

# 2016 Sustainable development Report



 **eranove**

PROVIDING ACCESS TO ESSENTIAL LIFE SERVICES



**Director of Publication :**

Marc ALBEROLA

**CSR coordination :**

Maud DANEL FEDOU

Marine de KERROS



**Ront cover :** Glanum

**Design and layout :** BeDevelopment

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# EDITORIAL

## Eranove: Committed to access to essential life services.

Eranove is a pan-African industrial group with over 8,500 employees, and is active in all water and electricity value chains, from production and commercialization to transmission and distribution. It also currently tops the drinking water sector in Senegal, and the drinking water and electricity sectors in Côte d'Ivoire.

Against a backdrop of more than 300 million people living without access to drinking water<sup>1</sup> and nearly 65% of the population with no access to electricity<sup>2</sup>, the Eranove Group's role exceeds that of a partner to the African States. It shares their goal for environmentally sustainable growth, as well as their wish to extend access to essential life services. The Eranove Group also applies this partnership approach to communities and to its customers, by consistently striving to improve the quality of its services, raising awareness on energy efficiency, and implementing water and electricity access schemes which are affordable for households.



**Marc Albérola**  
CHIEF EXECUTIVE OFFICER

Against a backdrop of more than 300 million people living without access to drinking water and nearly 65% of the population with no access to electricity, the Eranove Group's role exceeds that of a partner to the African States. It shares their goal for environmentally sustainable growth, as well as their wish to extend access to essential life services. The Eranove Group also applies this partnership approach to communities and to its customers, by consistently striving to improve the quality of its services, raising awareness on energy efficiency, and implementing water and electricity access schemes which are affordable for households.

Moreover, for over 20 years the Eranove Group has included CSR (corporate social responsibility) in its fundamental values. The Group's CSR policy originated from the decentralized and empowerment-based intercultural management model implemented in the 1990s by Marcel Zadi Kessy, then CEO of CIE and SODECI. This managerial culture (which continues to play a major role today) has been boosted by the investment of Emerging Capital Partners (ECP), the majority shareholder in the Eranove Group, and from integrated quality, environment, health and safety and CSR management systems. This Group process has been rolled out to all subsidiaries, and has resulted in ISO assessments and certifications.

In 2016, the Eranove Group continued to implement its development strategy, as well as reinforcing its aim to become the leading pan-African group for public service management and for drinking water and electricity production.

This strategy has been consolidated through significant progress in the Eranove Group's six main development projects underway, representing a total production capacity of approximately 950 MW over four countries (Côte d'Ivoire, Mali, Gabon and Madagascar).

These projects are led with and for communities, to ensure that development is synonymous with local growth. The Eranove Group's proven technical expertise, excellent management and maintenance capabilities and highly-efficient management tools rolled out to all subsidiaries provide assurance to its partners that its services will take into account stakeholders, legal provisions and the environment as well as adopting a transparent and ethical approach.

The Eranove Group's strong governance and robust human capital ensure that it is increasingly able to meet the African challenges of inclusive development and energy transition.

*This is the second sustainable development report published by Eranove. It sets out 2016 commitments and actions implemented to contribute to the environmentally sustainable growth of the African continent. It has been prepared taking into account the requirements of the Grenelle II Law, the guidelines of the Global Reporting Initiative V4 and the 2030 Agenda Sustainable Development Goals.*

<sup>1</sup> 2015 WHO report on the Joint Monitoring Programme for Water Supply and Sanitation, Sub-Saharan Africa

<sup>2</sup> World Bank Indicators - Sub-Saharan Africa 2012

# 14

## Sustainable Development Goals

14 Sustainable Development Goals out of the total 17 which the United Nations adopted in 2015, 7 of which have an impact on our core business, while 7 others have indirect positive impacts and are integrated into the Eranove Group's sustainable development strategy.

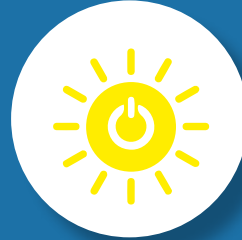
### 7 GOALS / Core business



4 Quality education



6 Clean water and sanitation



7 Affordable and clean energy



8 Decent work and economic growth



9 Industry, innovation and infrastructure



12 Responsible consumption and production



13 Climate action

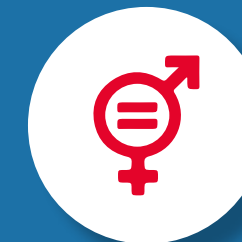
### 7 GOALS / Indirect positive impacts



1 No poverty



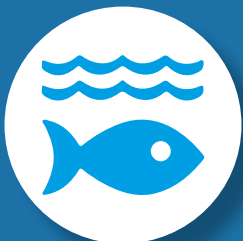
3 Good health and well-being



5 Gender equality



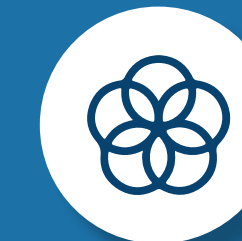
11 Sustainable cities and communities



14 Life below water



15 Life on land



17 Partnerships for the goals

“Eranove is an integrated leading pan-African company throughout the water and electricity value chains



# THE ERANOVE GROUP, A KEY PLAYER IN THE WATER AND ELECTRICITY SECTORS

Eranove is a pan-African industrial group with over 8,500 employees, and is active in all water and electricity value chains, from production and commercialization to transmission and distribution. It also currently leads the drinking water sector in Senegal, and the drinking water and electricity sectors in Côte d'Ivoire. The Eranove Group is also a key industrial player in public service management for West Africa, based on public-private partnerships.



**over 8 500**

employees at work each day

With its African roots and numerous decades of experience and presence in Africa, the Eranove Group has been able to develop a solid geographical grounding and establish trusting relationships with public authorities. The Group has also become known for its excellence based on its operational performance and its exacting social responsibility standards. These achievements have been led by an experienced management team, and have enabled the Group to build a solid profile based on consistently sound financial and operational performance. The Eranove Group drives a pan-African development strategy with the support of its leading shareholder Emerging Capital Partners (ECP).

The Eranove Group intends to continue its expansion in Sub-Saharan Africa to become the primary pan-African Group in its specialist sectors, thereby providing access to as many essential life services as possible.



**CIPREL**  
combined cycle power plant



# A unique identity in Sub-Saharan Africa



## Côte d'Ivoire



### Electricity public service management

- 1,631,000 customers
- 704 MW production capacity
- ~ 50,000 km transmission and distribution network operated
- 4 768 employees



### Independent Power Producer (IPP)

- 543 MW production capacity
- 99 employees



### Water public service management

- 937,200 drinking water customers
- 434,200 sanitation customers
- 242 million m<sup>3</sup> of drinking water produced
- 2,398 employees



### Fiber optic • Data transmission



### Energy efficiency



## Senegal



### Water public service management

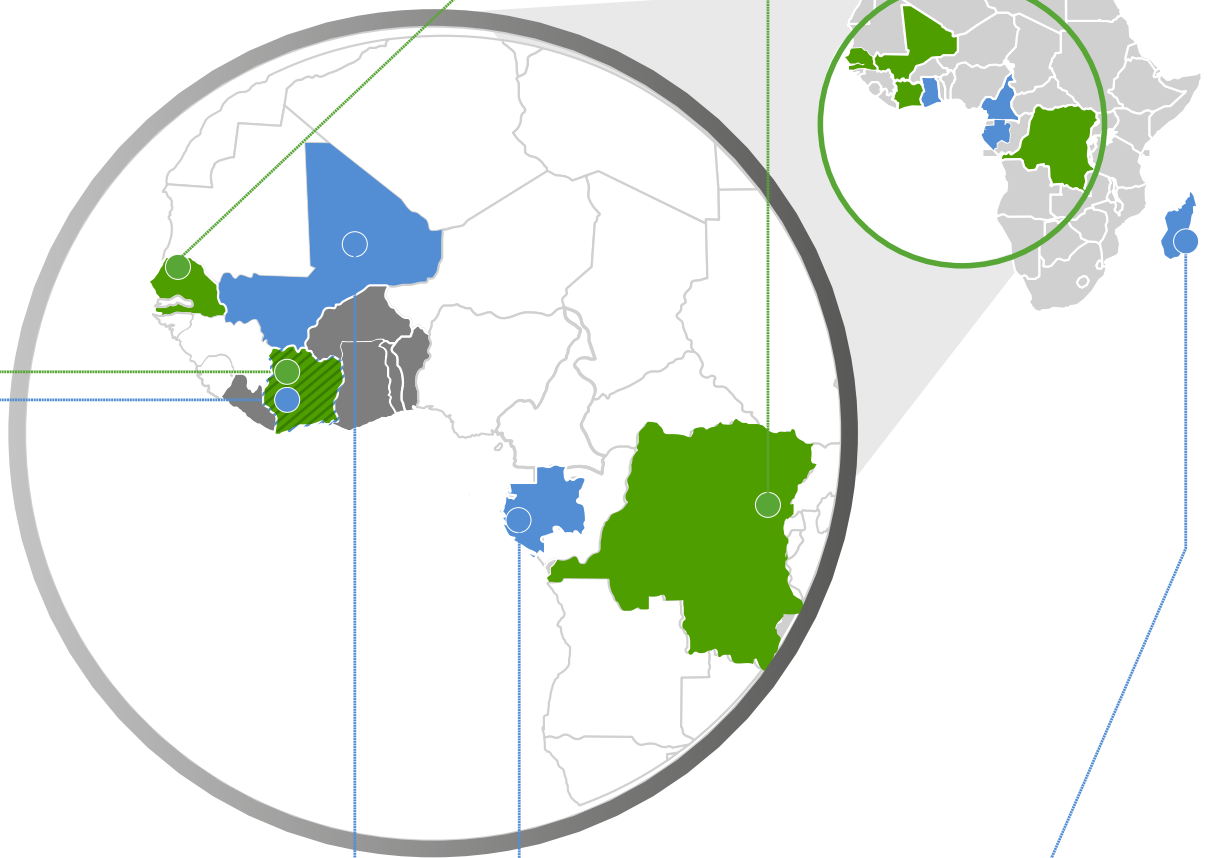
- 706,400 customers
- 180 million m<sup>3</sup> of drinking water produced
- 1,194 employees



## RD Congo



### service agreement contract



## Mali

Kenié hydroelectric power plant (42MW)



## Gabon

Hydroelectric power plants in Ngoulmendjim (73 MW) and Dibwangui (15 MW)

## Côte d'Ivoire

Cavally hydroelectric development (~250 MW)  
Combined combustion cycle in Abidjan (~375 MW)

## Madagascar

Hydroelectric power plant in Sahofika (200 MW)

Eranove operations through subsidiaries or service agreements

Eranove Operations and Projects

In-house Eranove projects

Current energy export markets

# Values - A source of innovation

## Performance

Eranove's goal is to become an international stakeholder. Based on a culture of economic, technical, social and environmental performance, the Group has been boosted by its continued excellence and ability to take into account contextual specificities in order to develop its customer service provision.

## Precision

The Group's governance bodies ensure that our practices are transparent and precise. Eranove also endorses the financial rating of its companies, and compliance with international security, quality, environment and social standards, primarily the ISO and OHSAS reference frameworks.

## Diversity

The Group comprises men and women who work together towards the same goals, applying a profoundly human outlook to their work. Eranove prides itself on being multicultural, multigenerational and promoting gender balance, and all of these aspects constitute great assets for the Group.



## Africanity

Le Groupe est empreint de la culture africaine qui l'a vu naître. Il s'appuie sur des racines fortes, qui fédèrent tous les collaborateurs.

L'africanité fait la spécificité du groupe en termes de modèle, d'organisation et d'état d'esprit. L'entraide, le partage, la solidarité et la responsabilité constituent l'ADN d'Eranove.

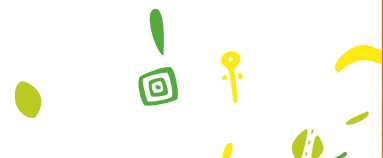
## Responsibility

The Group ensures that it maintains awareness of its social and environmental impact.

Its approach is based on the transfer of knowledge and values in order to raise the awareness of its customers, partners and employees on sustainable development issues, to protect the sustainability of our companies.

## Creativity

The Group is well-versed in providing ongoing and structured progress, creativity and innovation. Our creativity benefits both customers and employees by bringing them increased satisfaction, ease and security.









# GOVERNANCE-BASED COMMITMENT

---





An efficient management system which embodies African culture



Strong governance bodies



An ISO 9001, OHSAS 18001 and ISO 14001-certified QHSE management system



Ethics at the core of our decision-making process



A circle for each business line to promote CSR



**330**  
people trained in anti-corruption legislation in 2016

## A. DECISION-MAKING WITH **STRONG GOVERNANCE BODIES**

With the benefit of the CSR experience of its main shareholder Emerging Capital Partners (ECP), the Eranove Group has set up a governance system which complies with international practice as recommended by socially-responsible investors.

This system comprises **six committees**, three of which report directly to the Board of Directors.

**Mr. Vincent LE GUENNOU**  
Chairman of the Eranove Group  
(left) with  
**Mr. Marc ALBEROLA**, Chief Executive Officer of Eranove SA



### 1 – The Board of Directors

#### BOARD OF DIRECTORS

##### Role

The Board of Directors develops the Group's policies and ensures that these policies are implemented. Its focus is the main strategic, economic and financial policies.

##### Composition

The Eranove Group's Board of Directors is chaired by Mr. Vincent Le Guennou, co-CEO of Emerging Capital Partners (ECP), and has seven members:

- + M. Jean-Marc SIMON represents ECP FII Finagestion SARL
- + M. Brice LODUGNON, Emerging Capital Partners (ECP)
- + Mme Isabelle SCEMAMA, AXA Group
- + M. Philippe de MARTEL, AXA Group
- + M. Mansour Mamadou CAMA, Independent Director
- + M. Marc ALBEROLA, CEO Eranove SA
- + M. Eric TAUZIAC, deputy CEO Eranove SA

**2 – The Board committees**

**THE BOARD COMMITTEES**



**AUDIT COMMITTEE**

**ROLE :**

The role of the Audit Committee is to monitor issues relative to the drawing up and control of accounting and financial data, and to ensure the effectiveness of internal risk monitoring systems in this area.

**COMPOSITION :**

The Audit Committee comprises three members, one of whom is selected from the independent members of the Board of Directors, at the proposal of the Appointments Committee. The Board of Directors appoints its Chair. It does not have an executive director.

The Audit Committee is currently chaired by Mr. Brice Lodugnon, Managing Director ECP. Its members include Mr. Marc Albérola, Mr. Eric Tauziac (respectively CEO and Deputy CEO of the Eranove Group, and Mr. Philippe de Martel), Global Head of Corporate Finance of Axa.

**STRATEGY COMMITTEE**

**ROLE :**

The Strategy Committee advises and assists the Board of Directors with its main strategic and operational guidelines, and in particular supports its decision-making preparations. The Strategy Committee meets at least quarterly, and as often as required in the event that projects exceed the limits initially defined.

**COMPOSITION :**

The Strategy committee comprises four of the Company's Directors. It is chaired by Mr. Marc Albérola, CEO of Eranove Group, and its members include Mr. Brice Lodugnon, Managing Director of ECP, Mr. Philippe de Martel, Global Head of Corporate Finance of Axa and Mr. Eric Tauziac, Deputy CEO of the Eranove Group.

**COMPENSATION AND APPOINTMENTS COMMITTEE**

**ROLE :**

The primary role of the Compensation Committee is to support the Board of Directors in duly determining and assessing all compensation and benefits received by the Company's executive directors, while the Appointments Committee assists the Board of Directors with the composition of the Company's and Group's governing bodies.

These committees meet as often as required, and will always meet at least once a year, prior to the meeting of the Board of Directors.

**COMPOSITION :**

The Compensation and Appointments Committees comprise two members, one of whom is selected from the independent members of the Board of Directors. They do not have an executive director.

### 3 – Committees reporting to Senior Management

#### COMMITTEES REPORTING TO SENIOR MANAGEMENT



#### OPERATIONS COMMITTEE COMOP

**ROLE :**

The Operations Committee is a decision-making body where the CEOs of the Group's companies present their action plans for improving their operational, social, environmental and contractual performance, and the advancements achieved in strategy implementation for each subsidiary. It also discusses performance improvement benchmarks.

**COMPOSITION :**

The Operations Committee is chaired and led by the CEO of the Eranove Group Mr. Marc Albérola. Its members include Eranove Deputy CEO Mr. Eric Tauziac, Mr. Mamadou Dia, Group Director of Water and Sanitation, Mr. Ralph Olayé, Development and Project Management Director, the CEOs of the subsidiaries and of the GS2E EIG, Mr. Daniel Sampah, CEO of AWALE, Mr. Abdoul Ball, CEO of SDE, Mr. Basile Ebah, CEO of SODECI, Mr. Dominique Kakou, CEO of CIE, Mr. Bernard N'Guessan Kouassi, CEO of CIPREL, Mr. Zahalo Silué, CEO of Kénié Renewable Energy and Mr. Sylvestre Sem, CEO of GS2E.

#### MANAGEMENT COMMITTEE COGES

**ROLE :**

The Management Committee is the body that oversees the economic and financial results of Eranove Group entities. Each company in the Group has its own Management Committee.

Its role is to:

- + set-up financial planning for the subsidiaries (business plans, five-year plans, budgets, updates);
- + monitor and analyze the results and main components of each subsidiary's balance sheet under local standards and IFRS;
- + manage the main options for approving the subsidiary financial statements (both quarterly and annually);
- + set out and monitor corrective actions where results are not in line with those forecast;
- + promote feedback on best economic and financial practice between companies in the Eranove Group.

**COMPOSITION :**

The Eranove Group Management Committee members include: the CEO, Mr. Marc Albérola and Deputy CEO Mr. Eric Tauziac, together with the CEO of each company and his/her staff with economic and financial roles (Deputy CEO, Secretary-General, CFO etc.).

## B. LONG-TERM **ACCOUNTABLE** **GOVERNANCE**

The Eranove Group's governance draws on the strong management approach instilled within SODECI by Marcel Zadi Kessy in the early 1970s, which was duplicated within CIE from 1990. The genuine approach in terms of structure and management structure is based on the premise that an African company cannot be solely managed using universal management techniques.

Managers of a high-performing African company consider **the socio-cultural African** context, and use motivational methods linked to local cultural values.

In practical terms, Mr. Zadi Kessy has structured his companies around four key functions (administrative, sales and marketing, technical and stock), with no hierarchical link between them. The managers of these areas report directly to a regional director, and within this structure, women are prioritized.

During an era in which the boss tended to be shrouded in secrecy and mystery, some managerial roles were cut to promote the sharing of information, increase the delegation of powers and self-management, and to aid decision-making.

