49 years	9%	2%	25	11%
50-54 years	7%	2%	12	9%
55-59 years	4%	2%	33	7%
> 60 years	2%	0%	14	9%
Total	**75%**	**25%**	**385**	**100%**

Almost 5 out of 10 new hires were aged under 35. One in four new recruits is female.

The Group is also attentive to skills and expertise, and does not discriminate on the basis of age: 18% of staff recruited in 2016 were aged 50 or above. Furthermore, almost 60% of new hires were permanent contracts.

B. Departures

	Men	Women	Total		Departure rate
< 25 years	6%	2%	37	8%	2%
25-29 years	11%	6%	78	17%	3%
30-34 years	15%	4%	89	19%	4%
35-39 years	10%	2%	58	12%	3%
40-44 years	8%	2%	46	10%	2%
45-49 years	7%	2%	42	9%	2%
50-54 years	6%	1%	33	7%	1%
55-59 years	5%	2%	35	7%	2%
> 60 years	9%	2%	53	11%	2%
Total	**77%**	**23%**	**471**	**100%**	**21%**

The age groups with the highest turnover rates were the youngest and oldest categories. These two categories represent over half of all departures. This is explained by two factors: the youngest are the principal group employed under fixed-term contracts. At the other extreme, retirement is the most common cause of departure. Note that staff on fixed-term contracts represent almost 45% of departures.

	Men	Women	Total		Departure rate
Involuntary turnover	14%	4%	82	**18%**	**4%**
Voluntary turnover	36%	9%	203	**45%**	**9%**
Retirement	7%	2%	42	**9%**	**2%**
End of contract	19%	9%	127	**28%**	**6%**
Total	**77%**	**23%**	**454**	**100%**	**20%**

Fewer than one in five departures was due to termination of the contract by the employer. Seventeen people made transfers within the Group in 2016.

1.1.3 Remuneration and changes in remuneration

The annual payroll for 2016, including wages and social security contributions, as recorded in the accounts of the 18 companies covered by the report, is €147.5 million.

On a like-for-like basis, the annual payroll fell by 0.8% from 2015 to 2016. This change is due to the 0.7% fall in the size of the workforce over the same period. The average wage bill per employee changed very little from 2015 to 2016 (+0.3%). Based on the same companies taken into account in the 2015 report, the annual average wage bill per employee for 2016 was relatively steady at €63,960.

1.2 Organization of work

1.2.1 Working time

In accordance with the agreement on gender equality at work signed in 2012, a "Charter on Work-Life Balance" was produced at the end of 2013 by a working group comprising management and the representative labor union organizations of CNIM SA.

The aim of this charter is to foster employees' work-life balance, while taking business constraints into consideration.

In terms of the organization of working time, managers are encouraged to pay attention to the following matters:

- avoid scheduling meetings at late hours and allow travel to take place during working hours;
- adhere to the notice periods regarding changes to working time, except in exceptional or urgent circumstances;
- ensure adherence to the time slots during which portable business communication tools must not be used, except where justified by exceptional circumstances;
- implement a system of delegation during vacations, to ensure optimum cover for staff absences.

The charter was rolled out in early 2014 through various internal channels for all CNIM SA staff, before being extended to other Group companies such as Bertin Technologies. It is also referred to in the gender equality agreement signed on June 2016.

1.2.2 Breakdown of contracts: full-time, part-time

	Fixed-term	Permanent
BERTIN IT	96%	4%
BERTIN Technologies	94%	6%
CBM	100%	0%
CNIM AZERBAIJAN	100%	0%
CNIM CENTRE France	100%	0%
CNIM ENERGIE BIOMASSE	100%	0%
CNIM Insertion	100%	0%
CNIM OUEST ARMOR	97%	3%
CNIM SA	96%	4%
CNIM Singapore	100%	0%
CNIM Terre Atlantique	100%	0%
CNIM THIVERVAL GRIGNON	100%	0%
LAB SA	95%	5%
MES Environmental Ltd	92%	8%
SUNCNIM	88%	12%
VECSYS	65%	35%
CNIM Transport Equipment	100%	0%
Combined total	**96%**	**4%**

4% of Group staff are employed part-time. This figure is far below the OECD average of 16.8% (source: OECD, 2015). The great majority of part-time contracts are a matter of employee choice. The norm is for staff to be hired on full-time contracts.

1.2.3 Absenteeism

Group-wide, compared to 2015 there was a slight increase in the absenteeism rate, which rose to 5.5%.

2 STAFF HEALTH AND SAFETY

2.1 A priority of the Management Board

The CNIM Group sets particularly high standards for accident prevention, adherence to fundamental workplace safety rules, the protection of health and conservation of the environment:

- the delegation of responsibilities by the Chairman of the Management Board is implemented;
- appropriate safety and risk prevention measures are taken at each construction site and for all work performed on client premises;
- an inquiry is held into the causes of every accident or physical incident, and prevention and training solutions are proposed in order to further reduce risks;
- all steps are taken to ensure that legal provisions are respected.

This commitment by the Management Board translates into the close involvement of all Group staff at all levels of seniority, and recognition though numerous certifications, in relation both to quality, health and safety, as well as preservation of the environment.

	COMPANY	SITES / ACTIVITIES	CERTIFICATE					
			QUALITY	HEALTH & SAFETY			ENVIRON.	
			ISO 9001	OHSAS 18001	MASE	Other	ISO 14001	Other
ENVIRONMENT SECTOR	CNIM SA	Paris	o			CEFRI	o	
	LAB SA	Lyon and La Seyne-sur-Mer	o	o	o		o	
	CNIM THIVERVAL GRIGNON	Waste processing site		o			o	
		Thiverval Grignon sorting center		o			o	
	CNIM OUEST ARMOR	Waste processing site at Pluzunet		o			o	
		Waste composting and green algae processing site at Lantic		o			o	
	CNIM CENTRE France	Saint Pantaléon de Larche waste processing site.		o			o	
	CNIM TERRE ATLANTIQUE	Waste processing site at Plouharnel					o	
	MES ENVIRONMENTAL LTD	Waste processing site at Dudley	o	o		RoSPA	o	
		Waste processing site at Stoke on Trent	o	o		RoSPA	o	
		Waste processing site at Wolverhampton	o	o		RoSPA	o	
INNOVATION & SYSTEMS SECTOR	CNIM SA	Paris				CEFRI		
	CNIM SA	La Seyne-sur-Mer)	o	o		CEFRI		
	CNIM Transport Equipment	Foshan (China)	o					
	CNIM Singapore	Singapore	o	o			o	
	BERTIN TECHNOLOGIES	Montigny le Bretonneux, Aix en Provence, Tarnos, Thiron Gardais	o	o			o	
		Montigny le Bretonneux, Thiron Gardais, Montbonnot				CEFRI		
		Énergie Process Environnement - Tarnos	o	o	o		o	OPQIBI
ENERGY SECTOR	CNIM SA - Babcock Services	La Plaine Saint Denis	o			CEFRI		
		Gardanne	o		o			
		Villepinte	o		o			

In 2016, 81% of Group staff (based on the companies included in the scope of this report) were represented on mixed management/employee health and safety committees set up to supervise and provide opinions on health and safety at work programs.

2.2 Health and safety: a shared concern

Below are a few examples of the operational measures taken in 2016 with a view to achieving the set objectives and involving all staff in the improvement of health and safety.

- **Safety of employees traveling to high-risk countries: a priority for the Group**

CNIM Group pays particular attention to identifying and preventing risks that affect Group employees traveling to high-risk countries. The safety structure was updated in 2014 and communicated to all staff. Further work was carried out in 2016 in the form of training and discussion sessions organized at the Group's main sites. The sessions were aimed at all managers, staff and assistants affected by travel to high-risk countries. They enabled 337 people to enhance their awareness of the issues involved and ensured that the safety process is known, understood and followed by everyone concerned.

- **Health and Safety: a dedicated structure for UK projects**

Over the past five years, CNIM has carried out a number of projects in the UK, building three plants for Veolia, two for Suez/Sita, one for FCC, two for Viridor and one for MVV. During this time, CNIM has developed a Health & Safety culture, establishing a very robust management structure in strict compliance with procedures and regulations. These measures are put into practice at each site by a dedicated safety team, which ensures that everyone involved is on board and follows the company's safety rules. CNIM SA reinforces its safety and security culture through regular on-site audits led by Group staff or external bodies and has begun the work required to obtain certification under OHSAS 18001 in 2017.

CNIM has also set up a dedicated independent team to fulfill the Principal Designer role as defined in Britain's CDM 2015 (Construction Design and Management) regulations.

Statistics prove that the system put in place by CNIM in the UK works: over the course of 10 million hours worked, CNIM's RIDDOR* accident rate is 0.088, well below the UK average of 0.4.

**Reporting of Injuries, Diseases and Dangerous Occurrences Regulations.*

- **Risk prevention: 986 days and no accidents in the Composites and Polyurethane shop**

Risk prevention is central to the CNIM Group's corporate culture. A series of measures has been implemented in our workshops including "Zero Accident" training, "Safety Minutes", etc., so as to identify and analyze hazardous situations in day-to-day work and to propose and test solutions for their elimination, in conjunction with Production management. These measures, and respect for safety instructions generally, have enabled the Composites and Polyurethane shop at La Seyne-sur-Mer to go 986 consecutive days without an accident – an impressive result.

- **La Seyne-sur-Mer: good results from the second Safety at Work Day**

Following on from the success of the first Safety at Work Day in 2015, the Risk Prevention Cluster at the La Seyne-sur-Mer site chose to hold a second event in 2016. This year, the focus area was road safety. Both shop-floor and office staff had the chance to attend interactive workshops on riding on a motorbike track, car accident simulators, "technical check-ups" with a visual inspection of vehicle safety features, and sessions on how to complete a non-disputed accident report. The workshops were led by partner organizations such as Maison de la Sécurité.

More generally, at the La Seyne-sur-Mer site, the number of accidents with or without lost-time and minor incidents fell by more than half between 2014 and 2016, despite a rise in the number of productive hours.

- **Implementing a radiation protection policy at CNIM SA**

In December 2016, CNIM SA obtained CEFRI* certification for maintenance and intervention work as well as for non-physical expertise services in regulated zones. In order to achieve this, CNIM SA implemented a radiation safety policy in 2016. This applies to all staff of CNIM and its subcontractors working at nuclear facilities and in the Group's industrial units who are at risk of exposure to ionizing radiation. In accordance with the regulatory requirements, a number of commitments have been made, particularly with regard to training, medical monitoring and equipment modification. This will enable the company to improve its radiation safety on an ongoing basis.

**French Committee for the Certification of Businesses in the Training and Monitoring of Personnel Working with Ionizing Radiation.*

2.3 Expenditure on health and safety

CNIM invests in the safety of its employees. These investments operate at three levels:

- to ensure the reliability and safety of production facilities and tools for employees;
- to provide them with the personal protective equipment (PPE) they require;
- to provide them with the professional training necessary for their safety.

In companies that have joint management/employee health and safety committees, this investment is made in consultation with the committee.

Expenditure of €1.7 million was spent on health and safety in 2016, which equates to €747 per employee. This very high figure, 7% higher than in 2015 and over 30% higher than in 2014, reflects the importance that the Group attaches to the safety of its workforce.

The Group pays constant attention to safety and security, which translates into a spirit of continuous improvement at every site and for all staff. For example, following a fire at the Thiverval Grignon site in 2015, we worked together with insurance experts with a view to further improving our prevention and detection measures. All of their recommendations were accepted and put into practice.

2.4 Accidents at work and work-related illness

- **Frequency rate = 18.96 (number of accidents involving time off work x 1 million/number of hours worked)**

The CNIM Group performs particularly well on risk prevention, as proved by the accident rate, which is significantly lower than the French national average (22.9 in 2015. Source: Assurance Maladie). This is the result of accident prevention efforts made by everyone involved on a daily basis over a number of years.

- **Severity rate = 0.44 (number of days lost x 1,000/number of hours worked).**

The accident severity rate was 0.44 for 2016, compared with a French national average of 1.4 in 2015 (Source: Assurance Maladie). This rate – over three times lower than the national average – is all the more remarkable thanks to the significant proportion of staff working in factories, as itinerant site workers, and on the customers' premises.