Community pressure (which often leads to deviations) has been counterbalanced both by instilling a principle of straightforward management based on cross-project internal control (i.e. «the party who initiates an action should not complete it, especially if this action is financial»), and by creating various social funds. These social funds have strengthened solidarity links, and have played a key role in maintaining a positive social environment and instilling a corporate mindset.

Employees have received relevant training on budget management at all levels. This empowerment at local level involves all employees in the management of the Company: they assume responsibility on the Company's behalf, create and analyze steering indicators, and learn how to anticipate.

This inter-cultural, decentralized and **empowerment-based managerial model** now forms the basis of the Eranove Group. It provides guidance to employees for their day-to-day decisions, and has enabled the Eranove Group to become the current pan-African leader of the water and energy sectors.



# Marcel Zadi Kessy,

## how to combine performance and African culture

Chairman and CEO SODECI 1985 - 2002

Chairman and CEO CIE 1990 - 2002

Chairman of the Board CIE-SODECI 2002-2011

**M**arcel Zadi Kessy was born in 1936 in Yacolidabou, near Soubré, in the south-west of Côte d'Ivoire. After studying as a technical rural infrastructure engineer, he started his career with the Ivorian authorities before joining the Société de Distribution d'Eau de Côte-d'Ivoire (SODECI – Côte-d'Ivoire Water Distribution Company) at the beginning of the 1970s, and 15 years later became the Chief Executive Officer.

When the Ivorian electricity sector was privatized in 1990, Marcel Zadi Kessy also took the helm at the new Compagnie Ivoirienne d'Electricité or CIE (Ivorian Electricity Company). For a 10-year period he took on CEO roles for both SODECI and of CIE, before becoming the Chair of both Boards of Directors in 2002.

In addition to CIE and SODECI, Marcel Zadi Kessy has performed and continues to perform a number of other international roles. He was the Founding Chair of the African Union of Water Suppliers (now the African Water Association), and is currently a member of the International Water Association (IWA) Board of Directors, as well as being a director for various companies and the Chair of the Côte d'Ivoire Economic and Social Council from 2011 to 2016.

In October 1998, Marcel Zadi Kessy's book «Culture africaine et Gestion de l'entreprise moderne» (African culture and managing a modern company) was published by Editions CEDA and CLE. The book is testament to the 20 years of experience which have served to convince him that the sustainable development of African companies can only be achieved if management approaches are adapted to the cultural realities of African communities.

Marcel Zadi Kessy is also concerned about rural development in Africa, and particularly in Côte d'Ivoire. For a number of years he has been very instrumental in improving the economic and social wellbeing of the inhabitants of his village and region. His vision is to promote development which enables rural communities to be involved in effectively combating poverty. Instead of the «turnkey projects» which have not been as successful as expected, he advocates the active involvement of beneficiary communities in the design, implementation and management of shared facilities and productive projects.

He created the non-governmental organization Ouyiné («solidarity» in the Bété language) to promote this approach, with the mission of making his rural development vision a reality. He wrote two books about his experience, entitled «Développement de proximité et Gestion des Communautés villageoises» (Local development and managing village communities – January 2004, Editions Eburnie) and «Le village-école» (The Village-School – February 2013, Editions des îlots de résistance).



## C. PLACING ETHICS **AT THE CORE OF THE DECISION-MAKING PROCESS**



**330**

employees received ethics training and awareness session



**102,733 €**

was spent on tackling corruption in 2016

Ethics is at the core of the Eranove Group's governance system. Each of the Group's operating companies has rolled out an **ethics framework** and drafted a **code of ethics** which incorporates the company's mindset, credentials and key values. The purpose of this code of ethics is to ensure compliance with universal human rights principles, and to contribute to combating corruption and fraud. It helps to promote respect for customers and ethical compliance in relations with suppliers and sub-contractors. It also supports the professional approach of our employees and their exemplary behavior within the market.

The ethics framework covers :

- + an ethics **training** plan initially delivered to managers and then gradually extended to all employees,
- + a **three-year action plan** placed under the responsibility of an Ethics Committee set up in each department,
- + internal **awareness-raising** through widespread use of internal communications media (posters, office policies, calendars, ethical action guide, publications in monthly newsletters etc.),
- + a **code of conduct** for each business unit, listing what to do and what to avoid.
- + a **whistleblowing system** for reporting ethics alerts via an «ideas box», e-mail, toll-free number or via a web form available directly from the website.

In 2016, €102,733 was spent on tackling corruption, and 330 employees received ethics training and awareness sessions.



### 2016 STATISTICS FOR THE CIE ETHICS COMMITTEE

In 2016, 276 complaints were received by the CIE Ethics Committee. The considerable increase in comparison to the previous year (+68%) is proof that the whistleblowing system has been adopted and trusted. By the end of 2016, 229 complaints had been resolved (83%), and 46 were pending.

These complaints were primarily related to the following values and principles: compliance with laws or regulations, professionalism and respect for the customer.



## ASSESSMENT OF THE ETHICS FRAMEWORK BY AN INTERNATIONAL FIRM

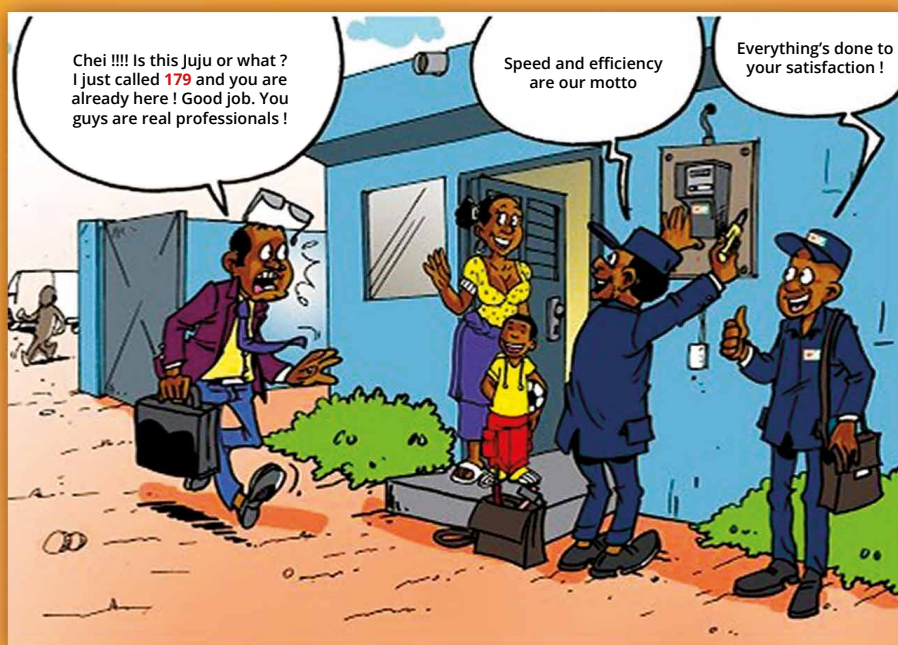
In order to foster continued improvement and excellence in the ethics domain, the Eranove Group commissioned the firm ERM to assess the ethics management framework for each of the companies.

During this initial phase, the Group took action to establish a three-year action plan for each entity, in order to ensure that the framework complies with international laws and standards (particularly the IFC performance standards and the Anti-Bribery Act), with a specific focus on high-risk business units. A second assessment will be conducted from 2018, to confirm the quality of the framework's implementation and analyze the impact (efficiency) of the ethics management frameworks and structures in place in the companies.



## ETHICAL ACTION GUIDELINES

### 8. PROFESSIONALISM



Each employee undertakes to:

- perform his/her duties with precision, care and a strong sense of responsibility;**
- guarantee customer satisfaction by providing high-quality services.**

## D. ASSESSING AND CERTIFYING OUR MANAGEMENT SYSTEMS

### CERTIFYING OUR QHSE PROCESSES

The Eranove Group decided to launch a Quality, **Safety and Environment management system in 2008** at the drinking water production plant in Ngnith, Senegal. It was therefore one of the first pan-African groups to set up a triple certification process.

Each of the Group's operating companies implements the International Organization for Standardization's ISO 9001 quality standard and the ISO 14001 environmental standard, as well as the OHSAS 18001 health and safety standard from the British Standard Occupational Health and Safety Assessment Series. The French certification body AFNOR conducts regular audits to renew certifications.

Certification programs form an integral part of the Eranove Group's management system, and are crucial to meeting its economic, societal, social and environmental objectives. Compliance with the QHSE action plans is incorporated into the objectives of the operating companies' managers.



CERTIFICATION TABLE (SCOPE, INITIAL CERTIFICATION DATES, CERTIFICATION TYPES)	AFNOR ISO 9001 <sup>4</sup>		AFNOR OHSAS 18001 <sup>5</sup>		AFNOR ISO 14001 <sup>6</sup>		AFNOR AFAQ 26000
	Quality	Initial certification:	Occupational health and safety	Initial certification:	Environment	Initial certification :	SOCIAL RESPONSIBILITY
<b>CIE</b> Interconnected production, transmission and energy movement	Power production			<b>2007</b>		<b>2010</b>	CONFIRMED
	Energy movement, transmission and telecommunications			<b>2014</b>		<b>2014</b>	-
<b>CIPREL</b> Management of construction projects for power production infrastructure, using and maintaining this type of infrastructure				<b>2009</b>		<b>2009</b>	CONFIRMED
<b>SDE</b> Full scope	Full scope			<b>2010</b>		<b>2010</b> (excluding Kôhr factory)	CONFIRMED
	Initial certification scope			<b>2006</b> (Ngnith factory)		<b>2008</b> 4 water production plants (KMS, Ngnith, R. Tall and Méthé), Laboratory and Central Maintenance (excluding Khar plant)	
<b>SODECI</b> Abidjan production units		<sup>3</sup>		<b>2015</b>		<b>2015</b>	-

<sup>3</sup> This table highlights triple certification Please note that SODECI's certification scope is broader (all scopes, excluding operations and sanitation)

<sup>4</sup> most recent certificates prepared in accordance with 2008 version

<sup>5</sup> most recent certificates prepared in accordance with 2007 version

<sup>6</sup> most recent certificates prepared in accordance with 2004 version

In 2017, the Eranove Group hopes to **extend the scope** of its certified entities by following a plan which covers all of the operating subsidiaries.

**SODECI** plans to :

- + set up a QSE system in the Sanitation department, and gradually roll the system out to the inland production plants, starting with Yamoussoukro and Bouaké
- + extend the scope of the Quality, Safety and Environment certification to the Finance and Accounts department, the Maintenance department and the Research and Works department
- + implement quality certification for the Sales and Customer department

**CIE** plans to roll out QSE certification for the CME (Electricity Training Center) and the DAMT (Occupational Health division). The QSE system will also be extended to cover the DPS (Welfare Benefits department), the DBCG (Budget and Management Control department) , the DFC (Finance and Accounts department), and the DP (Real-Estate department)

**GS2E** will integrate Safety and Environment components into its Quality certification. In addition, an ISO 26000 preliminary assessment will be held in order to establish an action plan.

Finally, 2017 will also signal the migration of all of the **management systems** in accordance with the requirements of the new versions of the ISO 9001, ISO 14001 (2015 versions) and OHSAS 18000 (new version pending ISO 45001)

This roll-out will be accompanied by a major training program. In 2016, for CIE, SODECI, GS2E and AWALE, the program delivered:

- + 460 employees trained in QSE basics;
- + 60 executives, process managers and QSE managers trained in QSE requirements;
- + 19 internal auditors trained in new standards through a bridging course;
- + 24 employees trained in Quality, Safety and Environment through a course for internal auditors based on new reference frameworks.

Each session included a module on environmental protection, and on estimating factors and impacts.

**SDE** trained 26 employees including the Management Committee and all of the CEOs, 47 internal auditors and 29 QSE advisers on the strategy for migrating the SDE management system to the 2015 versions of the ISO 9001 and ISO 14001 standards.

## COMMITTING TO CSR PROCESSES

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In 2015, a sustainable development circle was created in each business line to amalgamate skills, multiply in-company experience-sharing, formalize a sustainable development reporting system, foster a corporate culture in this area and create numerous initiatives arising from the application of sustainability principles within the Group. The circle for each business line is led by the parent company, and brings together key focus areas for each company in the Group.

This type of circle-based structure makes it possible to bring Group issues (experience-sharing, continual improvement, launching of cross-business projects) into line with the particular nature and culture of each company.

Under the impetus of the parent company, since 2015 all of the Group's companies have implemented CSR monitoring for a range of indicators which appropriately reflect the companies' individual identities, and which comply with the Grenelle II Law.

For the first time, CSR reporting is included in the companies' management cycle for FY 2016. To that end, from FY 2016, extra-financial reporting for CIE, SODECI, SDE and CIPREL will be presented and validated by the Board of Directors meetings called to approve the financial statements, before presenting and validating the Eranove Group's extra-financial consolidated scope.

Therefore, the whole of the Eranove Group will be instrumental in opening up both management information and environmental and societal information.

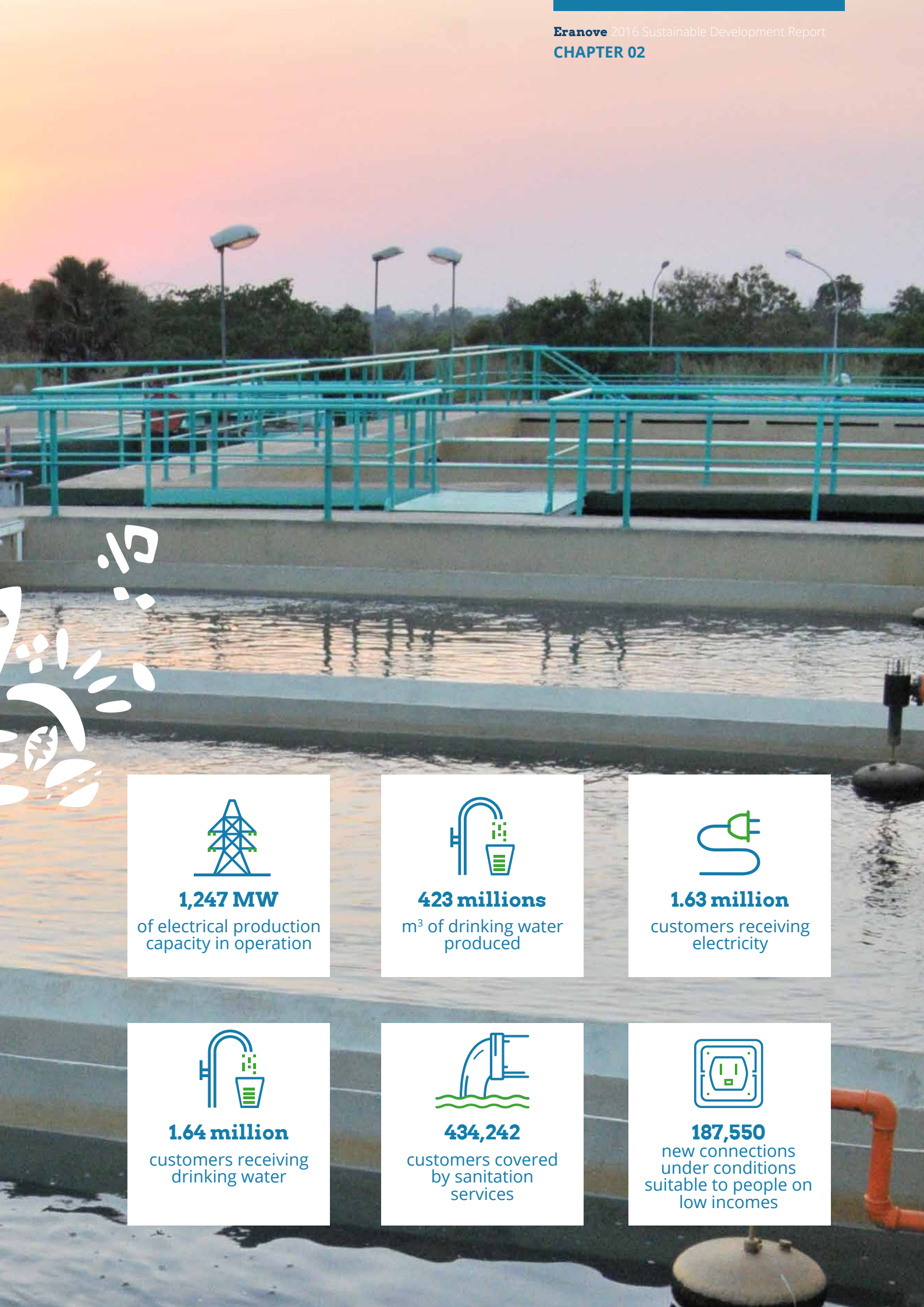




# 2 PROVIDING ACCESS TO ESSENTIAL LIFE SERVICES

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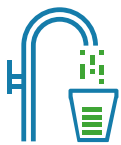
**1,247 MW**  
of electrical production  
capacity in operation



**423 millions**  
m<sup>3</sup> of drinking water  
produced



**1.63 million**  
customers receiving  
electricity



**1.64 million**  
customers receiving  
drinking water



**434,242**  
customers covered  
by sanitation  
services



**187,550**  
new connections  
under conditions  
suitable to people on  
low incomes

# A. IMPROVING THE PERFORMANCE OF FACILITIES

The Eranove Group believes that making electricity and water available to the largest possible number of people requires high-quality operation and maintenance of production, transmission and distribution infrastructure and a development of the client relationship.

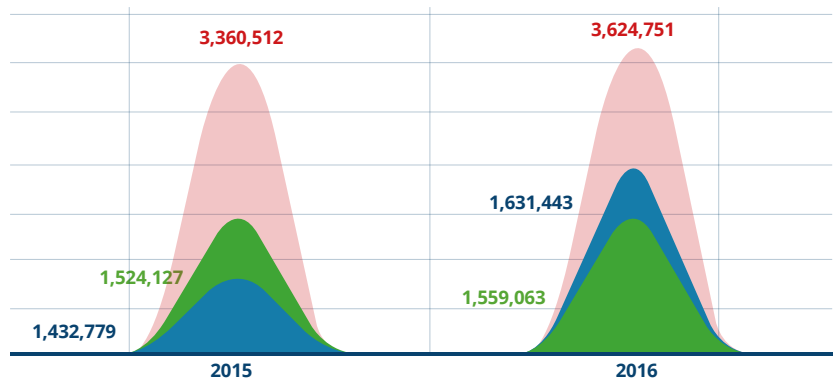
Over the past five years, the Group has enhanced its performance both in the drinking water and electricity sectors. The number of customers has increased from 1,294,873 to 1,643,584 (+27%) in the water sector, and from 1,154,000 to 1,631,443 (+41%) in the electricity sector. Therefore, at the end of 2016, the Eranove Group was providing water to nearly 12.6 million people, and electricity to 8.9 million people<sup>7</sup>.

Within the following segments :

- + **electricity production**, performance is measured primarily via the availability factor of production infrastructure: CIPREL = 97% and CIE = 93%<sup>8</sup> ;
- + **electricity distribution**, the total efficiency of the national Côte d'Ivoire network improved by 8% between 2012 and 2016 (74% to 80%), primarily due to stronger maintenance measures and anti-fraud measures implemented by CIE;
- + **drinking water production** : internal plant efficiency is measured (treated water/untreated water): it is 97% for SODECI and 95.5% for SDE;
- + **drinking water distribution** : the network efficiency indicator is used (water billed/drinking water produced): it is 74.5% for SODECI and 80.5% for SDE.

## NUMBER OF ELECTRICITY/ WATER CUSTOMERS

- ~ Number of water customers
- ~ Number of electricity customers
- ~ Number of customers



<sup>7</sup> Calculation assumptions: in Côte d'Ivoire: 5.43 people per household (RGPH census data 2014) – Senegal: 10.7 people per household (data from Artelia study for SONES 2015)  
<sup>8</sup> Availability outside programmed maintenance





## REGULATING WATER PRESSURE TO REDUCE LOSSES IN THE NETWORK

### IN SÉNÉGAL,

In 2015 SDE trialed a segmentation and pressure regulation program in Dakar's Sacré Cœur pilot district with the goal of reducing losses. Prior to the trial, the flow rate was 350 m<sup>3</sup> per hour between 00:00 and 5:00 am, and this high pressure caused a number of faults and leaks in the network, meaning that some districts were without water. Thanks to a better spread of water volumes distributed and continuous monitoring for priority customers, the flow has been stabilized at 50 m<sup>3</sup> per hr. The result is that 550,000 m<sup>3</sup> of water is being saved every year.

Based on the success of this project, SDE rolled out two further regulation projects in 2016: one («Ngor Almadies») in the lower distribution area of the Mamelles Reservoirs, and the other known as «DEPART RR2 Dakar» on an inlet of the main supply pipe in Dakar. The principle is the same as for the pilot area: pressure is controlled primarily at night in these low-lying areas, which reduces water loss due to broken pipes and enables excess water volumes to be channeled to areas with a water shortage, without creating any water supply issues.

This will save over 2,200,000 m<sup>3</sup> of water per year, the equivalent of the annual production of a bore hole providing over 280 m<sup>3</sup> of water per hr.

### IN CÔTE D'IVOIRE,

A number of drinking water production improvement measures have been implemented by the Côte d'Ivoire Government since the end of the crisis in 2011, to improve drinking water supply to the city of Abidjan. New plants were commissioned under these measures (including Bonoua 1 and Niangon 2) causing a significant rise in pressure on networks which had already been weakened by nearly a decade of intermittent supply. Although the measures improved living conditions for inhabitants, they also caused leaks and ruptured pipes which resulted in water losses of nearly 20% in the Abidjan distribution network by the end of 2015.

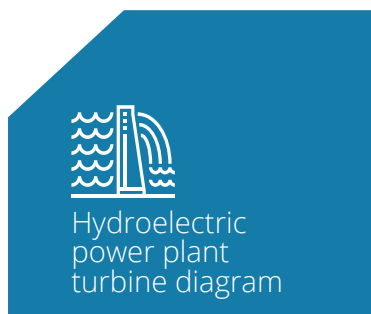
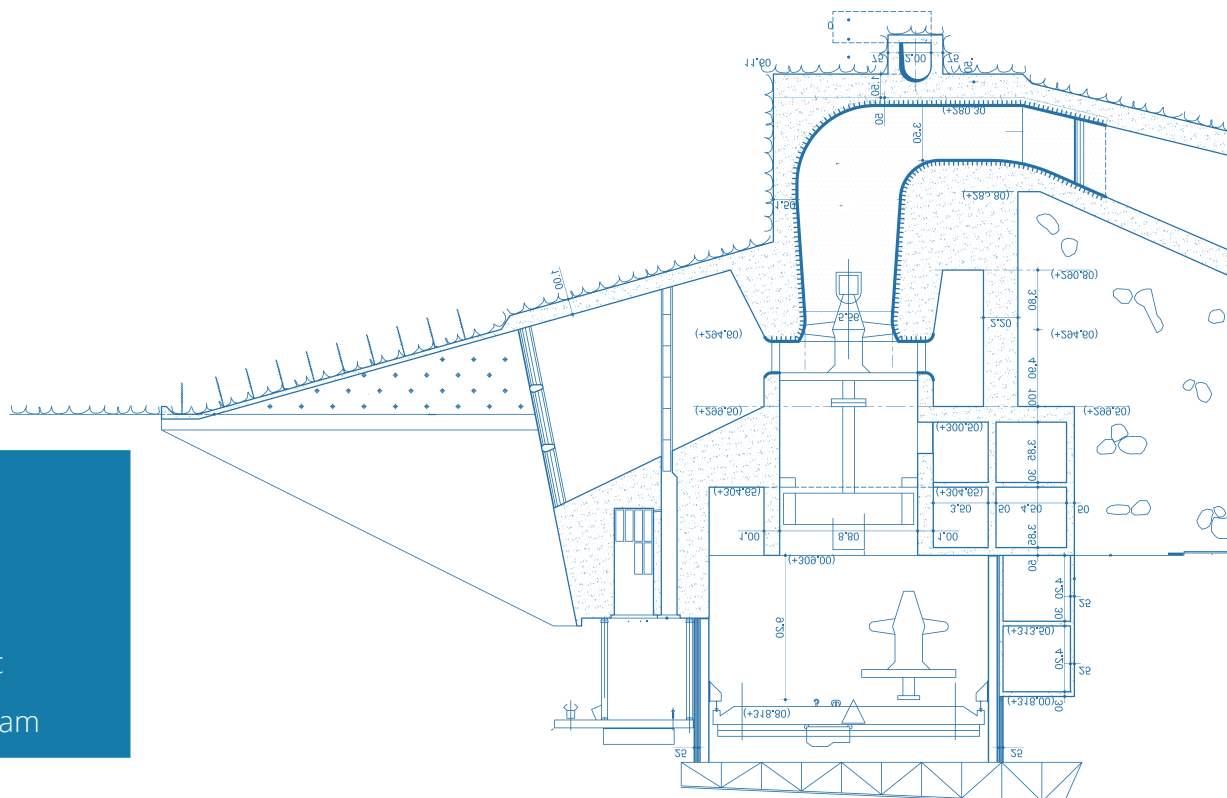
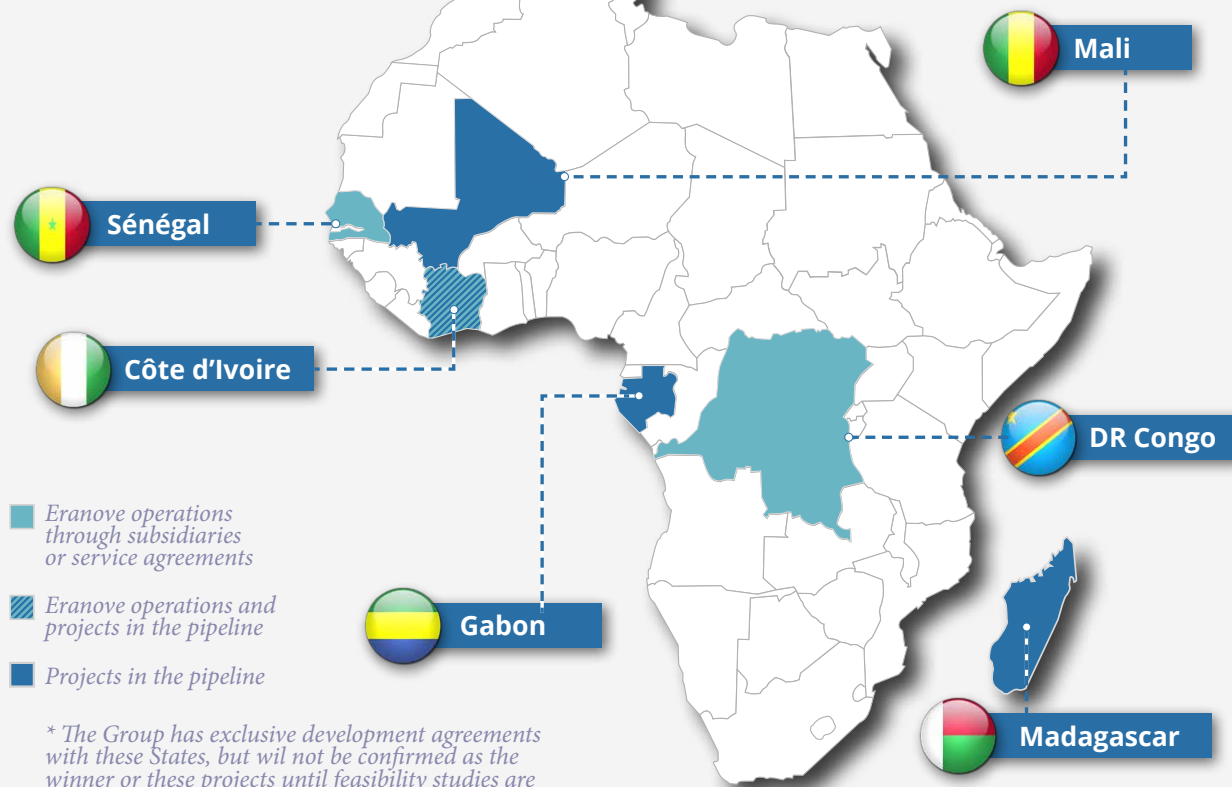
In September 2015, several pressure management projects were launched to resolve the issue in the regional divisions of Abidjan South, Yopougon and Abidjan North-East. During the initial phase, 21 pressure-regulating valves with a diameter of between 60 and 600 mm were deployed and configured to regulate downstream pressure on-demand, throughout the daytime. These regulated systems are located on the perimeter of key areas in the Zone Est, Riviera Centre, Nord Riviera, Abatta, Niangon 2, Zone Ouest and Bonoua 1 plants.

By the end of 2016, SODECI's investment of over €1.3 million (900 million CFA Francs) had resulted in an increase in water production of 9,000,000 m<sup>3</sup> per year. Over an entire year, the equivalent of the total annual production of the Nord Riviera water treatment plant (52,000 m<sup>3</sup> per day) will be saved.

# B. SUSTAINABLE DEVELOPMENT OF PRODUCTION CAPACITY

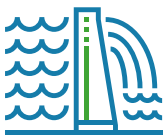
## A number of ongoing developments

New locations planned





**1,247 MW**  
including 48%  
hydroelectricity of  
electrical production  
capacity in operation



approximately **950 MW**  
including over 60%  
d'hydroelectricity in  
project stage

In 2016, the Eranove Group continued to implement **ITS PAN-AFRICAN DEVELOPMENT STRATEGY**, as well as reinforcing its aim to become the leading pan-African group for public service management and drinking water and electricity production.

This strategy has been consolidated through significant progress in the Eranove Group's six main development projects underway, representing an electricity production capacity of **approximately 950 MW** over four countries:

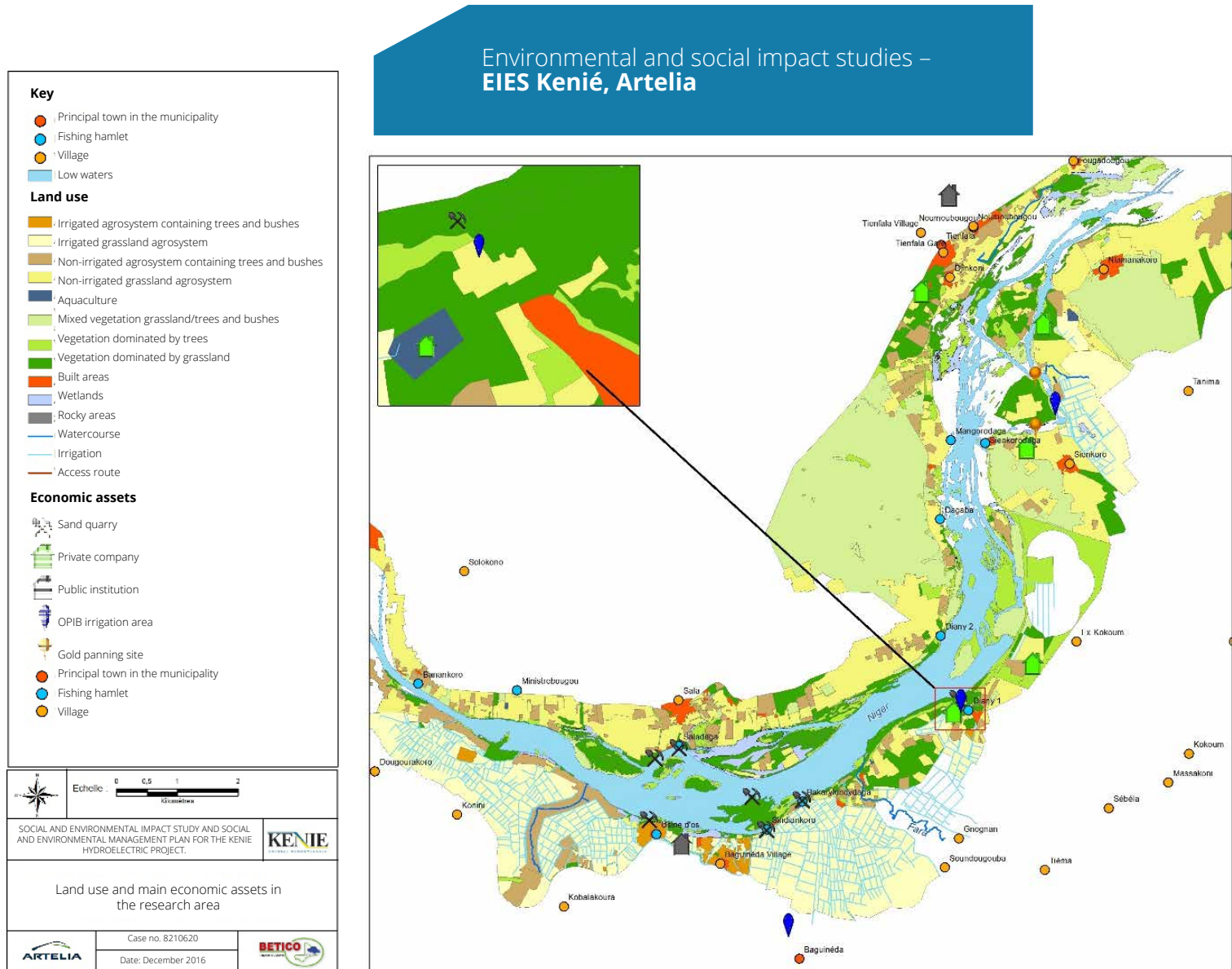
- + **in Mali**, and through its subsidiary Kenié Energie Renouvelable (KER), the Eranove Group is leading a project to develop a 42 MW hydroelectric power plant in Kenié, on the Niger River, 35 km downstream of Bamako. For this purpose, KER signed a 30-year concession agreement with the Mali Ministry for Energy and Water on June 18, 2015. This plant is designed to use water channels (without a reservoir), to help to plug Mali's energy shortfall and provide electricity to approximately 175,000 households<sup>9</sup> ;
- + **in Côte d'Ivoire**, on September 5, 2016 the Eranove Group signed a memorandum of understanding with the Ivorian government to finance, design, operate and maintain a 350-400 MW combined cycle power plant. The plant will use gas as its primary fuel, and will be based in the Abidjan region. Furthermore, in Côte d'Ivoire the Eranove Group is continuing to commission hydroelectric ventures through a string of facilities with estimated capacity of 200-300 MW;
- + **in Gabon**, the Eranove Group has joined forces with the Gabonese Strategic Investment Fund (Fonds Gabonais d'Investissements Stratégiques – FGIS) to contribute to the national target of meeting all of Gabon's energy needs through competitive, sustainable and job-creating services. For this purpose, on October 21, 2016 they signed two concession agreements for the design, financing, construction and operation of two hydroelectric developments on the following sites:
  - o Ngoulmendjim (73 MW), a hydroelectric power plant located on the Komo river, to supply power to Libreville,
  - o Dibwangui (15 MW), a hydroelectric power plant on the water channel located 450 km from the capital on the Louetsi river, to provide power to the south-east of the country;
- + **In Madagascar**, on December 2, 2016 the Eranove, Eiffage and Themis Groups consortium signed a project agreement with the Republic of Madagascar to build and operate a new hydroelectric power plant with an installed power of 200 MW. The plant will be located on the site of Sahofika, approximately 100 km to the south of Antananarivo, and will considerably increase national capacity and absorb the chronic shortfall on the capital's interconnected grid by producing electricity for approximately 1.5 million households (according to available research data).

<sup>9</sup> according to available data on average consumption in West Africa

**Environmental and social impact** studies have been conducted for all projects, in compliance with local requirements and the most stringent international standards, including IFC (International Finance Corporation, World Bank Group) performance standards. The results of these studies are incorporated into the project design, with the aim of seeking an optimum balance between the impact on local residents, the impact on flora and fauna and the efficiency of the infrastructure.

For example, the Kenié social and environmental impact plan will examine biodiversity, primarily based on the identification of 4,900 birds of 74 different species, and as regards vegetation, 29 varieties of woody species and 23 varieties of herbaceous species, 88 fish species in low and high waters, and 34 large animal species.

On June 10, 2016 the Kenié and CIPREL IV projects were respectively crowned «Best Water Deal» and «Best Sustainability Deal» by the EMEA Finance magazine in London, testament to the quality of the project preparation.