- **Work-related illnesses recorded in 2016: 2 (work-related illnesses reported by staff in 2016).**

3 DEVELOPMENT OF SKILLS

3.1 Training policies implemented

The CNIM Group training policy is directly in line with the business development strategy and its forward-planning policy on jobs and skills management. It has three focal points:

- technical or occupational training courses aimed at developing and maintaining the technical skills of Group staff. CNIM has rolled out numerous training sessions on defense, nuclear, parts control, and industrial machinery as well as on factory design and operation. “Operational support” training has also been put in place in areas such as procurement, legal, accounting and quality. We also provide language training, by video conference and in the classroom, to keep pace with the internationalization of the Group.
- safety training, which represents close to a quarter of our total training investment. These training courses go beyond the minimum legal requirements and include training in e.g. gestures and posture for Production personnel.
- corporate training courses aimed at supporting our managers, project leaders and sales staff via multi-day modules jointly designed with external partners. The Management program, which will run until 2017, comprises five days of training per person split into four modules, half of which are delivered by in-house trainers. Almost 200 managers – around two thirds of the Group’s management personnel – followed the program in 2015 and 2016. Two other programs, containing modules on complex sales and project management, have also been organized for sales personnel, project leaders or staff interacting with customers.

In organizational terms, the emphasis has been placed on delivery through a variety of teaching methods with a “blended learning” approach that combines classroom teaching with distance learning modules.

As every year, the use of experts from within the Group to teach more specific modules on e.g. operational safety, nuclear power and production software contributed toward raising the skills of our workforce. Almost 100 internal trainers have therefore completed the course on “Taking and leading an in-house training course”. This course enables them to wear their trainer’s hat more comfortably, especially as regards their teaching skills and the oversight of interns.

Finally, in 2016 two staff members underwent a professional development period with a dedicated specialist mentor with a view to switching professions.

- **More block-release training**

CNIM Group encourages apprenticeship and professional training contracts that involve block-release training. Such contracts enable the company to publicize the career options it has to offer, as well as training young people and enabling them to discover the world of work. Trainees are assisted by mentors who pass on their know-how and skills, ensure training programs are followed and liaise between the trainee, the business and the training organization. An in-house training session on “good mentoring practice” has been rolled out to help mentors fulfill their roles.

- **In-house trainers pass on their knowledge**

In 2016, 16% of the CNIM SA training plan was delivered via in-house training. The Group has over 160 internal trainers, who work on developing new modules for specialist technical and cross-functional training. Developing in-house training modules with the help of staff and helping staff to learn are a point of honor for the CNIM Group. Our trainers are people with a mastery of a skill or area of know-how that they are willing to pass on to other employees in the Group.

- **Strategic Workforce Planning**

During 2016, a large-scale Strategic Workforce Planning project was begun in the Group. The aims of the project are: to anticipate future skills needs in connection with CNIM’s strategic management, to lay the ground for inter-generational skills transfer, to adapt skills to evolve with changing job requirements, to optimize workforce management and the overall performance of our operating structures, and of course to help employees maintain their employability. One of the project’s early stages involves defining a shared reference catalog of skills for all of the Group’s specialist fields, which have already been mapped out. To achieve this, several one-day workshops were organized between June and December 2016 which systematically targeted specialist operating staff and HR

managers. These enabled the key professional skills and practices to be defined for the different standard roles in a variety of specialist fields (Projects, Design, Maintenance, Scheduling, Finance, HR etc.) More workshops to cover the remaining specialist areas are planned for 2017, which will enable the catalog to be completed and implemented on the Group's HR Development platform. This will provide the Group with an integrated tool from which it can manage the assessment, training and development of our employees' skills, as well as anticipating future changes in skills and staffing needs and aiding career mobility.

- **A new training module in project management**

This new module, aimed at project teams in our Environment businesses, tackles each stage of a project from kick-off to contractual completion. The teaching format is based on a business game, alternating between technical instruction and role-play situations in connection with a fictional project. Course participants work through a variety of topics in turn, such as a request for a change in specifications, negotiating with the customer, presenting their project to the Group Management Board and an incident involving a supplier. The bespoke program was designed by an external provider in conjunction with operational staff. It will be followed by around 150 employees over a four-year period. When a similar module was developed in 2012 for the Innovation & Systems Sector, nearly 163 employees joined in the fun! This success prompted CNIM to open up this training course to a wider pool of employees.

3.2 Number of training hours

In 2016, over 49,000 hours of training were provided, giving an average of 21.4 hours per employee. Collectively, the training measures are utilized to develop staff skills. Almost 61% of staff members followed at least one training course during the year.

3.3 Staff appraisal and career development interviews

In 2016, 91 % of staff falling within the scope of the analysis received an appraisal and career development interview. This type of interview is generally uncommon in English-speaking countries.

Also in 2016, the Human Resources Department conducted an opinion barometer exercise, which indicated that employees' perceptions of annual interviews has improved, especially with regard to the setting of well-defined targets and clear feedback on performance.

4 DIVERSITY MANAGEMENT

4.1 Measures adopted to promote gender equality

Composition of the governing bodies in 2016:

- the Management Board currently comprises four members, all of whom are male;
- the CNIM Supervisory Board comprises twelve members, of whom seven are men and five are women.

Female directors thus represent 42% of the Supervisory Board. This means that the CNIM Group's governance complies with French Act No. 2011-103 of January 27, 2011 concerning gender equality in the workplace, which states that the proportion of directors of either sex must not be lower than 40%.

- **Gender equality in the workplace: new agreement signed in 2016**

The distribution of jobs within the CNIM Group shows that the vast majority of female staff work in support functions such as communications, human resources, finance and legal. Although the percentage of women in engineering and managerial positions has virtually doubled in just under ten years, shop floor staff are still almost exclusively male.

During 2016, CNIM's management met on several occasions with trade union representatives in order to discuss observations, issues and actions aimed at underpinning CNIM's commitment to gender equality in the workplace.

The signatories to the agreement wished efforts to be continued towards promoting gender diversity at the workplace, especially as regards access to jobs and work/life balance, and towards preventing all unjustified gaps in terms of pay, promotion and access to professional training (in equal positions, irrespective of skills, age and seniority)

Precise metrics have been developed. These will be monitored annually, over and above the gender balance report given each year to the Central Works Council. To ensure that the entire workforce knows and passes on the commitments we have made, it has been agreed that internal communications will be sent out to all staff and managers over the lifetime of the agreement.

4.1.1 Proportion of women in the CNIM Group*

	Men	Women
< 25 years	75%	25%
25-29 years	72%	28%
30-34 years	79%	21%
35-39 years	75%	25%
40-44 years	78%	22%
45-49 years	80%	20%
50-54 years	82%	18%
55-59 years	86%	14%
≥ 60 years	85%	15%
Total	**79%**	**21%**

The proportion of women in the French metal-working industry was 21.9% in 2014 (Source: INSEE data, 2014); the proportion of women in the CNIM Group is slightly above this average. Moreover, the current dynamic clearly signals an increase in the proportion of women in the workforce: in the youngest age groups, the proportion of women is higher than average.

4.1.2 Proportion of women in the engineering and executive workforce (managers)*

	Men	Women
< 25 years	68%	32%
25-29 years	65%	35%
30-34 years	73%	27%
35-39 years	72%	28%
40-44 years	76%	24%
45-49 years	77%	23%
50-54 years	87%	13%
55-59 years	89%	11%
≥ 60 years	91%	9%
Total	**77%**	**23%**

Only in the age groups from 50 upwards is the proportion of women below the national average. The rates in age groups between 25 and 50 are more or less equal to the average for the metal-working sector.

4.1.3 Proportion of women in the white-collar workforce (employees, technicians and supervisors)*

	Men	Women
< 25 years	69%	31%
25-29 years	65%	35%
30-34 years	72%	28%
35-39 years	62%	38%
40-44 years	64%	36%
45-49 years	69%	31%
50-54 years	60%	40%
55-59 years	70%	30%
≥ 60 years	57%	43%
Total	**65%**	**35%**

**Statistics for December of the year in question, in accordance with French legislation on human resources reporting.*

The number of women working as employees, technicians and supervisors is above the national average in every age group.

4.1.4 Indices based on the median monthly salary of men and women, by age group and category

	Engineers and executives (Managers)		Employees, technicians and supervisors (White-collar staff)		Workers (Blue-collar staff)	
	Men	Women	Men	Women	Men	Women
< 25 years	215	201	160	100	119	119
25-29 years	225	219	165	168	127	NS
30-34 years	269	253	178	165	135	119
35-39 years	309	300	194	187	135	NS
40-44 years	351	309	182	198	152	NS
45-49 years	382	330	235	194	163	NS
50-54 years	397	392	218	194	167	-
55-59 years	419	300	220	177	167	NS
≥ 60 years	467	368	253	167	171	-
Total	**328**	**280**	**187**	**177**	**148**	**119**

100 is the lowest median value by category and gender.

The gender wage gap is 7.8%. This compares to a wage gap of 16% between men and women in the EU as a whole (Source: ILO, data for 2016).

The Group is attentive to all fairness issues, and staff remuneration in particular. Remuneration is the subject of a special action plan envisaged in the agreement on gender equality at work signed by management and labor in France.

In order to prevent gender discrimination, the Group takes part in annual pay surveys. The surveys put the Group's pay levels in perspective compared to the rest of the market, to ensure fair pay for the same level of responsibility, without gender distinctions. A special action plan has also been included in the agreement on gender equality at work signed by management and labor in France.

4.2 Policy on combating discrimination

The generation contract enables the CNIM Group to prepare for the future by recruiting and training today the generation who will be responsible for future projects, while fostering transfer of the knowledge and skills acquired by our most experienced members of staff.

Accordingly, CNIM, Bertin Technologies and LAB have made quantified commitments in their company-level agreements relating to:

- the number of trainees taken on each year;
- the proportion of young people aged under thirty among new recruits;
- the number of employees aged over fifty in the workforce;
- the recruitment of employees aged over fifty;
- listening to any specific request relating to health and the organization of working time.

- **Measures to promote the employment and integration of disabled people**

The CNIM Group has forty-five disabled employees, representing 2% of the workforce. Four disabled persons were recruited in 2016.

Committed to non-discrimination and equal opportunities for disabled employees, the Group reaffirms its willingness to continuously strive to promote the appointment, retention, training and development of disabled people. To achieve this objective, a specific action plan for disabled workers was implemented in 2013. Its aims are:

- to encourage Group employees with a disability to speak out;
- to adopt a proactive approach to the recruitment of disabled people;
- responsible purchasing: a voluntary initiative to use sheltered workshops (enterprises in which 80% of staff are disabled).

All of the Group's French personnel, staff representative bodies and company doctors have been included in this commitment.

5 PROMOTION OF SOCIAL DIALOG

5.1 Respecting freedom of association and the right to collective bargaining

- **Staff representation within the Group**

Staff are represented within the CNIM Group in a variety of bodies.

Four members of the Central Works Council (CWC) are appointed to represent staff on the CNIM SA Supervisory Board. Three members of the CWC are also appointed, along with three deputies, to the Supervisory Board of the CNIM Participation fund. A further director is also appointed to the CNIM SA Supervisory Board to represent employee shareholders. Two members of the CWC are also elected to attend General Meetings of CNIM shareholders.

Finally, the ten staff representative positions on the Group Works Council are divided between the four labor union confederations present in the Group. Without substituting for the representative bodies of individual entities in the CNIM Group, the Group Council acts as an advisory body on Group strategy. It is designed to be a forum for discussion and debate, thereby ensuring the reciprocal sharing of information between Group management and staff representatives. Going beyond its legal obligations, CNIM Group management has made a Group-level agreement whereby all trade unions representing staff members can nominate a union representative. These measures reflect CNIM's desire to promote constructive labor relations across the widest possible range of issues.

5.2 Organization of labor relations

The Group is committed to the quality of labor relations within the different companies that form a part of it. By establishing common principles, and then bargaining where necessary, different subjects are broached with management and labor in order to accommodate the special features and the diversity of the Group. Employee safety is an absolute priority. Health and safety in the workplace thus continues to be a focus area for ongoing measures with ambitious targets, and labor relations have an important role to play in this respect. All the Health, Safety and Working Conditions Committees within the various companies are focused on this issue.
In a multi-activity group like CNIM, labor relations are organized at all legal levels of the business: group (Group Works Council), company (Central Works Council) and site (Employee Representatives; Works Council; Health, Safety and Working Conditions Committee). Site-level meetings take place monthly, with extraordinary meetings being held to respond to exceptional requests, address particular topics or consult the representatives on specific projects.
Regular negotiations are also held with trade unions, enabling dialog to be held on a wide range of subjects such as work/life balance, combating discrimination, working hours, salaries and profit-sharing. As well as responding to staff concerns reported by the representatives, labor relations constitutes a vital route for supporting change management, the quality of life at work and the Group's needs to adapt to its markets.
Over 80 % of staff are covered by one of the following collective labor agreements:

- the collective labor agreement on the metalworking industry (at both national and regional level);
- the collective labor agreement on the waste industry;
- the national collective labor agreement on executives, engineers and equivalent employees of companies managing thermal and air conditioning plant operations;
- the national collective labor agreement on blue-collar workers, employees, technicians and supervisors of thermal plant operations;
- the collective labor agreement on engineering firms/engineering consultancies/consultancy firms;
- the collective labor agreement on shipping.

- **CNIM Group internal opinion barometer**

In 2016, the Group Human Resources Department launched CNIM's third internal opinion survey, following on from those conducted in 2012 and 2014. This time, the pool of survey subjects was widened significantly to cover all of the Group's employees in France; the goal for the longer term is to cover every company in the Group.

Staff were questioned about their perceptions of their job as well about changes, management, working conditions, pay and benefits and internal communications. The wording of the questions was the same as in the two previous surveys, so that changes could be measured.

The results of the barometer showed that 97% of staff members surveyed believe they have the right skills to perform their job, while 87% state that they are satisfied and motivated in terms of the interest level of their work and their degree of independence and 83% say they can count on their co-workers in the event of a problem.

An action plan based on the barometer results is currently undergoing validation, after which it will be implemented in 2017 and 2018. The focus areas of the plan relate mainly to internal communications, management practices and the visibility of career opportunities to all staff.

5.3 Collective agreements signed in 2016

The CNIM Group has good labor relations with management and labor. In France, these good relations enabled agreements in several areas to be signed in 2016: staff pay, diversity management, working arrangements and employee representation.

List of occupational pay agreements signed in 2016:

- Mandatory annual bargaining rounds: CNIM SA, Bertin Technologies;
- Statutory profit-sharing scheme: CNIM SA, Bertin Technologies;
- Voluntary profit-sharing scheme: CNIM SA, Bertin Technologies;
- Collective Retirement Savings Scheme: CNIM SA, Bertin Technologies, LAB SA;
- Workplace Savings Scheme: CNIM SA.

Agreement signed in 2016 on diversity management:

- Gender equality in the workplace: CNIM SA and Bertin Technologies.

Agreement signed in 2016 on working arrangements:

- Adjustment and reduction of working hours: Bertin Technologies (modulation of working hours at the Thiron Gardais site).

Agreements signed in 2016 on employee representation:

- Pre-election memorandum of understanding: Bertin Technologies;
- Classifications: Bertin Technologies;
- Collective deputization rule in relation to the Saphymo/Bertin Technologies merger.

An agreement was also signed at Bertin Technologies regarding the termination of employment contracts, while the mandatory annual negotiations at LAB SA were the subject of a formal record of disagreement.

No new agreement was signed in 2016 at Group level relating specifically to health and safety at work.

6 OUR ENVIRONMENTAL COMMITMENT

6.1 General policy on environmental management, and QSE policy

Within the framework of the sustainable development policy and its environmental responsibility, the Group has adopted a preventive approach toward the environmental impact of its activities, as it has for all the risks that it must manage.

Environmental management is closely linked to the preventive measures undertaken in relation to health and safety at work.

Legislative and technological surveillance, training, information and communication with its employees and external contacts (customers, suppliers, subcontractors and authorities) are the basis for the Group Quality, Health, Safety and Environment policy.

Several subsidiaries or sites of the Group have for a number of years made an effort to reduce the ecological footprint of their activities, whether they are production, research or engineering sites.

Each company has a Health, Safety and Environment Director who ensures that legislation is observed and preventive measures are implemented in relation to:

- noise pollution;
- waste treatment;
- land pollution;
- air pollution;
- the control of hazardous products.

All provisions are monitored, documented and their compliance with the legislation and the regulatory framework can be demonstrated at any time.

All of these matters are also discussed at meetings of the Health and Safety Committees of the various companies.

In 2016, the Group did not incur any fines or non-pecuniary penalties for failure to comply with environmental legislation and regulations.

The Group's know-how is used to improve the energy efficiency of the facilities designed, made, maintained or operated by the Group in all its activities and in the Environment and Energy Management department in particular. The Group is keen to improve the reliability and performance of its products and services in terms of energy efficiency and reduction in emissions so as to allow its customers to achieve their own objectives.

These arrangements have placed the Group in a position where it has not had to pay any compensation during this financial year in respect of court decisions relating to environmental matters, and has not had to make any provisions for risk in this regard.

Management of the Environmental Sector of CNIM considers sustainable development to be the fundamental challenge in the forthcoming decades.

To contribute to this global objective, the EPC business unit is setting up a voluntary program to structure and formalize its actions towards economically effective, socially equitable and ecologically sustainable development. Management’s objective is to eliminate, as far as is reasonably possible, all health and safety risks as well as nuisances that could be caused by its activities or facilities to personnel on the site or third parties.

It endeavors in its operations to promote the Best Available Techniques (BAT) in environmental protection, energy efficiency and residue reduction. The processes developed are optimized from the design stage onward in order to limit resource consumption (energy, water, reagents, etc.), minimize residues (flue-gas cleaning residues from household waste incineration, catalysts used, etc.) and recover by-products (scraps, bottom ash, process water, etc.) while maintaining a high level of performance.

During construction activities, an effort is made in relation to building waste management and limiting environmental impact in accordance with local legislation in force and good practice as established by European regulations.

The Waste & Energy Management Solutions (WEMS) business unit has developed an integrated management system to assure performance and continuous improvement in the following areas, in line with the risk assessments and the opportunities arising:

- the quality and performance of its products and services, building on BAT (Best Available Technology), innovation and R&D;
- compliance with applicable standards in relation to health, safety and the environment;
- the environmental footprint of its products and services, in terms of energy efficiency, cutting emissions into the air, ground and waste, minimizing water and reagent consumption and minimizing the production of residues.

The company's commitment to environmental management is attested by a range of relevant certifications (see section 2.1). This process will be continued in 2017 with the certification of further sites under ISO 14 001 or ISO 50 001.

6.2 Employee training and information on environmental protection

In 2016, nine Group companies were certified under ISO 14001; a total of 17 sites thus incorporate environmental issues into their management systems (see section 3.2.1). Over a thousand employees are thus regularly trained in and/or familiarized with the various continuous improvement programs that aim to enhance our ability to anticipate and counteract environmental risks.

6.3 Provisions and guarantees for environmental risks

A regulatory watch and compliance assessments are conducted in the Group's various sectors and subsidiaries so as to minimize risks. No risks were identified after these assessments, and therefore no provision has been made in the accounts for environmental risks.

In terms of guarantees for environmental risks, the CNIM Group has an ''environmental breaches and damage" insurance policy that covers losses incurred by third parties and damage to the environment. The guaranteed amounts vary depending on the type of insurance cover provided in the contract.

7 LIMITING OUR ENVIRONMENTAL IMPACT AND WORKING TO REDUCE THAT OF OUR CUSTOMERS

7.1 Waste management and waste-reduction measures

7.1.1 Waste management

INCOMING TONNAGES		SORTING CENTERS	OUTGOING TONNAGES	
TYPE	(T)		TYPE	(T)
Multiple	17,454		Cardboard and printed papers	4,847
Packaging	1,178		Tetra	210
Newspapers, journals and magazines	771		Coarse-grained paper and cardboard	2,065
Glass	10,583		Dark PET	352
			Light PET	1,018
			HDPE	492
			Steel	485
			Aluminum	27
			Newspapers, journals and magazines	5,592
			Glass	10,512

INCOMING TONNAGES		UCOM and ISDND	OUTGOING TONNAGES	
TYPE	(T)		TYPE	(T)
Waste collected in a composting/separation tank	12,965		Compost	8,979
Green algae	5,479		Ferrous metals	257
Wood and plant waste	8,771		Glass	2,509
Bulky waste and NHIW	3,747			
Glass	2,535			
Asbestos	-			

Waste from waste-to-energy centers:

INCOMING TONNAGES		UVED	OUTGOING TONNAGES	
TYPE	(T)		TYPE	(T)
Household Waste	1,076,229		Bottom ash and fly ash	308,855
Timber	400,051		Flue-gas cleaning residues from household waste incineration and salts	39,613
NHIW	77,715		Ferrous metals	21,779
Other	126,954		Other	29,492

Reuse of waste: all 65,504 tonnes of waste incineration bottom ash was reused in road engineering processes.

Waste from CNIM Environment Division sites:

CNIM SA: Environment Division sites*	
OUTGOING TONNAGES	
TYPE	**(T)**
Metal	204
NHIW	197
Timber	82

**Sites included: Leeds, Wilton, Beddington, Kemsley*

Waste from third-party sites*:

THIRD-PARTY SITES	
OUTGOING TONNAGES	
TYPE	**(T)**
Scrap metal	14
Timber	5
Paper/cardboard	4
Sundry	7

**Note: the quantities of waste from some third-party sites are not known.*

Waste from industrial sites

Industrial sites	
OUTGOING TONNAGES	
TYPE	**(T)**
Metal	726
NHIW	196
Timber	59
Paper/cardboard	10

Over 64 % of waste was directed toward the following channels:

- for use mainly as fuel or another way in which to produce energy;
- for the recycling or recovery of metals and metallic compounds;
- for the recycling or recovery of other inorganic materials.

It should be noted that there is no waste processing business in some of the countries in which the CNIM Group operates. Furthermore, the inclusion of LAB Washington in the scope of the 2016 CSR report led to a reduction in the Group's waste reuse rate, since this new procedure enables metals to be recycled in a new way.

7.1.2 Measures taken to improve waste recycling and reuse

- **Ash treatment: recovery and reuse of all metal residues within ash**

Since acquiring the technology and assets of Geodur Recycling AG in April 2013, LAB has offered solutions and services in relation to bottom ash treatment and the recovery of ferrous, non-ferrous and precious metals. There are two specific metal extraction processes: RecuLAB™ NF, a dry process that enables non-ferrous metals to be extracted from coarse particulates and RecuLAB™ Au, a wet process that allows precious metals such as gold and silver to be recovered from fine particulates.

LAB signed two contracts to build plants utilizing these two processes in 2015 in Washington state, USA and in the Zurich region in Switzerland. Both contracts were delivered in 2016. The facilities in question are now operational.

- **On-site treatment of hospital waste: Vietnam chooses Sterilwave**

In 2016, Bertin's Sterilwave proved to be a major export success, with a rise in orders of over 50%. The CNIM subsidiary won a number of contracts in Vietnam through tender competitions run by the World Bank. Several dozen sets of equipment have been delivered, leading crucially to global recognition from the World Bank and WHO.

Sterilwave technology was developed by Bertin over the course of several years. It is based on an innovative procedure that involves mashing waste together in a single vat before heating it to 100°C with microwaves to achieve complete microbial disinfection. The process enables potentially infectious waste to be transformed into inert material that ranks as household waste, leading to an economic gain for the hospital, an environmental gain and above all a reduced risk of biological contamination.