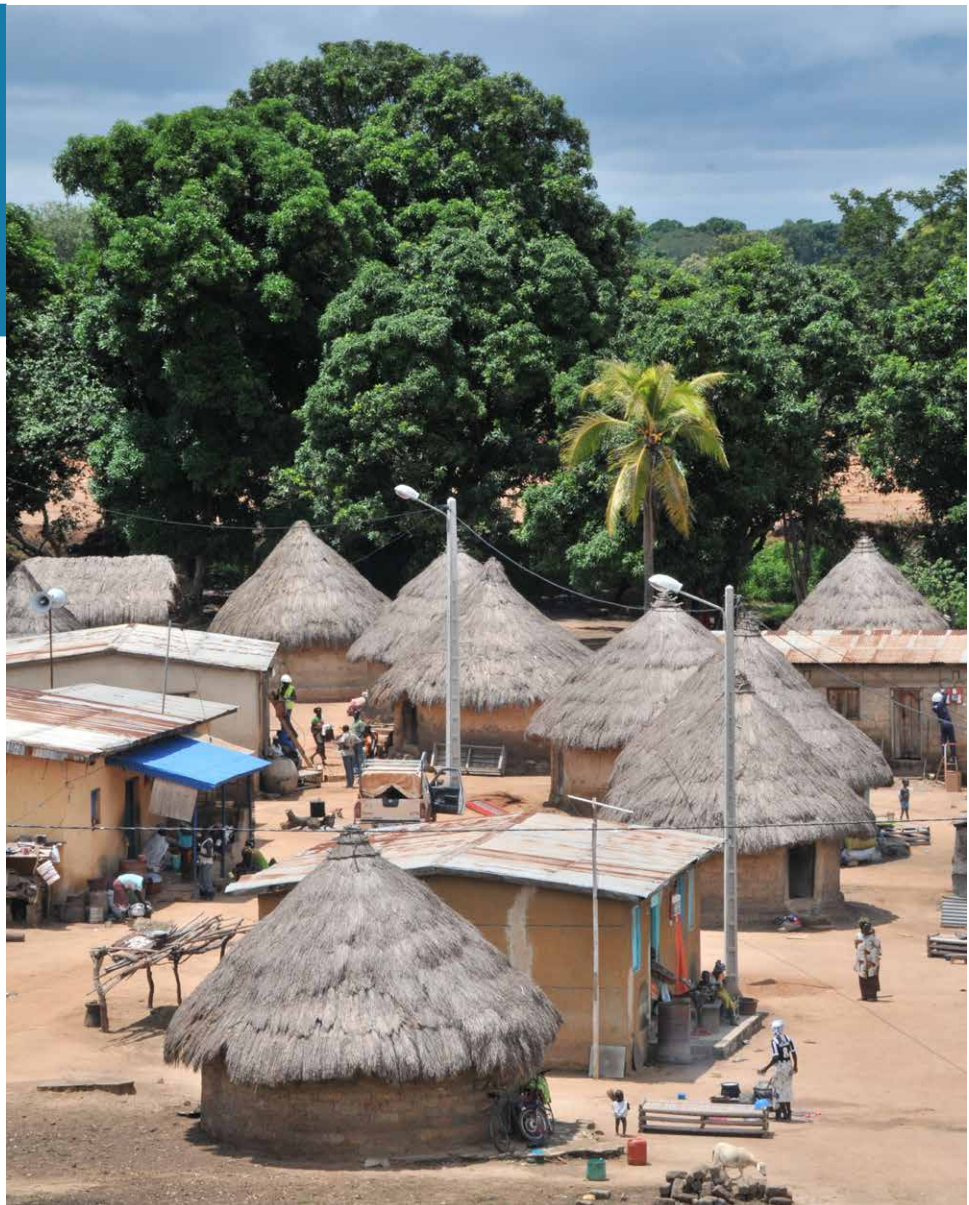
## C. **EXTENDING ACCESS** TO THE MOST VULNERABLE COMMUNITIES

In 2016, Africa had a population of over 1.2 billion, which is expected to double by 2050. Nearly 620 million people<sup>10</sup> have no access to electricity, and 319 million<sup>11</sup> are without access to drinking water. These challenges provide private sector investment opportunities, as public development subsidies and national budgets do not have the resources to bridge the current shortfall.

A number of obstacles stand in the way of widespread access to water, sanitation and electricity. Besides the necessary infrastructure for producing, transmitting and distributing electricity, the financial resources of households can still be a barrier. Large portions of the population have low, seasonal or irregular income, most often from farming or casual work. Their ability to save is too poor to pay for connection and then bi-monthly or quarterly bills.



**PEPT**  
beneficiary  
village



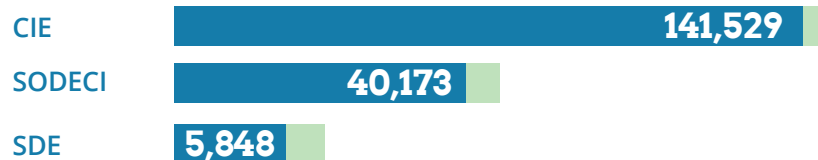
<sup>10</sup> Source: World Energy Outlook 2014, International Energy Agency, 2014  
<sup>11</sup> Source: Progress on drinking water and sanitation, WHO/UNICEF, 2015

Alongside governments, the Eranove Group is committed to helping to reduce the shortfall for future generations. The Group’s aim is to meet the needs of future generations, taking into account Africa’s demographic and social outlook.

In line with these principles, there are a number of solutions which make it possible to increase access to water and electricity for as many people as possible :

- + **lower rates** : Often known as «social tariffs», the government subsidizes these tariff brackets, which provides a means of opening up access to the most disadvantaged. In Senegal and Côte d'Ivoire, the Eranove Group companies apply these tariffs set by the government;
- + **social outreach** : These are subsidized connections for families with low incomes. This has historically been the proven way to reduce the costs of access to drinking water and electricity. Government funding schemes support installation of these connections, with the support of development partners. The Group’s companies – CIE, SODECI and SDE - are responsible for installing these connections, as part of requests for bids or CSR partnerships;
- + **innovative solutions such as the PEPT (“Electricity for All”) program** : The Eranove Group, alongside the concession granting authorities, seeks out and promotes technical and financial innovations to facilitate access to electricity for the greatest number of people. CIE, in close cooperation with its oversight ministry, started the PEPT «Electricity for All» program in late 2014 for the Ivorian electricity sector. In 2016, CIE installed 141,385 connections under the PEPT program.

**IN 2016, THE NUMBER OF CONNECTIONS ESPECIALLY FOR PEOPLE ON LOW INCOMES WAS :**





## SODECI SOCIAL OUTREACH (SUBSIDIZED CONNECTION TO THE NETWORK) FOR WATER CONNECTIONS

The cost of connection to the public drinking water network is still prohibitive for many families.

To make single connections more accessible, the Government and its financial partners have developed social outreach programs (subsidized connection to the grid). They use financial and technical schemes to increase the flexibility of the service agreement process for people on low incomes. SODECI's role is to implement the social outreach program (subsidized connection to the grid) in the field. In 2016, Côte d'Ivoire received two major donations from the Korea International Cooperation Agency (KOICA) and the World Bank (Côte d'Ivoire Infrastructure Revival Program or PRICI) for a total value of €5.6 million (3.7 billion CFA Francs). These donations funded the social outreach program (subsidized connection to the grid), to reduce the customer contribution to €15 (10,000 CFA Francs) in the Abidjan municipalities of Yopougon, Abobo, Koumassi and Cocody. The program targeted disadvantaged areas in order to increase private supply levels and reduce risk of waterborne disease.

Therefore, more than 81,000 new social outreach (subsidized connection to the grid) connections have been installed over the past two years, 40,173 of which were installed by SODECI in 2016.



## «ELECTRICITY FOR ALL» PROGRAM: CONNECTING ONE MILLION HOUSEHOLDS BY 2020

Despite the national coverage rate of the electric power grid of 80% (one of the highest in Africa), the electricity access rate in Côte d'Ivoire remains low (33%). In other words, some villages have an electricity supply, but no customers are actually connected to the network. With this in mind, the goal of the «Electricity for All» (PEPT) program launched by CIE at the end of 2014 at the request of the Côte d'Ivoire Government is to connect a minimum of one million households, representing 5-6 million people, by 2020, thereby achieving a 50% electricity access rate.

In order to achieve this ambitious goal, the PEPT project has combined energy efficiency (by installing energy-saving lightbulbs), with the «Smart Grid», which uses remotely-connected pre-payment meters with a minimum top-up of €0.76 (500 CFA Francs). Thanks to technical innovation and financial engineering, a connection can be installed for an initial contribution of €1.52 (1,000 CFA Francs). This ensures that connections are accessible to low-income households, while maintaining the social electricity tariff.

CIE recruited 160 PEPT-dedicated staff. After being trained and provided with the relevant kit, they were divided into 25 work teams deployed in five regional areas throughout Côte d'Ivoire.

The PEPT program has exceeded its goals: by the end of 2016 it had connected 175,817 new households to the grid (averaging 15,000 new connections per month).

## D. DEVELOPING **INNOVATIVE SERVICES**

For a number of years, the Eranove Group has been steadfast in its commitment to actively promote innovation, based on its belief that new technologies enable it to provide a better service to its customers.

Our vision of innovation is based on two key concepts:

### **1 - Improving customer experiences**

The Eranove Group aims to reinvent its relationship with its customers by offering increasingly innovative services through optimized customer pathways, mobile payments and new interactive services. The Eranove Group will attempt to rewrite its customer relations by placing customer satisfaction at the core of its missions.

### **2 - Further improving the performance of facilities**

The initial phase of the ambitious smart grid program, through the rolling out of smart meters by the CIE, SODECI and SDE subsidiaries, is testament to investment in innovative approaches.

This new generation of connected meters enables consumption readings to be taken far more frequently. Smart meters are therefore also a useful tool for customers, enabling them to manage their energy and water use. In the future, smart meters will also offer new services such as fault detection (water leaks, electrical overloads, or a fault in the household installations), and for pre-payment meters even remote top-ups by mobile phone.



MDAT (Mobile Data Acquisition Terminal) for **SODECI** meter readings





The latter phases of the smart grid program will roll out the equipment required to control and remotely manage water and electricity networks, improving control over facilities and preventing malfunctions, with the aim of gaining further control over the quality of service provided to our customers.

- + **CIE** has installed nearly 250,000 domestic smart meters throughout Côte d'Ivoire, primarily under the PEPT «Electricity for All» program. This program will be ramped up in 2017. CIE also set up a remote management system for Public Lighting to enhance network operation (remote lighting control and real-time monitoring of the network). This project, which is known as TERE2, has been rolled out in Yamoussoukro and on the Grand Bassam freeway.
- + Following an intensive test phase, **SODECI** will launch a program to roll out approximately 50,000 smart meters in 2017. 1,777 connected smart meters have already been installed for private customers identified as priority customers (where water is an essential component of their business) in the Cocody and Plateau municipalities. The meter reading time for these 1,777 customers is approximately 30 minutes, in comparison with three days for a standard reading by a local officer using a Mobile Data Acquisition Terminal.
- + During the first half of 2017, **SDE** plans to run smart meter trials in Dakar, Mbour and Saint-Louis before scheduling a widespread roll-out.

2017 will undoubtedly be the year in which innovative technology will underpin many of the Eranove Group's activities, as well as enabling the Group to offer new services to make its customers lives easier.



**CIE** smart meter with card

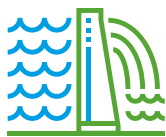




3

# PRESERVING THE ENVIRONMENT AND INTEGRATING CLIMATE CHANGE

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**604 MW**

Of hydroelectric capacity in operation



**580 MW**

Of planned hydroelectric capacity



**- 15 %**

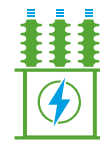
CO<sub>2</sub> emissions/MWh in one year



Installation of new technology to reduce discharges of NO<sub>x</sub> from natural gas turbines



Creation of Smart Energy, a subsidiary dedicated to energy efficiency



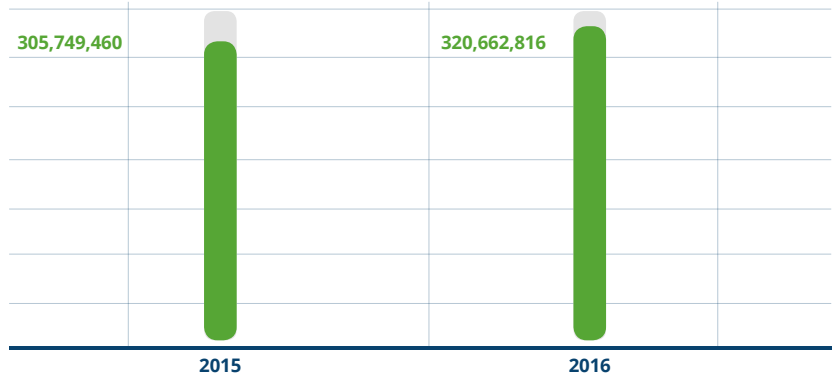
Management of PCB (Polychlorinated biphenyl) transformers in accordance with the Basel Convention

# A. RATIONALIZING RAW MATERIAL CONSUMPTION

**P**reserving resources is especially important to the Eranove Group. This is especially true for those essential to the performance of its activities whether or not they are related to production or distribution, which are, for the most part, natural gas and the back-up fuels it transforms into electricity and the raw water it transforms into drinking water and electricity.

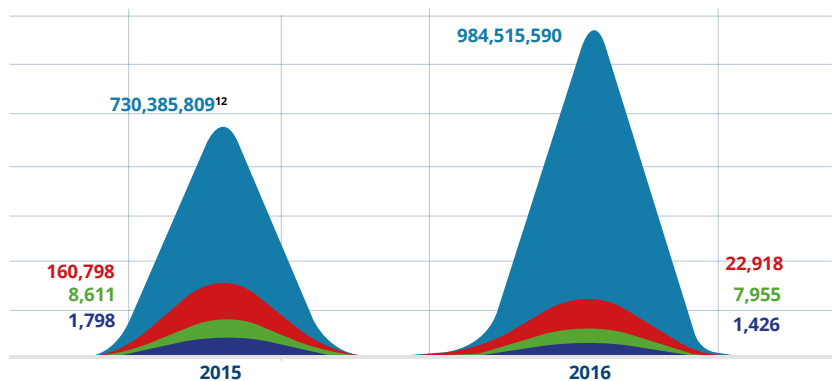
## RAW WATER CONSUMPTION IN PLANTS (m<sup>3</sup>)

~ Raw water, plants



## EVOLUTION GN, DDO, HVO (m<sup>3</sup>)

~ Natural gas consumption  
 ~ HVO consumption  
 ~ DDO consumption  
 ~ Consumption of diesel/diesel oil generators



**Energy efficiency** is a strategic issue for the Eranove Group, as can be seen in several actions:

- + sustainable production: construction of the **CIPREL IV combined cycle** and the design of a new thermal power plant in Côte d'Ivoire, which was designed directly as a combined cycle, attests to the development of sustainable production systems within the Group and its desire to increase its energy efficiency. The combined cycle recycles the hot exhaust gases emitted from the gas turbines to power a steam turbine. In this way, the steam turbine produces energy without additional gas consumption;
- + the Eranove Group hopes to achieve **ISO 50 001 - Energy Management certification** for its operating companies to make possible the implementation of an energy management system that will enable them to make better use of energy in the performance of their activities. It is striving to relay this energy efficiency to its customers by improving its diagnostic skills and energy consulting services;

<sup>12</sup> CIPREL - decline in gas supplied by the State in 2015; therefore greater use of HVO/DDO as fuel in 2015

- + information technologies: CIE, SODECLI and SDE currently use smart grids for drinking water, electricity and public lighting. The use of IT and **«smart grids»** make it possible to better monitor and thus reduce consumption while improving the total efficiency of the networks;
- + **energy audits** : the water companies SODECLI and SDE have high levels of electricity consumption to ensure the production and transportation of drinking water. Several studies have been launched to improve energy efficiency in both companies, and initial action plans have been implemented.



## AT SDE, «ECO-ENERGY» COMMITTEES ARE REDUCING ELECTRICITY CONSUMPTION

At SDE, the Société National d'Électricité du Sénégal's largest customer, the challenge of saving energy led to the February 2014 relaunch of **regional «eco-energy» committees**. Chaired by the Technical and Development Director and run by a coordinator and three employees from the statistical, production and maintenance departments, the goal of these committees is to optimize energy consumption. Their actions cover the optimization of electricity bills and the reduction of consumption at facilities.

Placed under the supervision of an engineer responsible for the oversight of energy efficiency actions, in 2015 and 2016, these committees delivered savings of over €1.8 million (FCFA 1,200 million) through major achievements such as the optimization of motor pump maintenance, the renewal of certain equipment with energy-efficient technologies, the monitoring of power factors, strict monitoring of billing, etc.

In addition, the Group monitors the **consumption of secondary resources**, in order to rationalize their use. This is the case for raw materials used in the production of drinking water and demineralized process water (chlorine gas, lime, calcium hypochlorite, alumina sulphate) and in the production of electricity (SF6 oils and gases, see indicator in appendix). This policy of rationalization extends even into the company restaurants in the main plants, dams, and training centers. Whether food services are subcontracted or not, each manager is careful to avoid **food waste** by adapting purchases to orders and forecasts, just-in-time preparation, and the use of vacuum storage and cold storage. If, despite these precautions, there are still leftovers, they are distributed to employees or local populations.



Drinking water analysis stations



## B. ENCOURAGING CUSTOMERS TO CONSUME IN A SUSTAINABLE MANNER

CIE promotes energy efficiency among consumers to reduce their electricity bills and the sector's carbon footprint.

To this end, a communication campaign targeting the general public called «10 good habits to protect the planet and reduce your consumption» was launched in November 2015. This campaign was deployed among CIE's regional divisions to make customer representatives aware of the distribution of green initiatives for citizens to their employees and consumers.

At the end of 2016, during the holiday season, CIE set up several stands in the shopping centers of Abidjan to give energy-saving advice to its customers.

For its corporate customers, CIE created a service at the end of 2016 called «Smart Energy» that will become a subsidiary dedicated to energy efficiency.



### SMART ENERGY – CIE'S FUTURE DEDICATED SUBSIDIARY FOR ENERGY EFFICIENCY

At the end of September 2016, with a view to innovating and diversifying its offer, CIE decided to strengthen its energy efficiency efforts by creating a dedicated service called Smart Energy, which is to become a subsidiary in early 2017.

Smart Energy offers its customers a planning strategy to optimize their energy consumption in a continuous and sustainable manner based on a thorough analysis of flows and real needs. To do this, its team of expert engineers, in cooperation with international partners, relies on the best available techniques, be they smart meters or renewable energies.

The energy use and control techniques now available allow annual savings of between 10% and 30% in buildings in the tertiary sectors (banks, insurance, hotels, or government buildings) and about 10% to 20% in the industrial sector. Among Ivory Coast customers, where efforts are more recent, the potential may be greater.

By promoting efficient energy cost management, Smart Energy is involved in protecting the environment, building a constructive dialogue with customers and increasing the competitiveness of companies.

## C. CONTROLLING WASTE

The controlling of the Group's environmental impacts has resulted in the deployment of a common approach for all of its companies. It is based on environmental management systems, including the management of generated waste, noise pollution from industrial operations, treated waste water in the drinking water and sanitation sector, and monitoring of air pollutant emissions. Each certified entity maintains an environmental management plan, which ensures that its impacts are monitored and the process is continually improved.

Some of our industrial facilities are subject to the regulations for ICPEs - Installations Classified for the Protection of the Environment. This is the case, for example, with the thermal power plants for the production of electricity and the treatment of drinking water. The procedures for declaring and applying for authorizations are carried out in strict compliance with national regulations and in collaboration with the Affermage Granting Authorities where this is their responsibility. When authorization orders are issued, their requirements are included in the environmental management plans for the sites.

### REDUCING NOISE POLLUTION

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Located in the VRIDI industrial zone, the CIE and CIPREL thermal power plants are distant from residential areas. Nevertheless, the operation of combustion turbines by CIE and CIPREL can cause noise pollution, especially for employees (a source of stress and fatigue). On a daily basis, the mandatory wearing of personal protective equipment (helmets, ergonomic earplugs) at thermal power plants is part of the work instructions implemented and followed in the QSE process.