- **Reuse of IT equipment and third-party waste**

Since 2014, the CNIM Group has signed partnership agreements with organizations for the employment of the disabled, respectively concerning the recycling or reconditioning of used IT equipment and screens for all French subsidiaries and the sorting and recycling of third-party site waste.

Under these agreements, the CNIM Group contributes on the one hand to reintegrating people into the job market who find it difficult to obtain work and on the other to the circular economy, by:

- reducing the Group's environmental impact by reducing waste and the associated CO_2 emissions;
- transforming waste into resources, thus limiting the consumption of raw materials;
- favoring reuse.

In 2016, 10 tonnes of paper and cardboard were collected under the agreement on the collection, sorting and recycling of third-party waste, and new contracts were signed with the aim of extending selective waste sorting to more sites.

7.1.3 Measures taken to reduce food waste

The CNIM Group does not buy, process, distribute or sell food products. Furthermore, only two companies in the Group, representing 10% of the workforce covered by this report, have a workplace canteen. Food waste is therefore a minor issue for the Group, and no specific action plan has been established for this topic other than the vigilance and common-sense measures that the Group applies to all of its consumption and waste.

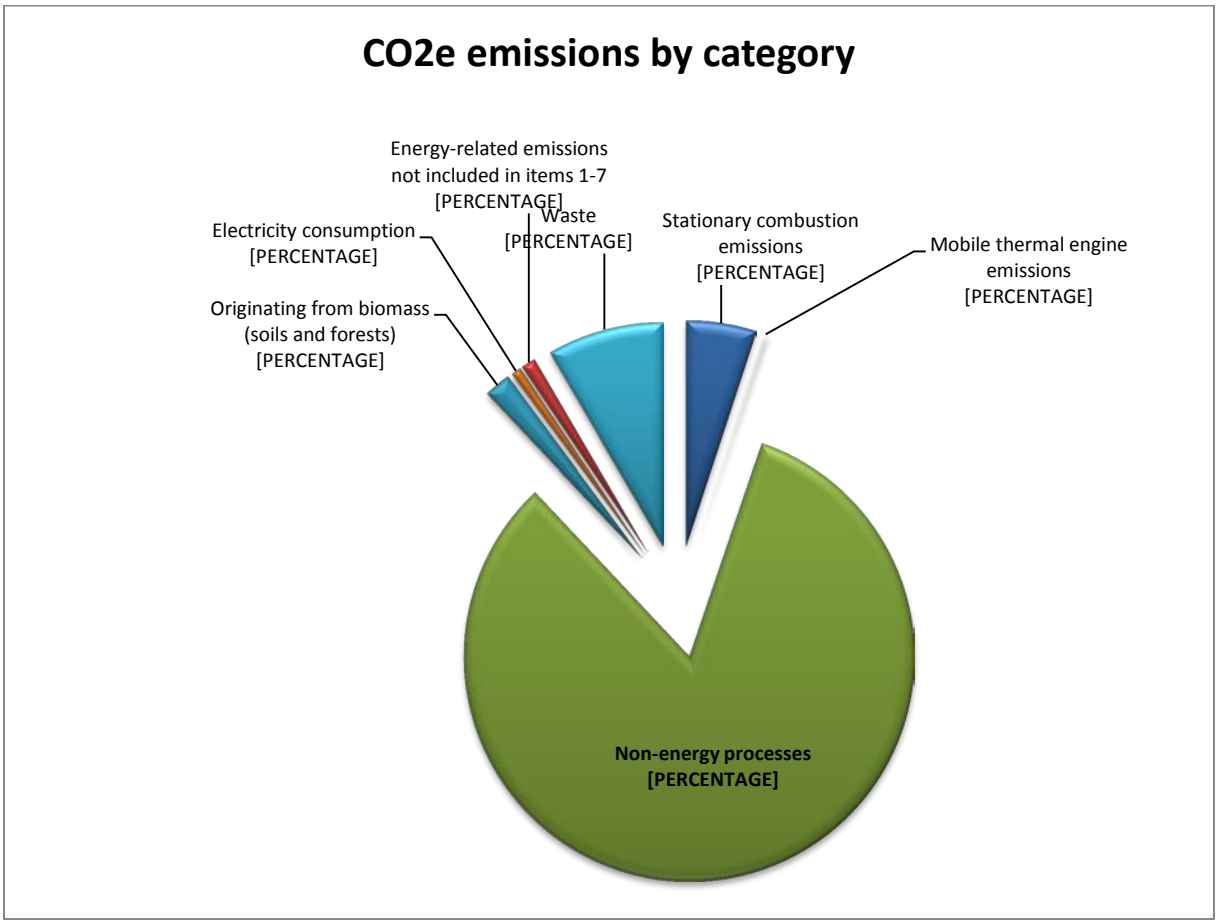
7.2 Greenhouse gases and measures to reduce and purify air emissions

7.2.1 Greenhouse gas emissions

In 2016, the consolidated greenhouse gas emissions for scopes 1 and 2 were 523,815 tCO_2e, with a 36% uncertainty.

			Values							
			Greenhouse gas emissions							Avoided emissions
Emissions categories	**Numbers**	**Emissions headings**	CO_2 (tonnes)	CH_4 (tonnes)	N_2O (tonnes)	Other gases (tonnes)	**Total (t CO2e)**	CO_2 b (tonnes)	Uncertainty (t CO2e)	**Total (t CO2e)**
Direct greenhouse gas emissions	1	Stationary combustion emissions	25.688	2	1	0	26.064	443.961	1.281	0
	2	Mobile emissions	1.274	0	0	0	1.284	36	76	0
	3	Emissions from non-energy processes	372.108	0	75	979	433.574	968.450	166.552	264.605
	4	Fugitive emissions	0	0	0	0	0	0	0	0
	5	Biomass emissions (soils and forests)	0	0	0	249	9.958	0	2.987	0
		Sub-total	**399.070**	**2**	**76**	**1.228**	**470.880**	**1.412 446**	**170.896**	**264.605**
Indirect emissions associated with energy	6	Indirect emissions associated with electricity consumption	0	0	0	0	3.726	0	320	0
	7	Indirect emissions associated with vapor, heat or cold energy consumption	0	0	0	0	0	0	0	0
		Sub-total	**0**	**0**	**0**	**0**	**3.726**	**0**	**320**	**0**
Other indirect greenhouse gas emissions	8	Energy-related emissions not included in items 1-7	3.530	54	0	0	5.411	-443.997	272	0
	9	Purchased goods and services	0	0	0	0	0	0	0	0
	10	Capital property	0	0	0	0	0	0	0	0
	11	Waste	42.423	55	0	0	43.798	0	19.667	0
	12	Upstream goods transport	0	0	0	0	0	0	0	0
	13	Journeys/travel	0	0	0	0	0	0	0	0
	14	Tax exemption	0	0	0	0	0	0	0	0
	15	Upstream leasing	0	0	0	0	0	0	0	0
	16	Investments	0	0	0	0	0	0	0	0
	17	Visitor and customer transport	0	0	0	0	0	0	0	0
	18	Upstream goods transport	0	0	0	0	0	0	0	0
	19	Use of products sold	0	0	0	0	0	0	0	0
	20	End-of-life of products sold	0	0	0	0	0	0	0	0
	21	Tax exemption	0	0	0	0	0	0	0	0
	22	Downstream leasing	0	0	0	0	0	0	0	0
	23	Commuting	0	0	0	0	0	0	0	0
	24	Other indirect emissions	0	0	0	0	0	0	0	0
		Sub-total	**45.954**	**109**	**0**	**0**	**49.209**	**-443.997**	**19.939**	**0**

Note CO_2b: CO_2 of organic origin (biomass and organic waste), chemically identical to fossil-origin CO_2e but reported differently in the carbon account. It is classified as short-cycle carbon, unlike fossil-origin CO_2.



Note: the item 'Biomass emissions (soils and forests)' does not take into account the organic CO_2b emitted by the CNIM Énergie Biomasse sites.

- **Emissions avoided**

The Carbon Accounting method estimates the emissions avoided by a certain activity. In the case of CNIM, this activity is waste reprocessing.

Thanks to waste-to-energy conversion and material waste processing at

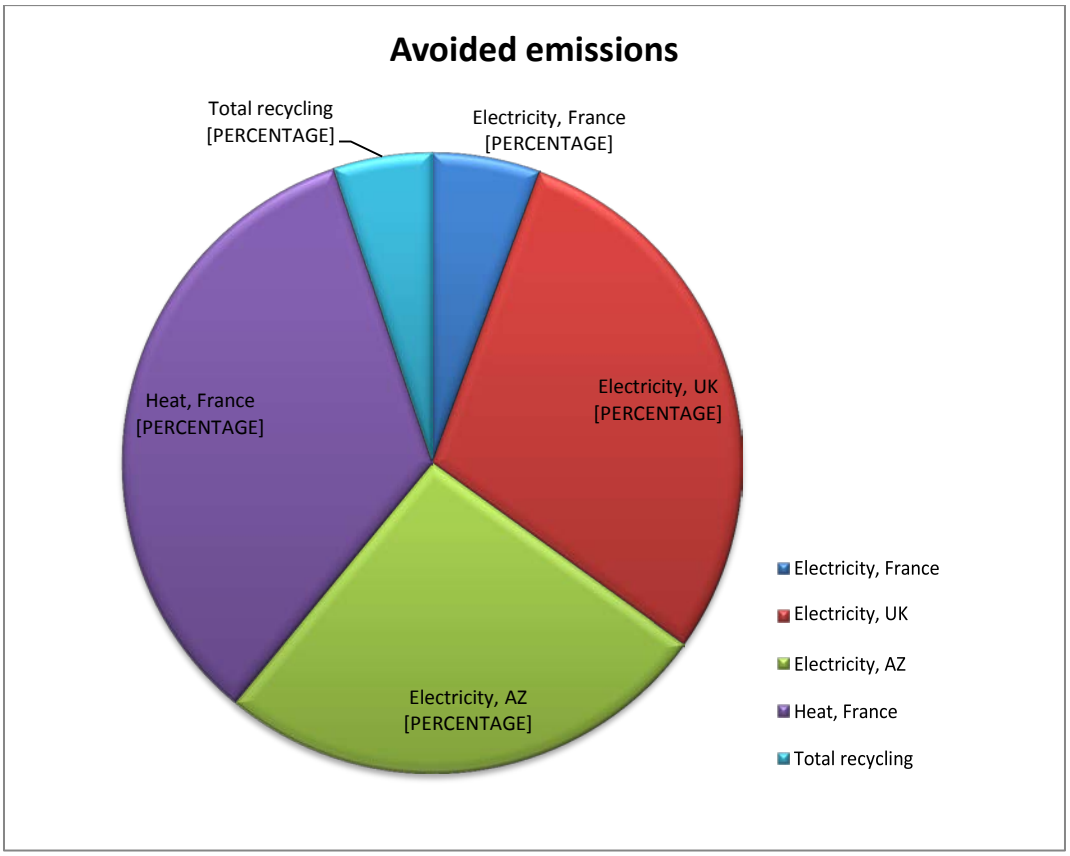
- - Thiverval-Grignon, Pluzunet, Launay Lantic, Saint-Pantaléon de Larche, Nesle, Estrées Mons (France),
- - Wolverhampton, Stoke-on-Trent and Dudley (UK),
- - and Baku (Azerbaijan),

the CNIM Group avoided emissions of 264,605 tCO_2e in 2016.

Note on avoided emissions: emissions that would have been generated in order to produce the same quantity of energy or raw material according to conventional production methods (national energy mix).

	Emissions factor	Emissions avoided
	kgCO_2e/MWh	t. CO_2e
Electricity sold in the UK	505	77,593
Electricity sold in Azerbaijan	473	68,920
Electricity sold in France	56*	14,850
Heat sold in France	279	89,662
Recycling of materials		13,580

*The carbon database emissions factor is 72kgCO2e/MWh for France, but 56kgCO2e/MWh if the part related to the distribution and transportation of electricity (which is outside CNIM's scope) is excluded. This figure is very low in comparison with the UK or Azerbaijan, which is due to the very considerable role of nuclear power in France's energy mix.



7.2.2 Measures taken to reduce and purify air emissions

- **LAB R&D**

LAB files on average 6-7 patents per year, more than two thirds of which are immediately put to use in its products and construction projects. These enable it to avoid dependency on third-party technologies and offer a range of processes that can be implemented in standard or customized configurations.

LAB's expert staff analyze and coordinate these needs in order to develop the right products to meet them. They have significant material resources at their disposal in the form of the LAB Test Center and its mobile on-site investigation units, of which DemoLAB® is the best example.

The final stage before inclusion in the LAB process catalog is industrialization, i.e. moving from a prototype installation to a reliable high-performance industrial product.

LAB has developed a wet scrubbing technology, marketed under the DeepBlueLAB® brand, that responds to the needs of the shipping industry for flue gas depollution systems. Perfecting this new product required LAB to comply with existing environmental directives and also take account of specific factors concerning the space available aboard ships and the technical preferences of the shipowners. Marine scrubbers appear to represent one of the best solutions currently available, in the face of the decision taken in 2016 by the International Maritime Organization to impose a maximum of 0.5 % for sulfur across all the world's oceans with effect from 2020.

- **Marine scrubbers supplied by LAB for three Brittany Ferries vessels**

On January 1, 2015, the European Directive on reducing the amount of sulfur emitted by marine vessels in ECA (Emission Control Area) regions took effect. The French ferry constructor STX has opted to fit LAB's flue-gas washing technology (marine scrubbers) to three Brittany Ferries vessels in order to bring them into line with the new standards. These are the very first scrubbers to be made of composite material, which makes them lighter, easier to repair and highly competitive. There is an overall global market of around 1,000 ships that will need to be equipped to comply with the Directive. These first new-generation scrubbers entered into operation during 2016, and performed as expected and even better.

- **District heating goes green in Paris**

CNIM Babcock Services and LAB Service have refurbished the Bercy steam generation plant operated by the Compagnie Parisienne de Chauffage Urbain (CPCU). The assignment, one of the largest environmental upgrades to be carried out in France in recent years, involves converting boilers that supply Paris's urban heating and hot water network to run on gas and biofuel. Ultimately, the works carried out have meant that CPCU is able to announce reductions in emissions values by 85% for nitrogen oxides, 98% for sulfur dioxide, 90% for particulates and 25% for carbon dioxide. This illustrates how one of the Group's traditional fields of know-how contributes to the achievement of pollution reduction targets and to the transition to renewable energy.

- **Bertin Technologies helps an agri-food company to cut emissions of pollutants**

An international food processing company was using process steam generated from a coal boiler. In order to comply with the French regulations on Large Combustion Facilities, the company is taking steps to reduce pollution, in connection with which it hired Bertin Technologies in 2016 to carry out a preliminary project on bringing the boiler into line with the rules. This project was an opportunity for collaboration with other CNIM businesses, namely: CNIM Babcock Services for the change of fuel and LAB for flue gas treatment.

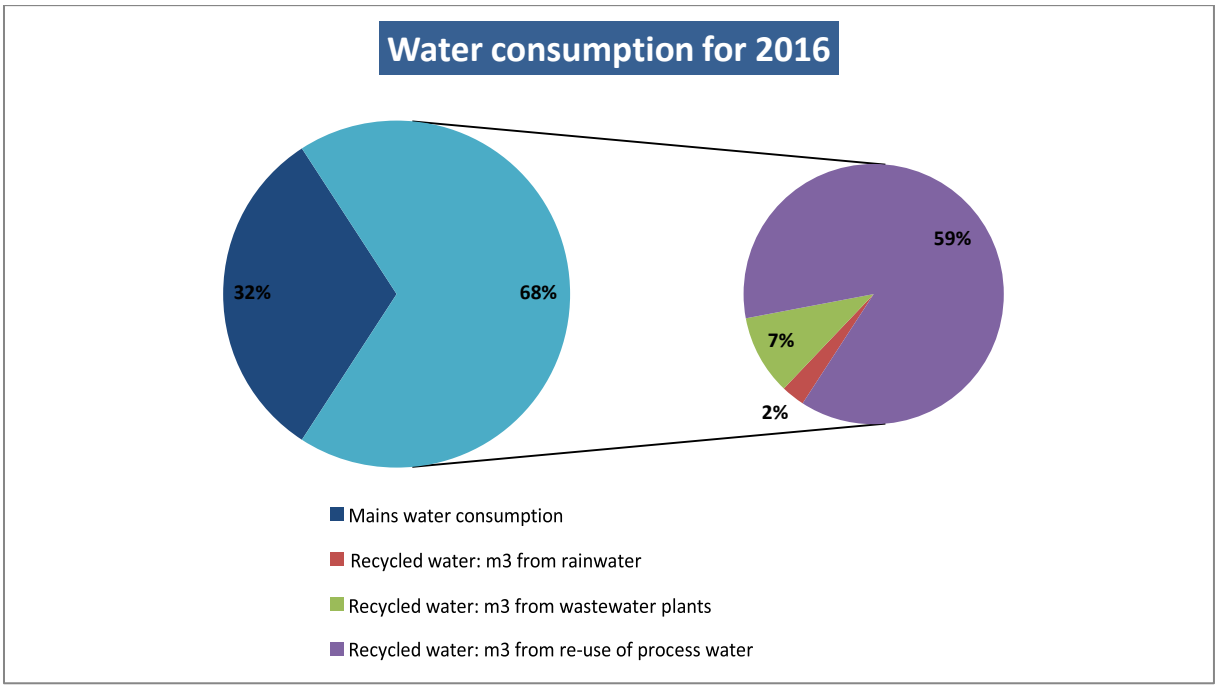
7.3 Sustainable use of resources

7.3.1 Water consumption and measures taken to reduce it

Based on the 2016 scope of analysis, the total water consumption of the CNIM Group is 1,967,390 m^3, 1,344,647 m^3 of which was recycled (68 %).

The recycled water is:

- either rainwater;
- or pumped directly from a cleaning station to be reused in the waste-to-energy process (with administrative authorization);
- or is the result of the reuse of water within the industrial process.



The Thiverval-Grignon and Pluzunet waste-to-energy plants in France and the CNIM Azerbaijan plant are all zero discharge sites at which all water (industrial and rainwater) is fully reused in the process. Work was also carried out in 2016 to eliminate all water discharges at the CNIM Centre France site, which will make it the Group's fourth zero discharge site as from 2017.

7.3.2 Consumption of raw materials and efficiency measures

- **Optimizing raw materials procurement**

CNIM Group's purchases mainly relate to semi-finished items, complete functions, intellectual creative services and on-site services. This means that the raw materials component is limited and, as the Group's historical core business is boilermaking, it mostly consists of metallic raw materials (tubes, sheet metal, and so on).

The optimization of raw material consumption is a major issue for its waste-to-energy plant construction business as, on average, this type of plant requires 1,000 tons for the frame, 1,500 tons for the boiler and 250 tons for the pipework. The material consumption optimization process is systematically followed for the purchase of tubes, tanks, refractory materials, pipework and thermal insulation and is conducted in three stages:

- selection of the optimum material, which should represent the best compromise between the dimensioning (flow rate, pressure and temperature), conditions of use and price;

- optimization of the installed thicknesses, in accordance with the Pressure Equipment Directive (PED) construction code and the classes of lines;
- the cutting of the boiler, which must take transport dimensions into account;
- the lead time which, depending on the case, will allow, or preclude ordering finite lengths from steel producers, as opposed to receiving standard lengths that will result in more waste.

All metallic waste is sold for reuse. For example, 407 tonnes of scrap steel, stainless steel and aluminum were recycled from the La Seyne-sur-Mer production site in 2016.

- **Biomass sourcing**

The two biomass-to-energy plants in Picardy mostly use wood chips from nearby forests, supplemented by shredded industrial wood waste.

The fuel sourcing radius largely covers Picardy plus smaller sections of the Champagne Ardenne and Upper Normandy.

Cogeneration means that the two facilities have high cycle yields of around 60%:

- Electricity is generated for the RTE electricity grid in France
- Steam is generated for use by nearby industrial sites

Achieving these high yields means that electricity can be sold into the grid at a subsidized price, under contracts made with the French Energy Regulation Commission.

7.3.3 Energy consumption

Data	Unit	Quantity
City gas for heating and processes	kWh	109,857,622
Ordinary domestic fuel	L	836,188
Mobile sources of petrol fuel (light and heavy vehicles)	L	519,453
Non-road diesel	L	104,957
Mobile sources of petrol fuel	L	41,879
Forklift gas (propane)	kg	7,353
Process gases (acetylene)	m^3	2,191
Electricity	kWh	81,781,771
Heating network	kWh	-

7.3.4 Energy consumption reduction measures

- **Energy audits**

Energy audits have been conducted in the various companies in the Group since 2015, in accordance with European Directive 2012/27/EU and the EN 16 247 standard. This measure is aimed at encouraging companies exceeding certain size or revenue thresholds to put an energy efficiency strategy in place for their businesses. Following this structured approach enables opportunities to improve energy efficiency to be identified, as well as the capital expenditure that would be required and the payback period for the investments. These audits confirmed that steps had already been under way for several years to control energy consumption at the main sites.

- **LAB conducts its first energy audit**

LAB conducted its first regulatory energy audit in 2016. The audit comprised an energy performance audit of the IT system, on the grounds that IT accounts for the bulk of LAB's electricity consumption, as well as an energy audit of transportation. Several improvement actions were identified and recommended, among them rationalization of the printing systems, regulating the air conditioning in the server rooms and ecological driving.

- **La Seyne-sur-Mer: a multi-year plan for reducing consumption**

At the La Seyne-sur-Mer site, the Group's principal site, the multi-year campaign of works initiated with the objective of reducing energy consumption is continuing. The main measures undertaken in 2016 were:

- outside: replacement of the outdoor sodium spot lighting with LEDs;
- inside: in 500 m² of offices, replacement of all lights with LEDs and removal of switches, these being replaced with individual detectors;
- fitting of solar protection films to reduce use of air conditioning in summer;
- acquisition of software enabling consumption of all fluids to be firstly monitored and then ultimately controlled for each building;
- acquisition of a first electric vehicle for on-site industrial maintenance, which has replaced a carbon-dioxide producing vehicle.

- **Two years of works for an energy-efficient head office**

Having been closed for works since 2014, CNIM's head office in Paris reopened its doors at the end of 2016. The building, a townhouse dating from the late 19th century, has undergone a complete renovation. The aims were firstly to bring together all of the Paris staff on one site, and secondly to comply with the applicable standards and regulations, in particular RT 2012 (the 2012 Heat Regulation). Specifically, the object of RT 2012, in accordance with Article 4 of the Grenelle I Act, is to limit the amount of primary energy consumed by buildings.

Due to the risk of noise pollution, it was not possible to use a heat pump for the site's heating and air conditioning. The energy solution adopted was therefore to connect to the city of Paris's urban network, which is powered by household-waste recovery. The whole of the building is now controlled by a programming system which enables lighting and temperature to be managed according to the time of day and the day of the week. There are no longer any light switches anywhere in the building, with the lighting being controlled by remote sensing. Taken together, these measures mean that energy use will not exceed 50 kWh/m²/year.

7.3.5 Development of services helping to improve our customers' energy efficiency

- **Energy efficiency at waste treatment plants**

CNIM, the global leader in the construction of waste-to-energy plants, has long aligned the energy performance of its buildings with respect for the environment. CNIM pioneered energy efficiency in 2005 when it built a plant in Bilbao which combines waste incineration and a recovery boiler with a gas turbine that enables steam to be superheated and re-superheated to 540°C. This combination allows waste to be treated in an extremely energy-efficient way.

The experience the company has gained, along with the development of new low-corrosion alloys, means that CNIM is now able to offer highly advanced thermal cycles (steam pressure and temperature) that help customers improve their energy performance by around 10%.

- **Energy efficiency in flue gas treatment**

LAB's projects include a comprehensive offering of heat optimization and recovery by way of flue gas condensation systems, which may or may not be supplemented with heat pump systems and/or combustion air humidification systems. Examples: The projects AARHUS (commissioned in 2016), Nordforbanding (commissioned in 2016), Amager (commissioned in 2016), Hofor (order taken 2016) and Helsingor, all of which are in Denmark.