### CIPREL ANTI-NOISE PLAN

In 2013, CIPREL decided to take actions to reduce the noise level of its machine fleet.

It planned the installation of silencers at the outlets of the gas vents of the various gas turbines. This work, which needs to be scheduled during long-term maintenance shutdowns, was carried out progressively between 2014 and 2016 on the 4 open-cycle NGTs (Natural Gas Turbines) (NGT 5, 6, 7, and 8). The two combined-cycle turbines (NGT 9 and 10) were already equipped with silencers.

Moreover, during 2016, CIPREL replaced all of the acoustic panels with new types that reduce the noise level in the turbine compartment of NGT 8. In 2017, an acoustic screen will be installed around NGT 8 to reduce the noise level in the offices of the neighboring building.

At the same time, CIPREL provides its employees with noise-canceling helmets or earplugs as part of the personal protective equipment (PPE) provided each year. The wearing of this equipment is mandatory on the site and employees are reminded to obey this rule during awareness campaigns and through pictograms displayed on the site.

Each year, an external body performs an external noise level audit to determine the noise level at the CIPREL production site and at the neighborhood boundary. The average sound level is under 85 decibels (dB), the regulatory limit.

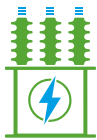


In order to prevent occupational diseases related to noise pollution, every three years, CIPREL organizes a special medical examination called an «audiogram» for all workers to ensure that their hearing skills remain intact.

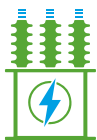
Finally, a preventive maintenance schedule is developed and implemented every year on all the machines to ensure their proper functioning and to reduce the level of sound intensity due to aging.

## PREVENTING IMPACTS TO SOIL QUALITY

The assessment of the environmental situation of each site takes into account the sensitivity of the soil. This is regularly re-evaluated. For example, at CIE, a new analysis revealed a change in sensitivity related to surface waters in Kossou and Taabo, taking into account the proximity of residences due to the expansion of residential areas. In Vridi too, the sensitivity of soils, subsoils and groundwater has been revised due to the shallow depth of the water table<sup>13</sup>. The soil quality impacts of the structures built by the Eranove Group undergo an impact assessment and have an environmental management plan in line with the expectations of international financial institutions.



**299 devices**  
containing PCB to  
be decontaminated



**73 devices**  
containing PCB to  
be disposed of

## OPTIMIZING WASTE MANAGEMENT

Waste treatment is part of our environmental concerns. The action principles enacted are aimed at minimizing the waste generated by the Group's activities and directing them towards conformity-based and value-added channels.

As far as **hazardous waste** is concerned, regulations require it to be monitored with traceability until it is finally disposed of by companies approved by the State. Compliance with regulations has led to the establishment of a waste tracking register in each producing unit. In Côte d'Ivoire, this process is supervised by CIAPOL<sup>14</sup> which issues a certificate guaranteeing the elimination of the product. In Senegal, some hazardous wastes are controlled by the National Environment Agency.

Oils and plastics are collected and recovered. However, opportunities for waste recovery remain poorly developed in the Group's countries of operation, which affects its objectives for the complete recovery or elimination of its waste.

Non-disposable waste such as batteries and lamps is then stored on site and disposal solutions are sought. Obsolete products and their packaging are recovered by suppliers for disposal. Companies are encouraged to favor suppliers that take back waste from products supplied to them.

<sup>13</sup> 1604 - Afjor CSR Energy Performance Assessment - Overview of the environmental situation

<sup>14</sup> Ivorian Anti-Pollution Center





Sanitation work



## CIE SIGNED AN AGREEMENT WITH THE BASEL AND STOCKHOLM CONVENTIONS REGIONAL CENTER FOR THE DISPOSAL OF PCBs

As for PCBs - Polychlorobiphenyls, mineral oil used in the distribution transformers manufactured before 1990, CIE has signed an agreement with the Basel and Stockholm Conventions Regional Center for Francophone African countries. In this context, an inventory was drawn up and samples taken from 1,300 processors in the city of Abidjan were tested and a traceability tool was put in place. According to an action plan drawn up in agreement with CI-Energies, at the end of December 2016:

- 67.3 tons of waste are stored at Envipur awaiting dispatch and disposal (6 tons of PCB in 1 barrel and 2 tanks, 1.3 tons from three auxiliary transformers from Kossou),
- 60 tons of dirty gravel from the Riviera transmission station,
- 40 tons of waste with a concentration of over 500 ppm from transformers are to be recovered from the distribution network.

All 107.3 tons of waste will have to be shipped to France at TREDI at the end of April 2017 for final disposal under the supervision of the Ministry of Environment and the Basel and Stockholm Conventions Regional Center.



## SOLID WASTE MANAGEMENT AT SODECI

Under its Environmental Management System (EMS), SODECI has built waste parks with specific receptacles for each kind of waste to encourage selective sorting and reduce environmental impacts.

At the Abidjan Drinking Water Production Directorate, an ISO 14001 certified perimeter, 9 waste parks were built on the factory premises and three contracts were signed with companies to ensure a better functioning of the waste management process.

Registers for the monitoring of the quantities produced and their final destination are continually consulted by and made available to the Local Authorities. Companies approved by the Ivoirian Ministry of the Environment ensure removal and disposal according to channels adapted to their specific types under the control of SODECI, the National Agency for Urban Sanitation (ANASUR) and the Ivoirian Anti-Pollution Center (CIAPOL).

All of these actions are evaluated annually.

Twice a year, SODECI performs a total elimination of papers according to its archiving plan. This means that 6,500 kg of paper in 2015 and around 8,500 kg in 2016 were disposed of by a licensed company.

In a constant search for new channels, SODECI initiates studies in collaboration with external partners for the recovery of incidences (residues of treatment products) into by-products such as paving stones, fertilizers, etc. If the initial encouraging results of the tests are confirmed, SODECI will deploy this new source of recovery.



**151 tonnes**  
tons of paper  
consumed



**4.6 tonnes**  
tons of ink cartridges  
consumed

Finally, with regard to **ordinary industrial waste**, the ERANOVE Group decided to also involve offices and agencies. For this reason, in 2016, it established monitoring of the waste generated by all tertiary activities (paper and printer cartridges consumed).

As a result, Eranove Group's approach to **the circular economy** is based on six principles of action. They aim to encourage the use of technologies that recycle part of the waste from the Group's main activities, develop services that reduce the water and electricity consumption, improve the internal efficiency of the resources consumed, raise awareness among its customers to water and electricity conservation practices, integrate waste treatment into a responsible purchasing process and prevent the risks of pollution and safely confine industrial waste for which there is no treatment solution in the countries in which it operates.

## REDUCTION OF AIR EMISSIONS

Atmospheric pollutants, nitrogen oxides (NOx) and sulfur oxides (SOx) are monitored as part of thermal power generation activity. CIE carries out studies on greenhouse gas emissions and air pollutants with BUREAU VERITAS (NOx, SOx and CO2 monitoring) annually, and CIPREL does so quarterly. The analyses verify compliance with the limits set by prefectural orders, and, in the case of CIPREL, with stricter international standards as well.



## CIPREL - COMBINED CYCLE TURBINE EQUIPMENT AS A NOx TREATMENT METHOD

CIPREL's NOx emissions were in accordance with the thresholds specified in the plant's operating order but under certain operating conditions exceeded certain international standards adopted by the funders of the CIPREL IV project.

In collaboration with its financial partners, CIPREL then studied the best available solution to ensure continuous compliance with the most stringent standards. The preliminary feasibility studies carried out resulted in the identification of two systems to reduce NOx while operating on natural gas (the main fuel of the plant). Dry Low NOx (DLN - with no water injection) technology was preferred to WLN (Wet Low NOx - uses water injection) because it is less demanding in maintenance operations and consumes less water.

The principle of DLN is to distribute each injector from the old system (one injector per combustion chamber) into several injectors per combustion chamber in order to lower the maximum temperatures at the heart of the flame during combustion.

Implementation of DLN requires two months of unavailability for the NGT (Natural Gas Turbine) production groups. For this reason, installation is done gradually and during preventive maintenance. NGT 10 was equipped with DLN in October 2016. NGT 9 was scheduled to be equipped with DLN in March 2017.

The NOx emission results of NGT 10 demonstrate that the objective is achieved with base concentrations of 7.1 ppm and 7.8 ppm at 80% of the load at a maximum threshold of 25 ppm.



**0 mg/Nm<sup>3</sup>**  
 NOx and SOx waste measurements

TABLEAU

### TRENDS IN NOx AND SOx EMISSIONS (mg/Nm<sup>3</sup>)

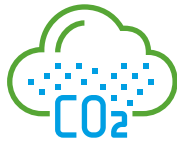
	2015	2016
NOx emissions, electricity production	244	248
SOx emissions, electricity production	0,00	0,00

## MONITORING THE QUALITY OF EFFLUENTS FROM DRINKING WATER PLANTS

On a daily basis, water treatment plants discharge liquid effluents and solid sludges with varying physical and chemical characteristics. These discharges come mainly from purging decanters, washing contact basins, coagulating/flocculating and decanting, washing filters, purging lime saturators and emptying reagent containers.

The pollution parameters for these effluent discharges are mainly: PH, suspended matter (SM), aluminum, Chemical Oxygen Demand (COD) and, to a lesser extent, fluorine. The management of these effluents is carried out in compliance with national laws and within the framework of the ISO 14 001 environmental plans.

# D. FIGHTING CLIMATE CHANGE

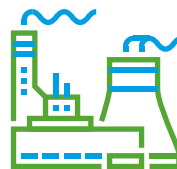


**2,876,731,422**  
kg CO<sub>2e</sub> of GHGs  
related to electricity  
generation

The rhythm of the tropical seasons directly affects the activity of the Eranove Group. Hot seasons increase the consumption of electricity (air conditioners) and drinking water, and in the absence of rainfall, the volume of surface water declines due to the use by hydroelectric plants and water production plants. As a result, climate variability within the same year and climatic variations over several years have a substantial influence on the production and consumption equilibrium of water and electricity.

In essence, therefore, the Group attaches great importance to taking the fight against climate change into account in its activities.

Through mitigation and adaptation to climate change, the group is consolidating its status as a green electrician in Africa.



**488 kgCO<sub>2e</sub> /MWh**  
produced, compared  
to 574 in 2015

- + out of an **interconnected capacity** operated by the Eranove Group of 1,247 MW, 604 MW is of hydroelectric origin;
- + the **projects** under investigation include approximately 950 MW of additional hydroelectric capacity;
- + the CIPREL **combined cycle** allows the recovery of exhaust gases from two combustion turbines of 111 MW each to provide an additional capacity of approximately 120 MW without additional gas consumption. This combined cycle improves the energy efficiency of the plant and avoids the release into the atmosphere of nearly 500,000 tons of CO<sub>2</sub> equivalent per year.

All the companies in the Group monitor their greenhouse gas (GHG) emissions, whether or not they are linked to the production of electricity. CSR indicators measure emissions related to electricity generation (consumption of natural gas, DDO and HVO by thermal power plants and generators) and emissions not related to it (fuel consumption for vehicles and generators for internal use, as well as the electricity consumption of agencies, offices and plants).



**306,789,256**  
kg CO<sub>2e</sub> de GES  
GHGs not related  
to electricity<sup>15</sup>  
generation in 2016

The projects currently being carried out by the Eranove Group contribute to the energy transitions sought by States. They are designed to factor in the impact of climate change (temperature and rainfall) on hydroelectric projects and incorporate mitigation measures during construction phases (such as the weeding of flooded areas before impoundment to avoid fermentation).

Beginning in 2017, significant indirect emissions will be identified according to the Group's perceptions of its activities and services. The publication of an international methodology or best practices of the sector could facilitate the quantification of these indirect emissions.

<sup>15</sup> Greenhouse gases related to the electrical power consumption of head offices, agencies, offices, electricity consumption of water and electricity production facilities, fuel consumption of vehicles and generators.



## PROTECTING AIR QUALITY AROUND LEASED STRUCTURES.

At SODECI, the sanitation services are making efforts to limit inconveniences caused to local populations while seeking to reduce emissions of gaseous pollutants.

In order to limit the emission of gaseous pollutants, sources of odor pollution in particular, SODECI's sanitation facilities are equipped with detectors and measuring devices for gases such as hydrogen sulfide ( $H_2S$ ), methane ( $CH_4$ ), carbon monoxide (CO), phosphine ( $PH_3$ ), and oxygen ( $O_2$ ) at all 60 pumping and pretreatment stations in the city of Abidjan.

The Port-Bouet station is equipped with fixed technology for detection and deodorization using activated carbon.

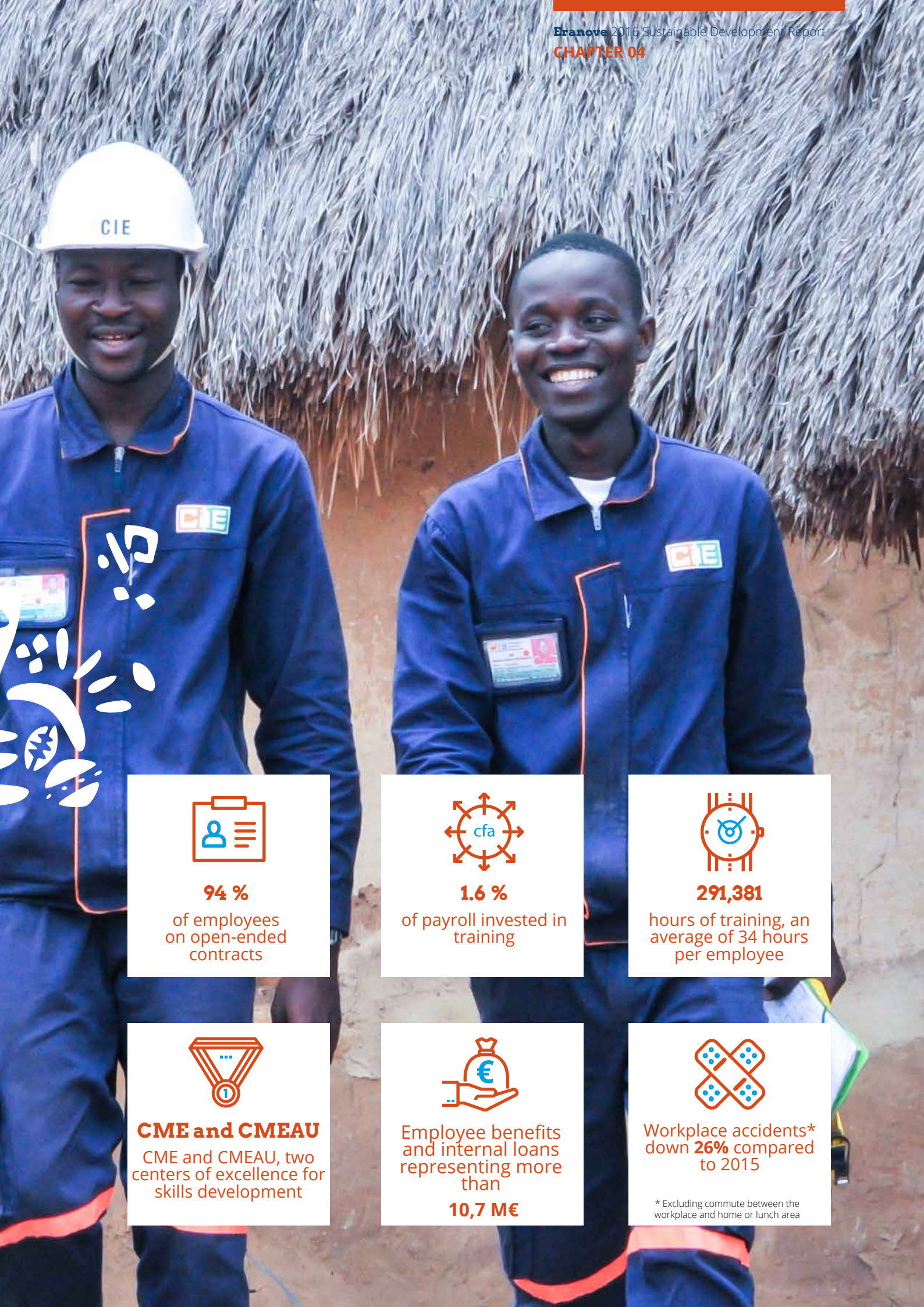




# DEVELOPING HUMAN CAPITAL

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**94 %**  
of employees  
on open-ended  
contracts



**1.6 %**  
of payroll invested in  
training



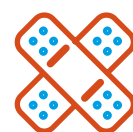
**291,381**  
hours of training, an  
average of 34 hours  
per employee



**CME and CMEAU**  
CME and CMEAU, two  
centers of excellence for  
skills development



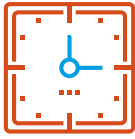
Employee benefits  
and internal loans  
representing more  
than  
**10,7 M€**



Workplace accidents\*  
down **26%** compared  
to 2015

\* Excluding commute between the  
workplace and home or lunch area

# A. PROMOTING **FAIR AND SUSTAINABLE EMPLOYMENT**



**1.25 %**  
absenteeism rate  
in 2016

## RESPECTING NATIONAL AND INTERNATIONAL LAWS

In accordance with the legal provisions applicable in the countries where it operates and the principles of the International Labour Organization relating to child labor, the recruitment procedures of the companies of the Eranove Group include a minimum age limit of 18. Naturally, the use of forced labor is prohibited.

The monitoring of overtime, leave and absenteeism in all companies of the Group complies with national regulations and is careful to respect employee working time.

The organization of work varies according to the nature of the activities (technical operations, customer management, administration) in compliance with the laws of the countries where it takes place. In Côte d'Ivoire and Senegal, working hours are 8 hours per day, or 40 hours per week. In France, it is 35 hours per week. Beyond that, all supervisor and employee/worker hours are considered overtime, in compliance with legal and internal provisions, subject to line-manager approval.

At the same time, the Eranove Group decided to monitor the unplanned absenteeism rate. As this is related to sick leave, unauthorized absences, workplace accidents, and lay-offs, it may reflect significant issue in the Company, with implications for its organizational structure.



**7 expatriés**  
in 2016, i.e. 0.08%  
of the total

## SUPPORTING LOCAL RECRUITMENT AND SUSTAINABLE EMPLOYMENT

The Group encourages the recruitment of skills in the countries where it operates. This proximity to the communities in the territories in which the Group operates deepens its roots in them and improves its local performance.

This performance is illustrated in particular by the low number of expatriates within the Eranove Group (7 expatriates in 2016, or 0.08% of the total workforce).

The Eranove Group has always relied on its human capital and believes that offering a sustainable contract is a factor in attracting, motivating and retaining its employees.

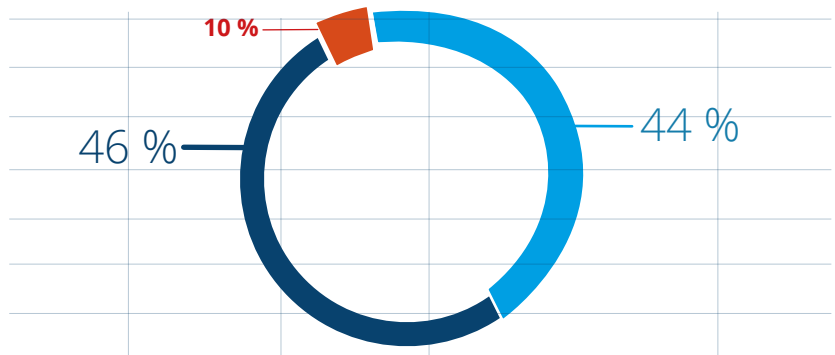
In 2016, 94% of employment contracts were open-ended (41% of new contracts signed).



**94 %**  
of employment  
contracts were  
open-ended (41%  
of new contracts  
signed) in 2016

### 2016 STAFF BREAKDOWN BY SOCIOPROFESSIONAL CATEGORY

- Executives
- Supervisors
- Workers







**+ 6 %**  
more women in  
the workforce since  
2012



**127**  
people with  
disabilities in the  
workforce



The average salary  
increased by **18%**  
between 2015 and  
2016

## FIGHTING DISCRIMINATION

The principle of non-discrimination is one of the fundamental principles articulated in the ethical charters of the Group's companies and described in detail in the recruitment policies.

As far as the **gender balance** is concerned, the low number of women in the workforce (24%), which is typical of the Eranove Group's business sectors, is being re-balanced. The Human Resources Departments of the Group's companies have become aware of the need to rebalance the workforce and, from the outset, improve the number of women in the workforce and average wages for men and women by socio-professional category.

The Group monitors the hiring and integration of people with disabilities. Indicators have been developed in conjunction with in-house physicians and social workers to ensure proper understanding and classification of practices in companies such as CIE, SODECI and SDE. Since 2016, the Group has monitored the number of employees with disabilities before and after hiring.

Employees with disabilities are also offered adapted work stations and functions in order to keep them in the workforce under the best conditions.

## MOTIVATING PERFORMANCE

The Eranove Group strives to offer its employees fair and competitive compensation. Each company has its own compensation policy that takes into account the diversity of geographical locations, qualifications and skills required for its activities.

In all companies, compensation includes a variable component to reflect individual and/or collective performance.

For the main managers, the Eranove Group has set up a compensation and appointments committee. In addition to a competitive fixed compensation that can maintain the loyalty of the country's best talent, performance is rewarded by variable compensation allocated according to the level of achievement of operational objectives. In addition, the main managers of the Eranove Group are Group shareholders and own 6.9% of its capital. The employees of the Eranove Group's main subsidiaries also have the opportunity to take a stake in the capital through mutual funds. Employee share ownership represents a total of 8.9% of the capital of the Eranove Group.

## ENCOURAGING SOCIAL DIALOGUE

The Eranove Group promotes social dialogue within its companies. In addition to compliance with the regulations applicable in each country in which it operates, it is careful to respect the principles of freedom of association and collective bargaining advocated by the International Labour Organization and the principle of equality of opportunity, and it is committed to fighting all forms of discrimination.

Each company has set up its own structures and representative bodies to maintain a high quality of dialogue with trade unions, employee representatives and all employees. They promote frameworks for regular meetings and the search for negotiated agreements, anticipating any crisis that may affect the performance expected from public services.

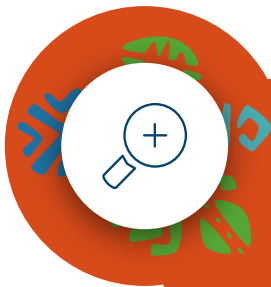
Within CIE and SODECI, discussions with employee representatives are formalized in a regular discussion process known as the «Permanent Dialogue Framework», an important dialogue tool that supports agreed practices and makes it possible to anticipate any likely company crisis. These two companies also have a Company Appeals body, a conciliation body that intervenes when a dismissed employee wishes to contest the conditions and grounds for his or her dismissal with a view to reinstatement.

At CIPREL, a college of delegates representing employees is established, in accordance with the regulations applicable in Côte d'Ivoire. It forms the basis for social dialogue between the senior management and its employees.

Within SDE, two colleges of delegates representing employees are established, in accordance with the legal and regulatory provisions applicable in Senegal. Meetings are held with them monthly. These meetings are the cornerstone of social dialogue between the senior management and employees and an opportunity for employee delegates to express awareness of company issues and present their complaints and suggestions.

This social dialogue translates into the signing of collective agreements with a twofold concern for economic performance and improvement of working conditions for employees. In 2016, a collective agreement was signed with the social partners at SDE concerning wage conditions, advancement, and transport and housing subsidies. In the Group, five historic collective agreements signed and still in force concern health and safety conditions at work. Even though discussions on health and safety provisions are underway, no agreements in this field were signed in 2016.

We are currently considering ways to measure the economic impact of these agreements.



## COLLECTIVE AGREEMENTS RENEGOTIATED EACH YEAR – EXAMPLE AT CIE

In 2016, CIE negotiated new provisions with its social partners that, upon signature, will be transposed into working agreements. They relate to :

- + the revision of the period for renewal of corrective lenses announced by the CEO during the celebration of Labor Day on May 1, 2016 in response to a complaint by trade union officials.
- + merit-based advancement for employees according to the following general terms and conditions :
  - \* merit-based advancement occurs annually;
  - \* the amount allocated is determined by Senior Management;
  - \* the criteria are defined with the Social Partners;
- + reclassification to Level A1 of the Supervisors and Employee Workers hired for two full years and classified as Level A0.

## B. ENSURING **SOCIAL PROTECTION** FOR OUR EMPLOYEES

**B**uilding on Africa’s traditional culture for solidarity, the Eranove Group implemented a social policy at an early stage to federate and create close ties among its employees. This policy hinges on a set of various mechanisms and means to cover solidarity, health, retirement and social financing. All Eranove Group employees benefit from health insurance as soon as they are hired. Personal risk insurance schemes are implemented according to the specifics of each company.



Infirmiry at the CME (Electricity training center) in Bingerville



**4,979,293 €**  
 voluntary  
 expenditures on  
 benefits<sup>16</sup>

### HEALTH INSURANCE

All Eranove Group employees benefit from a health insurance plan upon being hired that covers, in addition to the national plan, their expenses for care in the event of illness and also takes into account their spouse and their children. In addition, at SODECI and CIE, this system is supplemented by health insurance for retirees.

CIE and SODECI have also set up a health solidarity fund to deal with long-term diseases such as AIDS, cancer or kidney failure. In particular, the occupational health division at CIE and SODECI carries out systematic screening of prostate and breast cancer for all employees over 50.

### SUPPLEMENTAL PENSION

In addition to the national pension, executives receive a supplemental pension. Over the last few years at SODECI, the supplemental pension contribution has increased significantly, due to the growth of the SODECI population and especially to awareness-raising campaigns for and continuous encouragement of employees to increase their funding for their future retirement.

<sup>16</sup> Financial contribution by the Company to the funds dedicated to the solidarity, health and retirement of employees (Solidarity Fund, Health Solidarity Fund, Health Insurance for pensioners: ASMAR, etc.)



5,794,259 €  
funds used for  
internal loans<sup>17</sup>

## MUTUAL FUNDS

As part of its social financing, CIPREL, CIE, SODECI and SDE have set up a mutual fund dedicated to the shareholding of employees in the capital of their companies. The mutual fund enables employees to own a stake in the company and allows them to save for their retirement. This saving occurs through a compulsory deduction from the salary of each employee according to their category. Employees who wish to increase their savings can opt for an additional deduction.

## MUTUAL AID AND SOLIDARITY

All of the companies in the Group have set up a solidarity fund that offers a non-repayable financial contribution to their employees for fortunate or unfortunate life events.

For example, SDE, together with its social partners, has put in place social promotion tools based on solidarity among all employees to generate more resources and increase their capacity for action. A mutual aid and solidarity fund supports any employee who experiences a fortunate or unfortunate event according to predefined rules. A Savings-for-Credit fund allows employees to receive a interest-free loan equivalent to 1.5x the amount saved and capped at €3,049 (2,000,000 CFA Francs).

## FAMILY BUDGET

Within CIE and SODECI, the «Family Budget Management» project has been in place since 2012. Through this program, the employer’s objective is to ensure the development of his or her employees throughout their careers, help them to reach retirement with complete serenity and security in their future, and make the household an agent of development and poverty reduction.



CIPREL  
donation to  
children



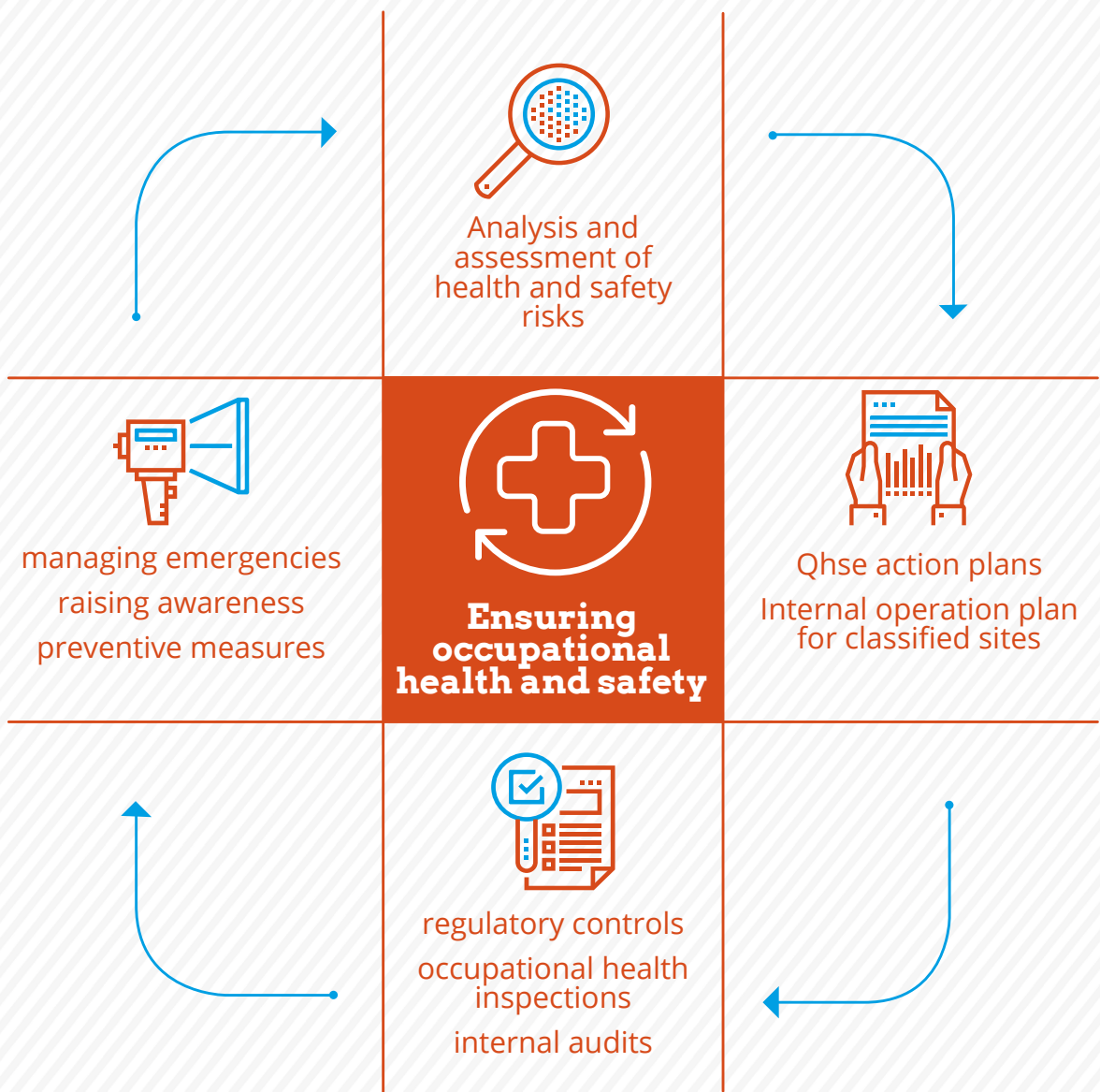
<sup>17</sup> Funds made available to employees to help them undertake personal projects to acquire property or investments to improve their income.

# C. ENSURING OCCUPATIONAL HEALTH AND SAFETY



**143**  
 non-travel  
 workplace  
 accidents  
 (compared with  
 198 in 2015)

The optimization of occupational health and safety conditions is a major focus of the Group's social policy. The measures implemented to enhance the safety of employees in the course of their professional activities are mainly based on the deployment of health and safety procedures according to OHSAS 18001<sup>18</sup>, as well as the preventive measures implemented by the Hygiene, Safety and Working Conditions Committees, Safety and Environment Visits by Management and toolbox talks. The QSE Coordinator and Hygiene, Safety and Working Conditions Committee members ensure that working conditions and the application of safety measures are in line with applicable regulations and the Group's social ambitions. Their recommendations are gradually being formulated within the various departments.





## MOTORCYCLE CLASS: TRAINING CIE MOTORIZED AGENTS TO ENHANCE THEIR SAFETY

Several CIE activities involve motorized agents. Aware of the increase in road accidents involving two-wheeled vehicles, CIE has teamed up with CFAO Motors Côte d'Ivoire to train its agents in road safety.

In 2015 and 2016, specific training courses involved motorcycle driving that included preventive driving and road risk management. These courses are designed around very practical modules based on the findings of a skills analysis to fill any gaps in knowledge identified.

At its launch in 2015, more than 900 officers from 14 regional departments were trained within one year. In 2016, 51 professionalizing training sessions were conducted for 535 trainees and 75 trainees attended initial training.

These courses produced very convincing results because the number of motorcycle road accidents dropped from 54 in 2012 to 16 in 2015 and 7 in 2016. This initial training is now compulsory for all new hires capable of driving a motorcycle and will be gradually extended to all drivers of rolling stock, heavy goods vehicles and motor vehicles.



**21 %**  
down severity rate  
(0.181 days of lost  
time per 1,000  
hours worked),  
from 2015



**26 %**  
down frequency  
rate (7.6 accidents  
with lost time per  
1 million hours  
worked), from 2015



Road safety  
training session



## D. INVESTING IN TRAINING



**1,491,188 €**  
spent on training



**8,636**  
employees trained<sup>19</sup>  
in 2016



**34 hours**  
of training per  
employee in 2016

The Eranove Group aims to propel the development of Africa's skill-set in keeping with the cultural diversity of its companies, employees and countries in which they operate. To this end, it is firmly committed to a strategy to strengthen and develop the skills of its employees to meet its commitments and growth prospects. These actions focus on job-related skills and are rolled out with a view to matching human resources to all key jobs.

To continue to strengthen its human capital, the Group has launched two ambitious projects :

- + the skill-based approach to obtain a perfect match between the skills required for a position and the skills of the employees holding that position;
- + training Centers: a pathway to excellence.

### TWO CENTERS OF EXCELLENCE FOR TRAINING IN WATER AND ELECTRICITY BUSINESS LINES

As a total number of Manager employees who have attended formal training sessions.

Note: One employee trained during «n» sessions is counted «n» times. The «ERANOVE ACADEMY» project is a partnership with the Government of Côte d'Ivoire and aims to develop Electricity and Water Industry Centers of Excellence. First, thanks to a close link with operations, this ambitious training policy will allow high performance and a perfect fit between employees and skills to be achieved in the companies of the Eranove Group. Second, the campuses will have an external dimension and will meet national and regional needs through international partnership.



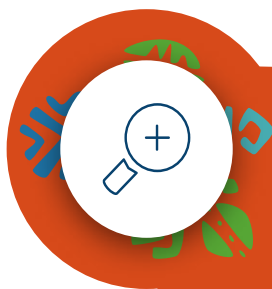
**SODECI** agents  
in training



<sup>19</sup> Total number of employees having attended formal training sessions. Note: the same employee trained during "n" sessions is counted "n" times.

The two centers of excellence will cover all water and electricity business lines, from the reception of customers to purely technical positions. The offers will include Bac +2 and similar diploma courses, theoretical and practical continuing education, in both classroom and e-learning environments.

The electricity division (CME, Electricity Training Center) has already initiated the first structuring actions to strengthen the team: recruitment and training of management and teaching staff; upgrading of buildings; redesigning of courses, including e-learning; launch of diploma courses: BTS (advanced French State degree) in electrotechnics (September 2015), BTS in industrial maintenance (September 2017); gaining international customers: WAPP training<sup>20</sup> for 80 SEEG trainees<sup>21</sup>, 10 NIGELEC students<sup>22</sup> in the BTS, ongoing discussions with local electricity companies); achievement of international standards: the only SERECT-accredited body<sup>23</sup> in sub-Saharan Africa; QSE certification in progress; ASEA – RACEE pole of excellence labeling<sup>24</sup> - in progress.



## THE SERECT-ACCREDITED ELECTRICITY TRAINING CENTER TO ENHANCE SAFETY IN LIVE WORK, A FIRST IN SUB-SAHARAN AFRICA

Since 2015, the CIE has been committed to enhancing the safety of agents working on live networks. To this end, it offers training with the CMEs (Electricity Training Centers) for the prevention of electrical hazards during construction, operation and maintenance of Electrical Power distribution infrastructure.

At the end of 2015, this training received initial approval from the Study, Design and Experimentation Section for the Technical Committee (SERECT) for Voltage/Low Voltage Work (TST BT).

Based on this outcome, CME organized TST BT training at the Taabo hydroelectric power plant site with the objective of enhancing its training catalog while focusing on operations. This site received SERECT accreditation in January 2016.

In 2016: 161 Voltage–Low Voltage Work workshops were conducted and 622 CIE agents were retrained.

In 2017, the CME aims to have its training courses in HTA Voltage Work (up to 75,000 V) accredited and obtain the extension of its SERECT certification thanks to its QSE certification.

It should be emphasized that CME is currently the only vocational training center for the electrical trades in sub-Saharan Africa to have obtained this type of accreditation.