- **CNIM has been awarded a contract to modernize the waste-to-energy site at Thiverval-Grignon (France)**

At the end of 2016, CNIM was awarded a Design-Build-Operate-Maintain (DBOM) contract for the energy optimization of the Thiverval-Grignon waste-to-energy center. The center is able to process an average of 200,000 tonnes of waste each year, as well as 20,000 tonnes of sludge from urban or rural wastewater plants. The project consists in optimizing the waste-to-energy center in order to respond to the following challenges:

- increasing the recovery of energy from waste incineration;
- improving energy performance in order to meet the European R1 (Recovery One) criterion;

- improving the treatment of the flue gas of the preserved existing line, with the current wet treatment system being replaced with a dry treatment system, and with elimination of stack plumes and reduction of NOx content;
- conducting an educational site tour.

Site safety will also be improved by altering traffic routes, following the recommendations of the National Health Insurance Fund regarding the reversing of refuse vehicles and trucks and also separating the traffic flows for light and heavy traffic. Completion is expected in 2019.

7.4 Contributing to the development of renewable energy use

7.4.1 Solar energy

- **SUNCNIM builds the world's first Fresnel concentrated solar power plant with energy storage**

In 2016, SUNCNIM finalized the funding of the eLlo joint venture company, which has been established to build and operate a concentrated solar power plant at Llo in the Eastern Pyrenees. This will be the first Fresnel concentrated solar power plant in the world with the ability to store several hours' worth of power. The Llo solar power plant will feature a thermal energy storage unit and will produce 9 MWe of renewable electricity for export to the EDF grid - enough to power over 6,000 households. Eco-designed and 100% recyclable, it will use SUNCNIM's Fresnel mirror technology, based on capturing thermal energy through mechanically driven mirrors which focus the sun's rays onto a receptor, the solar boiler. This generates thermal energy which can be stored or converted into electricity via a steam generation cycle.

- **Bertin Technologies carries out a study for Grenoble's "Campus Smart Grid" project.**

Schneider Electric, in partnership with the Grenoble Chamber of Industry and Commerce, is running a Future Investment Project based on the idea of a "Campus Smart Grid". The project aims to create an energy microgrid at the Institut des Métiers et des Techniques de Grenoble, combining renewable energy with energy saving measures to achieve the twin objectives of generating power locally for the institute and producing renewable energy for the grid. In 2016, during the feasibility phase, Bertin Technologies used its EMS (Energy Management System) software tool to carry out a parametric study, followed by a preliminary definition study of the different power systems.

7.4.2 Biomass

European Directive 2009/28/EC of April 23, 2009 on the promotion of the use of energy from renewable sources defines the biodegradable fraction of industrial and municipal waste as being biomass, and biomass as one of the non-fossil sources of renewable energy. As more than half of the carbon content of municipal waste is non-fossil in origin, half of the energy derived from its combustion is thus considered to be renewable energy.

- **Flue gas treatment for biomass sites**

LAB, a specialist in flue gas treatment, signed two contracts in 2016 for the flue gas and condensate treatment at large-scale biomass-to-energy plants. These will feature substantial energy recovery via condensation, as well as flue gas treatment that produces almost zero emissions, a performance level that exceeds current regulatory standards. The first of these is the HOFOR project at Copenhagen, Denmark. This is the largest biomass plant currently under construction in Europe, which will recover 120 MW of thermal energy from flue gas for supply to the urban heating system. The second project, for which the contract was signed in at the end of the year, is at Helsingor (also in Denmark). It will recover 15 MW of thermal energy from flue gases, again for urban heating. The LAB Service subsidiary is working on the major regulatory upgrade of flue gas treatment system as part of the Chilton biomass project in the UK.

- **Energy production from biomass**

CNIM designed, built and now operates two biomass cogeneration facilities which treat clean biomass obtained from forestry, sawmill by-products and wood chips from packaging materials or park and garden maintenance.

Estrées-Mons, France: The plant is a power generation facility fueled by clean biomass. It generates 13 MWe of electricity, and supplies energy in the form of steam to a nearby industrial company, which uses in its processes.

Nesle, France: The plant is a power generation facility fueled by clean biomass. Generating enough electricity to supply a town of 5,000 homes, it will enable three million tonnes of CO_2 to be saved over a twenty-year period. The plant can produce up to 130 GWh of electricity and 300 GW of heat energy each year from 250,000 tonnes of biomass. The heat is used by an industrial company.

- **Treatment of green algae**

In the composting field, CNIM has developed and installed a green algae treatment process based on the principle of dehydration through hot air ventilation (the hot air being produced by a wood-fired generator). This method eliminates odors and suppresses toxic gas emissions (hydrogen sulfide). After taking over the operation of the waste-to-energy plant at **Lantic (France)** in 2009, CNIM first upgraded the site before building a green algae treatment unit with a capacity of almost 25,000 tonnes per annum in 2010. The waste-to-energy plant takes in around 35,000 tonnes of waste per annum. The site features two microbiological treatment units and a non-hazardous waste storage facility. The compost produced (around 10,000 tonnes per annum) is approved for use in organic agriculture.

For over half a century, CNIM's technology has enabled energy trapped in household or other waste to be recovered. Such inherent energy would otherwise be little used or else lost entirely in landfills. Using this energy in place of traditional energy sources helps to conserve resources.

In 2016, the sites operated by the CNIM Group produced and sold 825,077 MWh of electricity and 321,368 MWh of heat, broken down as follows:

	MWh
Electricity sold outside France	299,357
Electricity sold in France	525,720
Heat sold in France	321,368

7.5 Noise reduction measures

In 2016, 100% of the decibel readings taken complied with the regulations.

Only two complaints were received from local residents in relation to the 35 sites included in the scope of the report. All of these complaints were examined and responded to.

The number of complaints received from local residents is again much lower relative to 2015, the figure for which was itself lower than the figure for 2014.

- **Reducing olfactory nuisances**

The waste-to-energy facilities designed and built by CNIM comply with the most stringent regulatory requirements in terms of noise levels and odor emissions. The unloading areas are kept at a lower pressure than the rest of the building, so that odorous particles are aspirated by the fan which supplies aspirated air into the hall. They are then destroyed by combustion.

On the Lantic site, every possible step is taken to ensure that the compost fermentation process produces as little odor pollution as possible. Part of the green waste is ground and sifted to produce a plant compost. This is then mixed with raw compost from household waste to be matured in boxes. The compost ferments in special boxes that are each equipped with their own air supply and extraction system. The boxes also have air ventilation tiles that are supplied with outside air by a fan and an independent air network. The foul air aspirated from the boxes is channeled toward a biofilter that deals with any odors.

Green algae, which are mainly composed of water, are treated using a drying process in ventilated boxes. After they have been structured by green waste sifting refuse, they are confined in boxes into which air is blown at high speed. The risk of fermentation is eliminated by maintaining an adequate oxygen level, as a result of which the H2S content becomes negligible. The foul air is again aspirated into a biofilter.

With regard to emissions of fumes and the associated environmental nuisances, LAB has developed and patented technologies that enable the emission levels of particulates, dioxins, sulfur, NOx, mercury and other heavy metals to be kept down in a way that goes beyond the standards currently in force in Europe. LAB's projects often ensure that emissions fall far below the thresholds set by current environmental standards.

- **Reducing noise nuisances**

The Group regularly makes improvements aimed at reducing noise nuisances. It does so even where there is no regulatory requirement to do so and without being prompted by complaints by local residents. In 2016, for instance, the Kogeban site built a housing around its feed motor pumps, enabling a permanent substantial reduction in noise emissions to be achieved.

7.6 Measures taken to reduce environmental pollution risks

- **Fiber-optic and laser diode systems for satellite weather and climate forecasting**

Having won an initial contract from Airbus Defence & Space in 2015 to design and manufacture a fiber optic system, Bertin won a further contract in 2016 to design and produce a laser diode system. The two systems will be installed aboard a satellite in the IASI-NG (Infrared Atmospheric Survey Instrument - New Generation) that Airbus Defence & Space will supply to CNES as part of METOP-SG, the European program for weather forecasting and climate monitoring between 2020 and the mid-2040s. As well as temperature and humidity, IASI-NG will take ultra-precise measurements of over 25 components of the atmosphere, which will be of vital importance for weather forecasting and the monitoring of pollution and the climate.

- **Wastewater treatment plants: a risk minimization study**

Regulations require wastewater treatment plants to conduct analyses aimed at minimizing the risk of treatment failure and risks to persons. Bertin has developed a generic approach for treatment plants with similar features. In 2016, Veolia hired the CNIM subsidiary to carry out a pilot study on two plants that it operated. The study offers numerous benefits for both the environment and staff, since it recommends actions to increase the availability of wastewater treatment systems and improve the safety of operatives.

- **Bertin Instruments: products dedicated to the environment**

Certain types of industrial location, such as cooling towers, composting plants, waste sorting centers, green waste collection centers and sewage plants, have to deal with a growing variety of chemical, biological and radiological pollutants that pose a potential risk to the health of operatives or local residents. Bertin Instruments offers a range of solutions to detect and measure invisible hazards:

- Radiation detection solutions, developed with expertise from Saphymo, have been designed to meet the demands of the recycling, steel and petrochemical industries, including radiation portal monitors, survey meters, and waste control beacons.
- The Coriolis µ biological sampler captures airborne particles in a liquid medium, allowing the quality and degree of contamination to be rapidly determined.
- A range of multi-use instruments for monitoring radon (a naturally occurring radioactive gas) enable radon levels and the associated risks to be measured and evaluated in any environment.

- **AlphaGUARD: a new generation of equipment for measuring radon gas**

AlphaGUARD, the portable radon monitor developed with expertise from Saphymo, has been redesigned to take snapshot and continuous measurements of radon gas activity. The highly sensitive device is now easier to use and comes with integrated digital connectivity. AlphaGUARD is the instrument of choice for large numbers of international scientists and experts. It is used in radon measurement programs in the environment, in mining and in the laboratory, as well as to monitor radon levels in homes and workplaces.

7.7 Measures taken to conserve biodiversity

All construction or extension projects involving industrial waste-to-energy conversion or energy production sites undergo prior environmental assessments to identify the preventive measures to be taken to reduce the new site's environmental footprint. These assessments systematically include biodiversity analysis and conservation.

8 CNIM'S SOCIAL ENGAGEMENT

8.1 Map of stakeholders

Based on its strategic goals, in 2013 the CNIM Group embarked on the identification and ranking[1] of its stakeholders. This map, which is supplemented by the identification of the forms of dialog, the level of influence and the mutual expectations of all of the stakeholders, should allow the Group to more effectively prioritize its listening and communication efforts with regard to those with the largest impact.

8.2 Impact of the Company's activity on the local economy

Due to its positioning in high-tech, innovative industrial markets, the CNIM Group buys few standard or catalog products. A limited number of suppliers are able to meet all of our technical and quality requirements and these suppliers operate on a national or international scale.

The strong construction site focus, whether this means the installation of complex systems on site for CNIM Industrial Systems, the construction of waste-to-energy facilities or flue gas treatment plants for the Environment Sector, or the service activities of CNIM Babcock Services, also makes it necessary to have local subcontractors.

Based on the scope of the 2016 CSR report, the local economic and social impact of the CNIM Group, including purchases, salaries, taxes and duties (taken from the financial accounts of 18 companies) is €404.9 million, spread across six countries (France, the UK, China, Azerbaijan, Morocco and Singapore), 91% of which relates to France and the UK.

Of the €404.9 million total:

- €147.5 million relates to wages and salaries, including social security and similar charges;
- €14.5 million relates to taxes and duties;
- €242.8 million relates to purchases.

In addition, SUNCNIM's business created 68 indirect jobs (49 of them in France) in addition to 24 direct jobs in 2016.

[1] The size of the bubbles reflects this ranking.

8.3 Consideration of subcontractors and suppliers from a social and environmental viewpoint

Based on the scope of reporting, the Group's purchases were €330.8 million in 2016.