<sup>20</sup> West African Power Pool

<sup>21</sup> Société d'Énergie et d'Eau du Gabon

<sup>22</sup> Société Nigérienne d'Électricité

<sup>23</sup> Study, Design and Experimentation Section for the Technical Committee

<sup>24</sup> African Network of Centers of Excellence in Electricity





Pylon  
maintenance  
agents **CIE**

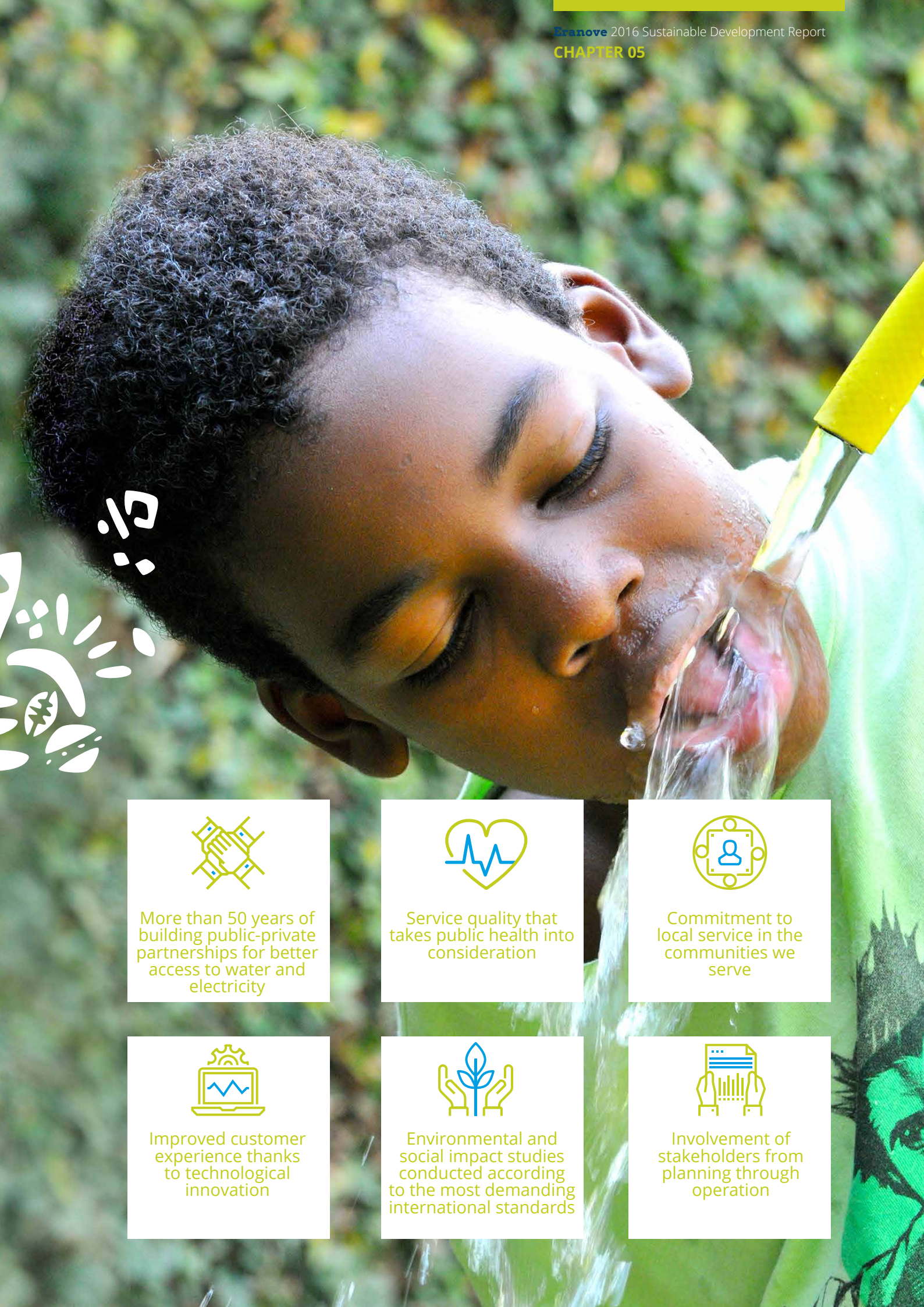




5

# CONTRIBUTING TO LOCAL DEVELOPMENT

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More than 50 years of building public-private partnerships for better access to water and electricity



Service quality that takes public health into consideration



Commitment to local service in the communities we serve



Improved customer experience thanks to technological innovation



Environmental and social impact studies conducted according to the most demanding international standards



Involvement of stakeholders from planning through operation

## A. DEVELOPING **BALANCED PUBLIC-PRIVATE PARTNERSHIPS**

**A** public services manager, pan-African producer of water and electricity, developer of high-speed data transmission capabilities and training solutions in its core businesses, the Eranove Group, through its subsidiaries, has been working in Africa for **over 50 years**. Its history and its development are proof of successful partnerships with national governments, striving to balance service quality, sustainable development goals and assigning to States in their strategic objectives for their industries placed under concession management. This partnering has not been limited just to the public authorities. It incorporates, in various respects, all stakeholders of the Group: employees, technical and financial partners, consumers, suppliers, NGOs and local communities. It is gradually building a shared vision of sustainable development goals to which the Group and its stakeholders can contribute, each in their own way.

## B. RESPONDING TO **PUBLIC HEALTH ISSUES**

**T**he Eranove Group conducts its businesses pursuant to the safety rules for operating infrastructure and providing services. Great care is demanded of each company in the design, construction, operation and maintenance of installations, to prevent any accident that might affect the health and safety not only of its employees and subcontractors but also of its neighboring residents and its consumers.

The water and electricity facilities that the Group owns or manages on behalf of the State may present health risks to consumers and local residents. These risks are governed by strict national and international regulations, whose observance is subject to regular review by Eranove Group staff and the public authorities. Group companies are contractually obliged by the concession-granting authorities to avoid any hazard to public health and safety, whether during the construction or operation phase.

In the water sector, the Group ensures particularly that the production of drinking water and the discharge of wastewater into the natural environment comply at a minimum with the recommendations of the World Health Organization.



## THE SODECI WATER ANALYSIS LABORATORY

This project, sponsored by Eranove and SODECI, consist of creating an ISO 17025 accredited water analysis laboratory (General requirements for the Competence of Testing and Calibration Laboratories) and will conduct on Ivorian territory, according to the best international standards, all of the bacteriological and physico-chemical analyses required for monitoring water quality (raw, potable, waste) for companies in the water sector, agri-food businesses and other manufacturers.

The water analysis laboratory will also be an important educational tool for internal, external and accredited (Baccalaureate plus 2 years) training in water chemistry and environmental chemistry.

## WATER QUALITY CONTROL AT SDE

Every year SDE contracts with the asset management company (SONES - Senegal water corporation) to conduct a number of analyses and a rate of compliance. The SONES monitors these results in the laboratories of the Institut Pasteur and the Laboratory Bio Ndar (for bacteriological analyses) and of the Department hydrology of Cheikh Anta Diop University (for physico-chemical analyses).

In 2016 SONES carried out :

- + 9,599 bacteriological tests with a compliance rate of 97% (exceeding the objectives of 96% on 9,500 tests); and
- + 2,556 physico-chemical tests with a compliance rate, excepting exemptions, of 99.67% (exceeding the objectives of 95% on 2,500 tests).



Water  
quality  
analysis

## C. FOSTERING CLOSER RELATIONSHIPS

### PARTICIPATING IN THE DEVELOPMENT OF HOST COMMUNITIES

Very early on, the Group integrated its host communities into a shared vision of their economic and social development. These regional footholds prompted local development efforts in several villages where the Group added to local capacities. An approach gradually took shape, reflecting a part of its managerial model with regard to local communities: training in participative village management and assistance with social organization, tools to identify sources of wealth, promotion of a family savings culture and sustainable management of village resources.

This foothold is reflected in actions taken for the sake of communities neighboring our sites. These can take a variety of forms but all help maintain constructive relations with its neighbors and to promote local development.



#### **PROMOTION OF LOCAL DEVELOPMENT IN ZIMÉGUHE, A VILLAGE NEAR THE DALOA DRINKING WATER PRODUCTION PLANT**

In 2013, SODECI committed to promoting local development in the village of Ziméguhe, which neighbors the Daloa drinking water production plant.

The objective of the program is to fight poverty by assisting the people of this locality in the undertaking of their own development.

The activities of this program include setting up a local development plan and designing its implementation with the locals, in the form of a document entitled «Local Development Plan».

A local development plan (LDP) was submitted to the village authorities of Ziméguhe in July 2014. A development officer was assigned full-time to the site to lead the action plan and track the indicators of the related measures taken.

Actions underway in 2016 have focused on revenue-creation for women (market gardens, rice, vegetables, etc.), the construction of a shelter and training (literacy).

The village has been provided with a drinking water system, thus enabling the people to enjoy running potable water.



## IN SÉNÉGAL, SDE IMPROVES THE CONDITIONS OF PRISON LIFE

The staff of SDE chose to focus its social action on those most isolated: the prison population and particularly youths. For this, in August 2014 SDE signed a protocol with the prison administration which commits it to :

- + improve the supply of drinking water and monitor the quality of the water of the wells installed;
- + improve the health situation by educating about disease, arranging medical consultations and distributing equipment;
- + contribute to the education (general education, literacy) of detained minors ;
- + participate in the vocational training of juvenile prisoners by running a plumbing/sanitation module;
- + help those leaving to reintegrate into society.

On its side, the Administration agreed to facilitate the access of and preserve the safety of SDE agents and to participate in the selection of the beneficiaries of the actions.

In 2016, Camp Fort B thus was able to receive gifts of materials (beds and freezers), foodstuffs and work on the water system (leak-finding and renovation) to restore a permanent supply.

SDE plans to roll out this plan in the regions in 2017. Each regional management will make a point of deciding its actions on the basis of local vulnerabilities.



**990 030 €**  
committed to  
social actions<sup>25</sup> in  
2016

Each subsidiary, in consultation with the stakeholders, conducts its own social actions for the benefit of neighboring communities in the following areas (examples are not exhaustive) :

- + **Health** : donations of blood, free, funded screening of certain diseases (example cervical cancer of the uterus, AIDS), free health care within our infirmaries (SDE).
- + **Education** : purchase of books and school supplies, complete equipment of a computer room and refurbishing of tables and benches (SDE);
- + the donation of school kits to more than 2,500 students of nursery and primary schools of Vridi Canal, Vridi 3 and Vridi and BAD (CIPREL)
- + **Access to drinking water** : distribution by tank trucks of 24,200 m<sup>3</sup> of drinking water to the railway town of Thiès, when its drilling apparatus suffered a severe failure, or the installation of hydrants (18,371 m<sup>3</sup> of water consumed) at the Cité Thiaroye, a neighborhood devastated by the sea swells (eds)
- + **Sports and culture** : funding of libraries for bordering communities (CIPREL); football match with the Town Hall agents of Port Bouët (CIPREL); organization of an "Enchanted Christmas" for the children of social centers and orphanages in an amusement park of Abidjan (CIE).

<sup>25</sup> Sums set aside and invested in support, sponsorship and partnership in the areas of sport, culture, health and education (including extraordinary contributions to employees).



## IN MALI, THE HYDROELECTRIC POWER PLANT PROJECT HAS INVOLVED THE STAKEHOLDERS' RIGHT FROM THE STUDY PHASE

The signing of a concession agreement with the State of Mali in June 2015 made it possible to start the pre-construction studies of the hydroelectric power station of Kénié, on the Niger River, thirty kilometers to the east of Bamako. Villages will be affected directly or indirectly by the construction on both sides of the river.

Kénié Renewable Energy (Ker) has assigned the NGO HUDDA to the impacted populations to ensure that this project of national interest is also a project of local development.

The HUDDA team came onsite in July 2016 with three major objectives:

- + to be available to all stakeholders and provide them with clear, reliable and definitive information about the planned hydroelectric power plant;
- + to be a facilitator in the relocation by strengthening dialog and collaboration between the parties involved: local communities, landowners, administrative authorities and the steering committee;
- + to highlight local economic and human potential in an environmentally friendly and participative way by supporting individual and group projects that will lead to sustainable development.

All stakeholders — local administrators, associations, fishermen, livestock keepers, rice growers, etc. — were informed and listened to in order to examine together how to turn the impacts of the construction into opportunities for inclusive development. Kénié Renewable Energy and its NGO partners in social services will have a long term presence in the impacted communities to help them accomplish their plans, making sure to keep the emancipation of women and young people central to the process.

## PLACING THE CUSTOMER AT THE CORE OF THE ORGANIZATIONS

Product quality alone is not sufficient to satisfy the domestic customers, businesses, governments and municipalities served by the Group. It must be accompanied by an offering of services that meet, and anticipate customers' needs.

Each company of the Group has therefore developed specific actions to raise the satisfaction of final consumers: the introduction of payment by mobile phone, opening of «customer relationship centers», redecorating and refurbishing the agencies open to the general public, pilot projects in remote billing and smart meters, improved handling of waiting lines, etc.

Since 2015 the Eranove Group has unified its expertise in customer relations in a marketing group. The mission of this group is to see that all utility companies become customer-oriented companies.





At **CIE** and **SODECI** today, nearly **45%** of customers use their mobile phone to pay their invoices

## Electronic payment

Since 2011, CIE and SODECI have offered their customers new ways to pay their bill (NMPF), via mobile phone or partner banking networks.

## Monitoring customer satisfaction

To measure customer satisfaction, SDE, SODECI and CIE annually perform quantitative studies of their customers, using specialized consulting firms.

In this way they track the macro indices of customer satisfaction and identify the main causes of dissatisfaction.

In addition, "live" studies are carried out to measure the impact of sales and marketing efforts.

## CIE - A department dedicated to industrial customers

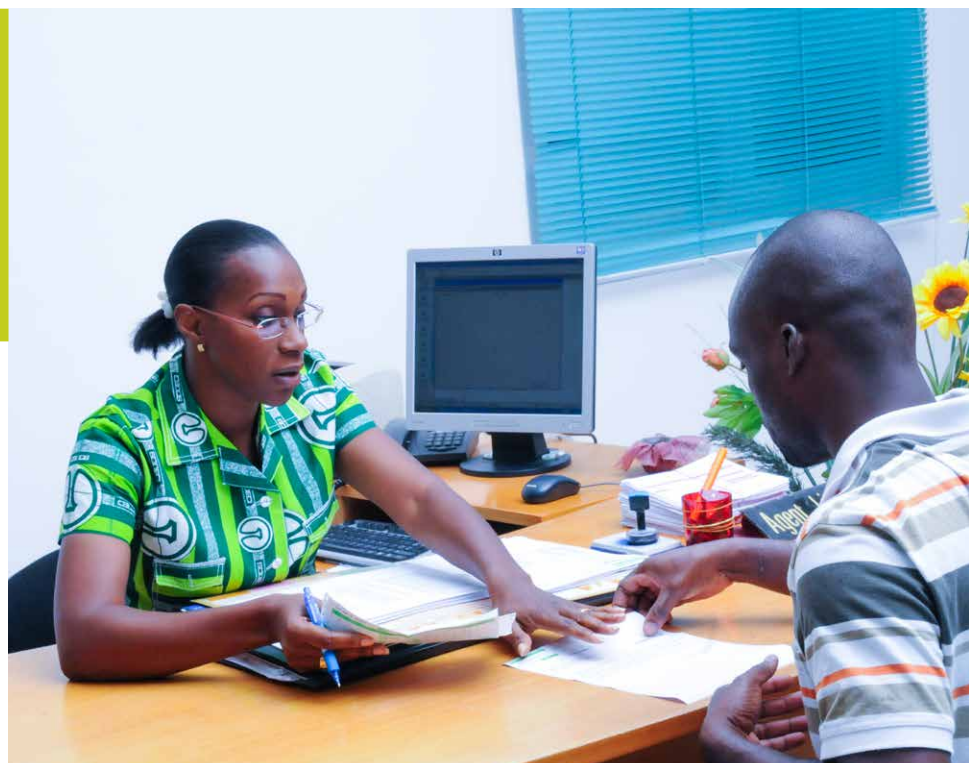
Electricity is usually a major input in manufacturers' production process. Accordingly, CIE has decided to dedicate a specific Industrial Customers Department: French acronym DORCI.

DORCI was created to provide personalized oversight and comprehensive support for the concerns of industrial customers. Differentiated, targeted solutions must be provided that deal with the concerns of the different categories of customer.

Particular features of DORCI's mission are responsive processing of applications, assistance to manufactures with their connection/subscription plans, and training and technical assistance and specific advice. The DORCI strives to promote energy efficiency among its customers, and to guide them in their choice of pricing in order to achieve savings.



Customer  
branch  
**SODECI**



## SODECI Customer Relationship Center

To move closer to its clients, SODECI in 2007 created a Customer Relationship Center (CRC), which can be called at the abbreviated number 175 and which operates 24/7.

In 2016, the SODECI CRC received more than 70,000 calls, and registered more than 59,300 inquiries, of which:

- + 66% concerned water service;
- + 19% concerned commercial offerings;
- + 15% concerned sanitation services.

The overall rate of processing of requests was 98% (the remaining 2% requiring infrastructure work falling to the State).

Pursuing its desire that the customer take an active part in its relationship with its supplier of drinking water and sanitation, SODECI in 2016 built on the site of the Riviéra-Palmeraie, a building housing its new Center for the Integrated Management of Operations.

This center, which will be put into service in 2017, will bring together :

- + a state-of-the-art customer relations center;
- + a work scheduling center;
- + a remote-readings center.

It will make it possible to answer customer complaints more accurately and quickly, to supervise actions taken in the field and to anticipate technical malfunctions..

## SDE - A model agency being tested

The modernization of SDE agencies continues with the upgrade of customer reception areas (air conditioning, replacement of visitors' chairs and of the system for managing waiting lines).

SDE is currently testing a new agency model that better meets the expectations of its customers (signage, confidentiality of operations, waiting time and functionalities) and puts employees in a work setting that encourages efficiency. This agency model pilot project integrates such innovative products as :

- + free wifi for all customers who appear at the agency;
- + an invoice payment terminal at which, besides making payments, one can make complaints and in-quiries, which are sent immediately to the various Customer Representatives;
- + an electronic system for managing waiting lines which also provides customers with information;
- + video surveillance to regulate the flow of customers during the busiest hours and check the availability of agents in the front office.

## D. PROMOTING OUR CSR **APPROACH** **AMONG OUR PARTNERS**

Following the issues identified in the ISO 26000 program and the ethics program, the Group's companies realized the role they could play as specifiers, particularly with respect to their subcontractors and suppliers, encouraging them to observe fundamental ethical principles.

This responsible purchasing policy was expanded in 2016. Though binding environmental and social criteria were already systematically built into the requests for bids on new projects such as CIPREL IV, they are increasingly seen in contractual commitments when services or equipment are procured.