For the reasons given above, the CNIM Group has decided to adopt a purchasing policy by subsidiary and/or business sector, according to a sector-based approach. This micro-economic approach was preferred to a global, Group-wide one, which would have lost some of its effectiveness owing to the consolidation of businesses and subsidiaries that are too different in size.

Each sector and/or subsidiary defines its supplier qualification process according to the nature of its business:

- the supplier pre-approval questionnaire used by CNIM SA and LAB SA contains questions about the company's quality, safety and environmental certification and, for service providers, about the accreditation of staff or the verification of equipment that may present a safety risk;
- LAB has also set up an end-of-construction evaluation process for its main suppliers which, since 2013, has taken into account Health, Safety and Environment criteria as well as their ISO 14001 and OHSAS 18001 certification.

All of these criteria are considered when selecting a supplier, which is a process that is adapted to the variety of the Group's businesses and the size of the organizations that must implement it.

8.4 Contribution to competitiveness clusters

The CNIM Group and its subsidiaries are fully involved with competitiveness clusters, which aim to structure the R&D activities within a region around specific themes. The Group is represented in a number of clusters, in particular:

- the Cap Énergies cluster, whose purpose is to control energy consumption and work on the shift toward non-greenhouse-gas-generating energy sources;
- the EMC2 cluster, which works on advanced production technologies.
- the Mediterranean Sea cluster, an international landmark in the maritime and coastal sector;
- the Optitec cluster, which is at the cutting edge of optics, photonics and image processing;
- the Routes des Lasers cluster, active in photonics;
- the Systematic cluster, active at the crossroads of eight company-level technological markets (transport, energy, telecoms, security, health, smart cities, information technology and the factory of the future) and two general technological fields (free software and complex systems).

8.5 Involvement in trade associations and unions

CNIM is very actively involved in numerous trade and environmental associations and unions. The CNIM Group is represented in the following bodies, in which it plays an active part:

- SNIDE (French National Union of Designers and Builders in the Waste Industries);
- ESWET (European Suppliers of Waste-to-Energy Technology);
- SVDU (National Syndicate for Treatment and Recovery of Urban and Assimilated Waste);
- FNADE (French Federation for Pollution Control and Environmental Activities);
- FEAD (European Federation for Pollution and Environmental Activities);
- CEWEP (Confederation of European Waste-to-Energy Plants);
- AMORCE (National Association of Communities, Associations and Businesses for Waste, Energy and Heating Network Management);
- SER (Authority on Renewable Energy);
- FBE (France Biomasse Énergie);
- ASTEE (Scientific and Technical Association for Water and the Environment);
- ISWA (International Solid Waste Association);
- the ADEME International Club (ADEME: French Environment and Energy Management Agency);
- MEDEF International (MEDEF: French employers' federation);
- FIMM, Morocco (Federation of Mechanical and Metalworking Industries);
- CFCI, Morocco (French Chamber of Commerce and Industry);

- OFATE (Franco-German Office for Energy Transition).
- CNIM UK and MES Environmental are also members of the ESA (Environmental Services Association).

The Group is also active

- **within the context of its shipbuilding activities:**

- in GICAN (French Marine Industries Group), where CNIM acts as vice-chair of the scientific & technical and mid-sized enterprise/SME committees. CNIM also takes part in the GICAN-led Océan 21 structuring program for the French shipbuilding business.
- in the Cluster Maritime Français (CMF).

- **within the context of its defense and terrestrial security activities:**

- in GICAT (French Defense and Land and Air/Land Security Industries Group).

- **within the context of its nuclear activities:**

- in AIFEN (French Association of Nuclear Exporters), which represents over 300 French businesses and major organizations (GIIN, PFCE, PFME and PNB) covering the entire nuclear cycle;
- in the GIIN (Confederation of the Nuclear Industry), a spokesman body for industry associations and organizations in the nuclear sector;
- in the SFEN (French Nuclear Energy Association);
- in the NIA (UK Nuclear Industry Association);
- in PFCE (China-France Electricity Partnership). PFCE aims to promote the long-term involvement of French midcaps and SMEs in the construction of the Chinese nuclear program;
- in the PFME (France Global Electricity Partnership), which promotes French industrial companies in countries with a nuclear program.

- **within the context of its NBC threat detection activities:**

- in the Défense NBC consortium, which brings together the main French businesses active in the NRBCE (nuclear, radiation, biological, chemical and explosive) sector;

- **within the context of its cybersecurity activities:**

- in Hexa Trust, an association of experts in IT security, cybersecurity and digital trust which responds to the needs of companies, governments and public and private organizations seeking to benefit from innovative French solutions for the full range of their IT security requirements;
- in CLUSIF (French IT Security Club);
- in CECyF (French Center of Expertise on Cybercrime);
- in the SystemX IRT (technological research institute);
- in the ACN (Digital Trust Alliance).

8.6 Local integration

8.6.1 Action to promote integration

- **CNIM Insertion**

Since 2009 and the creation of the Thiverval Grignon (Yvelines, France) sorting center, whose operating contract was awarded to CNIM, CNIM Insertion has offered social support and employment to people in difficulty to facilitate their integration into the economy. The undertaking is a company for the integration of workers through economic activity whose status has been accredited by the State. The people in question are hired for a maximum of 24 months, trained as sorting operators and helped with their social difficulties, and especially with their search for employment, as this activity is only one stage in their journey and is a stepping stone on the path to long-term employment. CNIM Insertion's mission comprises numerous positive outcome objectives, as the reintegration process can be counted a success only when the person has been able to find a job or take a training course that matches their aspirations and skills.

Since obtaining State certification in 2009, CNIM Insertion received AFAQ EI/ETTI approval in 2013: it is the first integration enterprise in Ile-de-France to obtain AFNOR certification, which aims to validate the social practices of sheltered employment companies.

In 2016, 67 people benefited from a contract with CNIM Insertion, with a “positive outcome” rate of 30% for those leaving the organization, this being measured by the successful obtaining of a fixed-term or permanent job or training leading to a qualification.

- **Paris chooses CNIM for its new city-based waste sorting center**

In 2015, a CNIM-led consortium involving several partners was selected to design, build and run (for a two-year period) a waste sorting plant to be sited in the Clichy-Batignolles industrial zone. The plant will enter service in 2019 and employ 80 staff, of whom 35 will be employed under reintegration contracts, almost twice as many than at Thiverval-Grignon. The process will incorporate the latest in automated sorting technology, such as the optical sorting of plastics and paper and mechanical fractioning, so as to limit the amount of work done by hand and allow operatives to focus on quality control. The center will have a capacity of around 40,000 tonnes per year and will process the waste of 900,000 residents.

8.6.2 Collaboration with teaching establishments

- **Teaching partnership between CNIM and SeaTech**

Multiple areas of synergy exist between CNIM and SeaTech, a Toulon-based school of engineering specializing in marine science and technology, including training in mechanical engineering trades and the sharing of the technical and manufacturing issues of tomorrow. CNIM is involved in the running of the school and plays an active part in developing teaching. As part of this involvement, the Group offered four groups of third-year students the chance to do something outside the normal run of academic learning, namely to conduct a role-playing exercise based on responding to a call for tenders in which CNIM played the customer. The students had five months in which to submit a technical and financial tender, exhibit a 3D model and present their tender to a panel made up of four academic staff and six CNIM employees. The panel convened in February 2016 and paid tribute to the creativity, methodology and team spirit showed by each of the groups. This cooperative exercise will be repeated with a shipbuilding topic in 2016-17.

- **“My Camera Meets the Pros”**

Designed and implemented by the French Ministry for Education in 2010, the “Ma caméra chez les Pros” (My Camera Meets the Pros) program allows fourteen- to fifteen-year-old students at school to consider their career path, training and professional future in light of the business sectors and professions with potential in their region. In 2013, CNIM was one of the three institutions and companies selected by the Académie de Nice.

The CNIM La-Seyne-sur-Mer site has also signed a partnership agreement with the Welding Institute and its teaching establishments, which train future welding experts: the ESSA (School of Welding and its Applications for Engineers) and the EAPS (School for Training in the Welding Professions for Technicians). Accordingly, CNIM participated in the

school's forum in Yutz in November 2016 and regularly informs the schools about the internships and jobs offered by the site. Thanks to this partnership a student from the ESSA completed an internship at CNIM 2016.

- **Trainees and apprentices**

Number of interns, trainees and apprentices hired on completion of their training in 2016:

	Consolidation
Interns recruited during the year	14
Career development contracts offered during the year	8
Apprentices recruited during the year	2

8.6.3 Partnership initiatives

- **Partnership on the Business and Neighborhoods Charter**

CNIM La Seyne-sur-Mer has signed a partnership agreement on the Business and Neighborhoods Charter, undertaking alongside local government to promote access to employment for residents of inner-city districts in cases of equal ability, thereby assisting the economic, social and cultural development of priority districts in the city in relation to education, career choice, employment, training and so on. CNIM has thus undertaken firstly to take in three students from schools in the priority education network and secondly to present the careers it offers and/or lead job interview simulations at educational establishments in the priority education zone. In 2016, CNIM accordingly took part in the Enterprise forum at Henri Wallon College in La Seyne-sur-Mer. CNIM also has an internal social law training program for managers which includes a module on discriminatory language in recruitment communications.

9 ETHICS AND FAIR PRACTICES

9.1 Action taken to prevent corruption

9.1.1 The Group's ethics charter

The Management Board has decided to introduce a Group-wide ethics charter to formalize the values that each Group employee must observe in their work. Its purpose is to cover the following issues:

- respect for individuals and their work;
- respect for health, safety and the environment;
- respect for laws and regulations;
- fairness and integrity;
- transactions involving CNIM shares;
- use of the Company's property.

9.1.2 The Group's purchasing code of conduct

The CNIM Group drew up and implemented its purchasing code of conduct in 2013.

This code of conduct:

- concerns buyers and all of the Group's employees likely to have an influence on purchasing;
- defines the behavioral rules and ethical standards to be complied with during purchasing;
- draws employees' attention to the impact that their relationships with suppliers and partners may have on the Group's image;
- clarifies the concept of conflicts of interest.

9.1.3 Raising staff awareness of fraud risks

In 2013, a first fraud risk awareness-raising session was organized for managers. In 2014, awareness-raising efforts were continued for staff involved in procurement and contracting during a training session on Purchasing Fundamentals, which included ethical guidelines to be followed. Since 2015, the Management training program has also included a fraud risk familiarization component. In total, over 500 employees have undergone training or familiarization, 99 of them in 2016.

9.1.4 Management of agents and consultants

Finally, the CNIM Group also has a procedure for selecting and monitoring agents and/or consultants, which covers the following aspects:

- selection criteria;
- search for applicants, which is based, amongst other things, on an information questionnaire to be completed by the agent;
- approval of the choice of agent;
- drafting of the agent's contract;
- monitoring and archiving of the documentation.
-

10 RESPECT FOR HUMAN RIGHTS

10.1 Our Values

The Company's values are excellence, creativity, commitment and trust. They are based on respect for individuals, the law and the internal rules in force within the Company.

Excellence:	of our professional skills and expertise; of our industrial tools; of our collective achievements and services.
Creativity:	of our solutions to anticipate and meet the expectations of our customers; of our teams to put forward powerful and competitive solutions.
Commitment:	to Group shareholders over the long term; to our customers, by offering them quality, flexibility and performance; to our partners, by developing balanced and lasting relationships; to our employees, by helping them to achieve their ambitions.
Trust:	to consolidate our relations with our employees; to underpin our customer relations; at the heart of our activities to achieve greater success with responsibility and enthusiasm.

10.2 Human rights: procurement takes a stand

Bearing in mind its aim of growing its business outside Europe, as well as the passing of the UK's Modern Slavery Act in 2017, the Group has implemented an action plan in its various Procurement Departments that aims specifically to ensure that suppliers and subcontractors show respect for human rights. This action plan underlines the Group's commitment to honor the principles and rights proclaimed under the 1998 Declaration of the International Labor Organization, which promotes dignity in labor and fundamental conventions worldwide, and ensure that its subsidiaries and business partners do the same. The action plan is made up as follows:

- Undertaking by the Management Board;
- Group Purchasing Policy describing the Group's CSR commitments and the expectations we have of our business partners;
- Inclusion of a clause on respect for human rights in our General Procurement Terms & Conditions;
- Inclusion of an undertaking to respect human rights in our supplier approval questionnaire;
- Starting 2017, on-site audits of suppliers and subcontractors presenting a potential risk.

10.3 Other action taken to promote human rights

Furthermore, the substantive work on:

- health and safety conditions in the workplace;
- respect for dialog between employees and management;
- the combating of discrimination;
- entitlement to teaching and training;
- and the duty of vigilance exercised by the Group with regard to the payment of social security contributions by its suppliers and sub-contractors;

described in previous reports was continued in 2016.

11 METHODOLOGY OF THE CNIM GROUP'S CSR REPORT FOR 2015; EXTERNAL OPINION ON FAIRNESS

To ensure the transparency and reliability of the data disclosed, the CNIM Group engaged DNV GL Business Assurance to audit its corporate, environmental and social information.

The scope is fixed as at December 31 of the financial year.

Change in the scope of analysis: legal entities included in the 2016 report.

	2012	2013	2014	2015	2016
BERTIN IT					o
BERTIN TECHNOLOGIES	o	o	o	o	o
CNIM AZERBAIJAN				o	o
CNIM Babcock Maroc				o	o
CNIM Centre France		o	o	o	o
CNIM Énergie Biomasse		o	o	o	o
CNIM Insertion			o	o	o
CNIM Ouest Armor	o	o	o	o	o
CNIM SA	o	o	o	o	o
CNIM Singapore			o	o	o
CNIM Terre Atlantique				o	o
CNIM Thiverval Grignon	o	o	o	o	o
CNIM Transport Equipment			o	o	o
LAB SA	o	o	o	o	o
LAB Washington*					o
MES Environmental Ltd		o	o	o	o
SUNCNIM					o
VECSYS			o	o	o

Note: the white area identifies the scope of the consolidation area each year.

Entities selected for reporting consolidate the performance and impact of the industrial facilities where they are responsible for operational technical control, including facilities operated on behalf of third parties.

*Environmental matters only are included in respect of LAB Washington. Other data for this company is immaterial.

Babcock Wanson Holding and its subsidiaries (except Babcock Wanson Maroc) were sold by the CNIM Group in 2016. Babcock Wanson France and Babcock Wanson UK, which were included in the 2015 report, will therefore be excluded from the scope of reporting from 2016 onwards.

These companies account for more than 94 % of the Group's consolidated revenues and cover 91 % of its headcount over 35 sites. The companies in the analysis are covered from one year to the next, in order to enable the full consolidation of all subsidiaries in the long term.

The list of entities to be covered by the Group CSR Report is put forward by the Group CSR Manager and approved by the Management Board and General Management of the subsidiaries concerned.

The Group CSR Manager is responsible for collecting and consolidating data, writing the report and coordinating the action plans implemented within each Sector or subsidiary.

In environmental terms, the scope covers all waste sorting, treatment and recovery center operating business throughout the world.

With regard to the data published in this report, the following facts should be noted:

- for 2016, methods of estimation were defined for data that were not available, to ensure that all of the information required could be delivered within the specified deadlines. Unknown water consumption figures for certain third-party sites were therefore estimated based on the consumption figures for sites of a similar size. These estimates account for less than 1% of the total;
- The CNIM Group is concerned about what happens to the waste material produced by its activities and can provide indicators about the recovery of its waste. To this end, it relies on the definitions of 'waste' and 'recovery' established by the local regulations.
- CO_2 emissions were calculated based on the V7.2 spreadsheet program of the *Association Bilan Carbone* (French Carbon Accounting Association), with emission factors from the Carbon Database.
- Given that the Group subcontracts all inbound and outbound transportation and that hauliers and freight forwarders do not publish figures for the CO_2 emissions generated by these services, the CNIM Group does not possess sufficient data to disclose “Other indirect greenhouse gas emissions” (scope 3).
- The emission factor applied for waste sorting and waste processing centers is 326 kg. CO_2/tonne for the incineration of household waste (excluding transport, which does not form part of the scope) and 128 kg eq. CO_2/tonne for landfill waste disposal for hazardous industrial waste;
- Acetylene gas is used by many Group companies and subsidiaries. It was not referenced in the Carbon Database, and was added to the carbon account as follows: density 1.1 kg/m^3, emission factor 3.38 kg.CO_2/kg (based on stoichiometric ratios).
- Calculation of uncertainty: as most emissions are due to the incineration of household waste, all these emissions depend directly on the household waste incineration emission factor. These values are not independent, as in previous years the uncertainties were added together.
- when calculating its direct greenhouse gas emissions, the CNIM Group includes the CO_2 from the vehicles owned, leased or hired by the Group and used within the context of its industrial and business activities.
- In the CNIM SA and CNIM La Seyne-sur-Mer reports, diesel consumed by the LCAT vessel is counted under the Energy 2 tab, whereas its carbon impact is reported under “Direct emissions from zero-energy processes”, scope 1 point 3. This is due to the use of the LCAT, which, although mobile, is used neither to transport persons or goods nor for the conversion of energy, but is instead machinery forming part of the site. The same applies for the propane used in processes, which is likewise counted under the “Energy 2” tab and reported in item 1 point 3.

On the next few pages you will find the table of correspondence between the forty-two questions contained in Law No. 2012-557 of April 24, 2012 relating to companies' social and environmental transparency obligations and the CNIM Group's CSR report for 2016.

Topic	Type of information provided by CNIM	With indicator	GRI/EFFAS correspondence	See section:
A. EMPLOYMENT				
1. Total workforce and breakdown of employees by gender and by geographical area	Indicator	Total average workforce and geographical breakdown of employees by gender and by category	LA1 / LA13 / S03-01	See 1.1.1
2. Recruitment and dismissal	Indicator	Turnover with breakdown of employees by age, gender and reason for departure	LA2 / S01-01	See 1.1.2
3. Remuneration and changes in remuneration	Indicator			See 1.1.3
B. ORGANIZATION OF WORK				
1. Organization of working time	Text and indicator	Breakdown of contracts: full-time, part-time		See 1.2
2. Absenteeism	Indicator		LA7	See 1.2.3
C. Labor relations				
1. Organization of labor relations	Indicative text	Percentage of salaried employees covered by a collective labor agreement	LA4	See 5.2
2. Summary of collective agreements	Text			See 5.3
D. Health and Safety				
1. Health and safety conditions in the workplace	Text			See 2
	Indicator	Percentage of workforce represented by an HS Committee	LA6 / S09-02	See 2.1
	Indicator	Sum of expenditure on safety throughout the business	LA6 / S09-02	See 2.3
2. Summary of agreements with labor unions or personnel representatives on health and safety at work	Text			See 5.3
3. Accidents at work, particularly frequency and severity, as well as work-related illness	Indicator	Frequency rate and severity of accidents at work; number of work-related illnesses	LA7 / S04-02 / S04-04	See 2.4
E. Training				
1. Training policies implemented	Text			See 3.1
2. Total number of training hours	Indicator	Total number of training hours, hours per employee, employee training rate	LA10 / S02-02	See 3.2
	Indicator	Proportion of staff benefiting from regular appraisal and career development meetings.	LA12	See 3.3
F. Equal treatment				
1. Measures adopted to promote gender equality	Text and indicator	Proportion of women in the workforce	LA13 / S10-01 / S10-02	See 4.1
	Indicator	Median male/female salaries	LA14	
2. Measures to promote the employment and integration of disabled people	Text and indicator	Proportion of disabled workers and number of disabled workers hired during the year		See 4.2
3. Policy on combating discrimination	Text			See 4.2
G. Promotion and observance of the provisions of the fundamental conventions of the International Labor Organization on:				
1 . respecting freedom of association and the right to collective bargaining	Text			See 5.1
2 . the elimination of discrimination in respect of employment and occupation	Text			See 4.2
3 . the elimination of forced or compulsory labor	Text			See 10
4 . the effective abolition of child labor	Text			

Topic	Type of information provided by CNIM	With indicator	GRI/EFFAS correspondence	See section:
A. General policy on the subject of the Environment				
1. Organization of the company regarding environmental issues and the related assessment or certification measures	Text			See 6.1
	Indicator	No. of ISO 14,001-certified sites		See 2.1
	Indicator	Total amount of material fines due to breaches of environmental legislation	EN28	See 6.1
	Indicator	Total non-financial penalties due to breaches of environmental legislation	EN28	See 6.1
2. Training and information for employees on environmental protection	Text			See 6.2
3. Resources dedicated to the prevention of environmental risks and pollution	Text			See 7.6
4. Provisions and guarantees for environmental risks	Indicator			See 6.3
B. Pollution				
1 Measures to prevent, reduce or redress emissions in the air, water and ground	Text			See 7.2.2
2. Noise and any other forms of pollution specific to an activity	Text and indicator	Proportion of regulatory-compliant decibel recordings; number of complaints from those in the vicinity		See 7.1
C. Circular economy: prevention and management of waste				
1. Measures to prevent, recycle, reuse, recover value from, and eliminate waste	Text and indicator	Total weight of incoming and outgoing waste Proportion of waste usefully reprocessed	EN22 / E104-01	See 7.1
2. Policy on combating discrimination	Text			See 7.1.3
D. Circular economy: sustainable use of resources				
1. Water consumption and water supply based on local constraints	Indicator	Volume of water consumed, of which recycled	EN8 / EN10 / E28-02	See 7.3.1
2. Consumption of raw materials and measures taken to use them more efficiently	Text			See 7.3.2
3. Energy consumption, measures taken to improve energy efficiency, use of renewable energies	Text and indicator	Direct energy consumption, by primary energy source	EN3 / EN4 / EN5 / EN6 / EN7 / E01-01	See 7.3.3 and 7.3.4
4. Land use	Not applicable	There are no material issues for the Group to report		
E. Climate change				
1. Major sources of greenhouse gas emissions due to the company's activities, particularly through the use of the goods and services it produces	Indicator	Total direct or indirect emissions of greenhouse gases Emissions avoided	EN16 / EN17 / E02-01	See 7.2.1
2. Adapting to the consequences of climate change	Text	Initiatives to reduce greenhouse gas emissions; reductions obtained		See 7.2.2
F. Protection of biodiversity				
1. Measures taken to conserve or develop biodiversity	Text			See 7.7

Topic	Type of information provided by CNIM	With indicator	GRI/EFFAS correspondence	See section:
A. Territorial, economic and social impact of the company's activity:				
1. in relation to employment and regional development	Text and indicator	Impact of the company's activity on the local economy	EC6	See 8.2
2. on neighbors and local residents	Text			See 8.6
B. Relations with stakeholders such as employment associations, employment organizations, training establishments, etc.				
1. Conditions for dialog with the above organizations	Text			See 8.6
2. Partnership or Sponsorship actions	Text			See 8.6
C. Subcontractors and suppliers				
1. Taking social and environmental issues into account through purchasing policy	Text			See 10.2
2. Importance of subcontracting and consideration of social and environmental responsibility	Text and indicator	Group Purchasing		See 8.3
D. Fair practice				
1. Action taken to prevent corruption	Text and indicator	Number of employees trained in the organization's anti-corruption policies and procedures	S03	See 9
2. Measures adopted for consumer health and safety	Text	See chapter on action taken to reduce emissions into the air		See 7.2
3. Other action taken to promote human rights	Text			See 10

12 GROWTH OF THE GROUP'S AVERAGE TOTAL WORKFORCE

	2011	2012	2013	2014	2015	2016
Group workforce	2,660	2,772	2,831	2,914	3,000	2,773

Note: the CNIM Group's scope of consolidation changed between 2015 and 2016 due to the sale of Babcock Wanson Holding and its subsidiaries (except Babcock Wanson Maroc). The Group's total workforce on a like-for-like basis (i.e. after eliminating the staff of these companies) was 2,422 employees in 2015 and 2,483 in 2016.