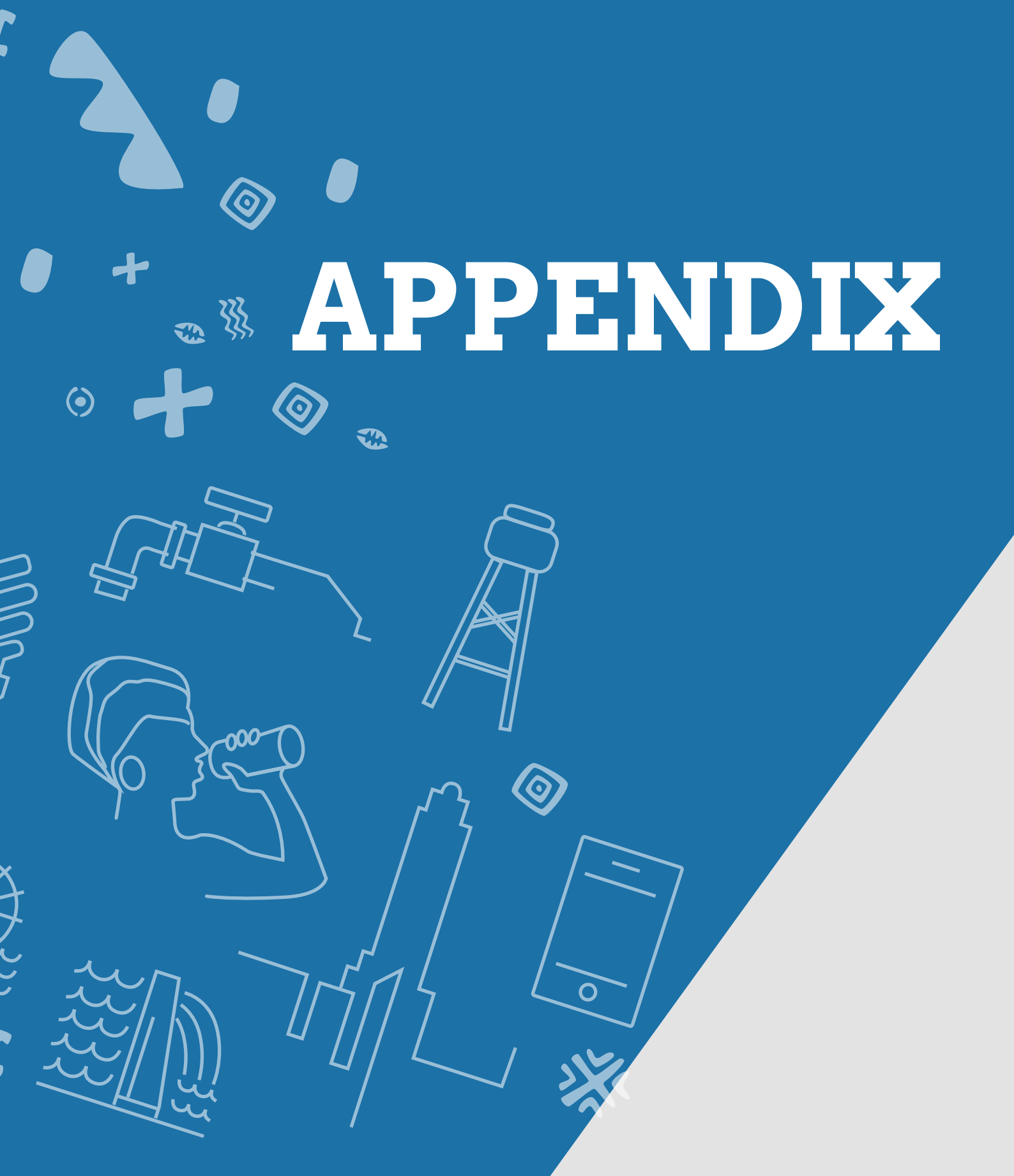
At **SODECI** these environmentally responsible principles in purchasing have been made a part of the 2015-2019 policy and strategy. This effort was begun by communicating the sustainability principles to the purchasing and logistics managers, incorporating the "5 Rs" as criteria in the procurement of goods and services: - Reduce energy consumption - Reduce the production of waste - Recycle to the fullest extent - Repair to lengthen the life of the product; - Re-use.

The purchasing managers are involved in this approach and have been trained in the notion of responsible purchasing. The first actions have taken the form of purchases of equipment not contributing to the destruction of the ozone layer, including "split" air conditioners R410a gas, and taking environmental safety standards into account when choosing suppliers. For 2017, it is planned to put the emphasis on raising the awareness of suppliers, with a particular focus on personal protective equipment.

At **CIE**, the main suppliers were brought into the ethics initiative from the very start, in 2015 during a meeting where the Code of Ethics was presented to them. An anti-corruption clause was then introduced into the various specification sheets, concerning the respect of ethics in commercial relations, as a token of credibility and long-term commitment in contractual relations. The year 2017 will mark the launch of the anti-corruption program and the fight against conflicts of interest. It is in this perspective that several preparatory actions have been undertaken, such as the mapping of ethical risks and finalization of the document which will be used for the awareness-raising campaign intended for all stakeholders.

At **SDE**, CSR clauses are included in contracts for general services (cleaning, green space maintenance, guarding). In 2017 the plan is to write a section on ethics on the back of work orders.

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REPORT OF THE INDEPENDENT THIRD PARTY ORGANIZATION

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# APPENDIX I

## GRENELLE II CROSS-REFERENCE TABLE

GRENELLE 2 INFORMATION	SECTION IN 2016 REPORT
<b>SOCIAL DATA</b>	
• <b>Employment</b>	
Total workforce and breakdown of employees by sex, age and geographical area	4.A.2
New hires and dismissals	4.A.2
Compensation and pay trends	4.A
• <b>Work structure</b>	
Organization of working hours	4.A.1
Absenteeism*	4.A.1
• <b>Employee relations</b>	
Organization of social dialog, and specifically employee information, consultation and negotiation procedures	4.A.5
Overview of collective agreements	4.A.5
• <b>Health and safety</b>	
Occupational health and safety conditions	4.C
Overview of occupational health and safety agreements signed with trade unions or employee representatives	4.C
Workplace accidents (particularly frequency and severity) and occupational illnesses*	4.C
• <b>Training</b>	
Training policies	4.D
Total hours of training	4.D
• <b>Equal treatment</b>	
Measures implemented to promote gender equality	4.A.3
Measures implemented to promote the employment and integration of people with disabilities	4.A.3
Anti-discrimination policy	4.A.3
• <b>Promotion of and compliance with the terms and conditions of the ILO basic conventions on:*</b>	
Respect of the freedom of association and the right to collective bargaining	4.A.5
Eliminating employment-related and professional discrimination	4.A.3
Eliminating forced or mandatory labor	4.A.1
The effective abolition of child labor	4.A.1
<b>ENVIRONMENTAL DATA</b>	
• <b>Overall environmental policy</b>	
Structuring the Company in order to take environmental issues into consideration, and where necessary, implement assessment and certification processes	1.D / 3.A / 3.C
Employee environmental protection training and information measures	3.A / 3.C
Dedicated resources for preventing environmental risks and pollution	3.C
• <b>Pollution and waste management</b>	

Measures to prevent, reduce or redress air, water and soil emissions and effluents which have an adverse effect on the environment		<b>3.A / 3.C / 3.D</b>
Dealing with noise pollution and all other forms of pollution which are specific to an activity		<b>3.C</b>
<b>• Circular economy</b>		
- Waste prevention and management	Waste prevention, recycling and re-use measures, and other means of recovering or eliminating waste	<b>3.C</b>
	Measures to prevent food waste	<b>3.A</b>
- Sustainable use of resources	Water consumption and water supply according to local constraints	<b>2.A./3.A./3.C</b>
	Consumption of raw materials and measures taken to improve the effectiveness of their use	<b>3.A / 3.B / 3.D</b>
	Energy consumption, and measures taken to improve energy efficiency and use of renewable energy	<b>2.A / 3.A / 3.B / 3.D</b>
	Land use*	<b>3.C</b>
<b>• Climate change</b>		
Significant levels of greenhouse gas emissions are generated by the Company's activities, and particularly through the use of the goods and services that it provides		<b>3.C / 3.D</b>
<b>• Protection of biodiversity</b>		
Measures taken to preserve or develop biodiversity		<b>2.B</b>
<b>INFORMATION ON SOCIETAL COMMITMENTS TO SUSTAINABLE DEVELOPMENT</b>		
<b>• Regional, economic and social impacts of the Company's business activity</b>		
In terms of employment and regional development		<b>4.A.2 / 5.C</b>
On local residents		<b>2.C / 5.C</b>
<b>• Relationships established with people or organizations affected by the Company's business activity, including integration charities, educational institutions, environmental protection associations, consumer associations and local residents</b>		
Conditions for dialog with these people or organizations		<b>4.A.5</b>
Partnership and sponsorship actions		<b>5.C</b>
<b>• Sub-contracting and suppliers</b>		
Consideration of the social and environmental issues in the purchasing policy		<b>5.D</b>
Importance of sub-contracting and the Company's consideration of its responsibility as an employer and environmental responsibility in supplier and sub-contractor relationships*		<b>5.D</b>
<b>• Fair commercial practices</b>		
Anti-corruption measures*		<b>1.C</b>
Measures taken to support consumer health and safety*		<b>5.B</b>
<b>• Other actions taken to promote human rights*</b>		
Other actions taken to promote human rights		<b>1.C</b>

# APPENDIX II

## GRI CROSS-REFERENCE TABLE

\* Global Reporting Initiative IV

GENERAL INFORMATION		SECTION IN 2016 REPORT
<b>STRATÉGIE ET ANALYSE</b>		
G4-1	Statement from the organization's chief decision-maker	Editorial
G4-2	Description of main impacts, risks and opportunities	Editorial /1/2/3/4/5
<b>ORGANIZATION PROFILE</b>		
G4-3	Organization name	Editorial
G4-4	Main brands, products and services	Editorial
G4-5	Registered office of the organization	Editorial
G4-6	Location of the organization	Editorial
G4-7	Ownership and legal status of the organization	1
G4-8	Geographical distribution of the organization's market	Editorial
G4-9	Size of the organization	Editorial
G4-10	Total number by employment contract and by gender	4.A
G4-11	Percentage of employees covered by a collective agreement	4.A
G4-13	Changes in the organization during the reporting period	2.B / 3.B / 4.A
G4-14	Methodology, processes and precautionary principle within the organization	3 / 4.C / 5.B
G4-15	Codes, policies, and other initiatives which the organization has adopted	1.C / 3.C
<b>IDENTIFIED RELEVANT ASPECTS AND SCOPES</b>		
G4-18	Reporting principle and system, content process and aspects scope	Appendix 3
G4-19	Relevant aspects identified in the content process	1/2/3/4/5/ Appendix 3
G4-20	Scope of relevant aspects within the organization	1/2/3/4/5/ Appendix 3
G4-21	Scope of relevant aspects outside the organization	5
<b>INVOLVEMENT OF STAKEHOLDERS</b>		
G4-24	List of stakeholders in dialog with the organization	Editorial/5.A.
G4-25	Stakeholder identification and selection criteria	Editorial
G4-26	Method for the involvement of stakeholders, and frequency of dialog	4.A/5.C
G4-27	Key stakeholder topics and concerns as regards dialog	Editorial
<b>REPORT PROFILE</b>		
G4-28	Reporting period	Editorial/Appendix 3
G4-29	Publication date of most recent report	Appendix 3
G4-30	Reporting cycle	Editorial/1.D
G4-31	Reporting key focus area	Masthead
G4-33	External audit	Appendix/Mazart
<b>GOVERNANCE</b>		
<b>GOVERNANCE STRUCTURE AND COMPOSITION</b>		
G4-34	The organization's governance structure	1.A
G4-35	Delegation of powers process	1.A
G4-36	Appointment of economic, environment and social managers and their line managers	1.C/1.D
G4-38	Set out the composition of the higher governance body and its committees, in accordance with the following breakdown	1.A./1.C



G4-42	Set out the roles of the higher governance body and executive managers in relation to the organization's development, approval, mission updates, mission values or statements, strategies, policies and goals as regards economic, environmental and social impacts	1.A
<b>HIGHER GOVERNANCE BODY'S RISK MANAGEMENT ROLE</b>		
G4-45	Set out the role of the higher governance body as regards identifying and managing economic, environmental and social impacts, risks and opportunities	1.A
G4-46	Set out the role of the higher governance body as regards examining the effectiveness of the organization's risk management processes in economic, environmental and social areas	1.A
G4-47	Indicate how frequently the higher governance body examines the economic, environmental and social impacts, risks and opportunities	1.A
<b>ROLE OF THE HIGHER GOVERNANCE BODY IN SUSTAINABLE DEVELOPMENT REPORTING</b>		
G4-48	The most senior manager in charge of examining and officially approving the sustainable development report	1.A
<b>COMPENSATION AND INCENTIVES</b>		
G4-52	Compensation calculation process	1.A / 4.A
<b>ETHICS AND INTEGRITY</b>		
G4-56	Description of the organization's values, principles, standards and rules in relation to conduct	1.C
G4-57	Procedures for obtaining advice on ethical and law-abiding conduct	1.C
<b>SPECIFIC INFORMATION</b>		
<b>Advice on the description of the managerial approach</b>		
G4DMA	Relevance of the aspect and the impacts which justify it	Editorial
G4DMA	Methodology for managing the aspect and its impacts	Editorial
<b>CATEGORY: ECONOMICS</b>		
<b>ASPECT: ECONOMIC PERFORMANCE</b>		
G4-EC1	Direct economic value created and distributed	2.A / 2.B / 2.C / 2.D / 4.A / 4.B / 5.C
G4-EC2	Climate change-related risks and opportunities likely to lead to major changes in business activities, income or expenditure:	3.D
G4-EC3	Defined benefit pension scheme coverage	4.B
<b>ASPECT: MARKET PRESENCE</b>		
G4-EC5	Ratios for basic starting salary by gender in comparison with the local minimum wage	4.A
<b>ASPECT: INDIRECT ECONOMIC IMPACTS</b>		
G4-EC7	Development and impact of investment in infrastructure and service support	2.A/2.B/2.C/2.D
G4-EC8	Substantial indirect economic impacts and the scale of such impacts	2.A/2.B/2.C/2.D
<b>CATEGORY: ENVIRONMENT</b>		
<b>ASPECT: MATERIALS</b>		
G4-EN1	Consumption of materials in weight and volume	3.A/3.B/3.C/3.D
<b>ASPECT: ENERGY</b>		
G4-EN6	Reducing energy consumption	3.A/3.B/3.C/3.D
G4-EN7	Reducing the energy needs of products and services	3.A/3.B/3.C/3.D
<b>ASPECT: WATER</b>		
G4-EN8	Total volume of water taken by source	3.A/3.B/3.C/3.D
<b>ASPECT: EMISSIONS</b>		
G4-EN19	Reduction of GHG emissions	3.D

<b>ASPECT : EFFLUENTS AND WASTE</b>		
G4-EN22	Total water effluents by type and destination	<b>3.C / 3.D</b>
G4-EN23	Total waste weight by type and processing method	<b>3.C / 3.D</b>
<b>CATEGORY : SOCIAL</b>		
<b>SUB-CATEGORY: EMPLOYMENT AND DECENT WORK PRACTICES</b>		
<b>ASPECT : EMPLOYMENT</b>		
G4-LA1	Total number of new hires, and staff turnover rate by age, gender and geographical area	<b>4.A</b>
G4-LA2	Social benefits offered to employees on the main operating sites	<b>4.B</b>
<b>ASPECT : EMPLOYER/EMPLOYEE RELATIONS</b>		
G4-LA4	Minimum notice period in the event of an operational change included in an agreement	<b>4.A</b>
<b>ASPECT : OCCUPATIONAL HEALTH AND SAFETY</b>		
G5-LA5	Percentage of the total workforce represented in the occupational health and safety joint committees	<b>4.C</b>
G6-LA6	Rate and type of workplace accidents, occupational illnesses, absenteeism, lost work days by geographical area and by gender	<b>4.C</b>
G7-LA7	Employees who are directly and frequently exposed to specific work-related illnesses as part of their jobs	<b>4.C</b>
<b>ASPECT: TRAINING AND EDUCATION</b>		
G4-LA9	Average number of employee training hours during the reporting period	<b>4.D</b>
G4-LA10	Employee training and skills development schemes	<b>4.D</b>
<b>ASPECT: DIVERSITY AND EQUAL OPPORTUNITIES</b>		
G4LA12	Breakdown of employees by professional group, age and gender	<b>4.A</b>
<b>ASPECT: EQUAL PAY FOR WOMEN AND MEN</b>		
G4LA13	Ratio of basic salary and comparison between women's and men's salaries for each category	<b>4.A</b>
<b>SUB-CATEGORY: HUMAN RIGHTS</b>		
<b>ASPECT: ANTI-DISCRIMINATION MEASURES</b>		
G4-HR3	Total number of discriminatory incidents, and corrective actions implemented	<b>4.A</b>
<b>ASPECT: ASSESSMENT OF SUPPLIER COMPLIANCE WITH HUMAN RIGHTS REGULATIONS</b>		
G4-R10	Percentage of new suppliers checked against human rights-related criteria	<b>5.D</b>
G4-R11	Negative impacts on human rights in the supply chain and measures taken	<b>5.D</b>
<b>SUB-CATEGORY: SOCIETY</b>		
<b>ASPECT: LOCAL COMMUNITIES</b>		
G4-SO1	Percentage of sites having implemented schemes to involve local communities, impact assessments and development programs	<b>5.C</b>
<b>ASPECT: ANTI-CORRUPTION MEASURES</b>		
G4-SO3	Communication and training on anti-corruption policies and procedures	<b>1.C</b>
<b>SUB-CATEGORY: RESPONSIBILITY FOR PRODUCTS</b>		
<b>ASPECT: CONSUMER HEALTH AND SAFETY</b>		
G4-PR1	Percentage of product and service categories for which health impacts are assessed with the aim of making improvements	<b>5.B.</b>
<b>ASPECT: LABELING OF PRODUCTS AND SERVICES</b>		
G4-PR3	Information on products and services required by organizational procedures	<b>5.B.</b>

# APPENDIX III

## ODD CROSS-REFERENCE TABLE\*

\* Sustainable Development Goals

SDG N°	OBJECTIFS ET CIBLES	SECTION IN 2016 REPORT
<b>SDG N°1</b>	<b>END POVERTY IN ALL ITS FORMS EVERYWHERE</b>	
1.1	By 2030, eradicate extreme poverty for all people across the globe, currently measured as people living on less than \$1.25 a day	<b>1.C/2.C/4.A.2/ 4.A.4/4.B/5.C.1</b>
1.2	"By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions"	<b>1.C/2.C/4.A.2/ 4.A.4/4.B/5.C.1</b>
1.3	"Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable"	<b>4.B</b>
1.4	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	<b>2.C / 2.D/ 5.C.1</b>
1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	<b>5.C.1</b>
1.a	"Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programs and policies to end poverty in all its dimensions"	<b>2.C / 5.C.1</b>
1.b	Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions	<b>4.A.1/4A2/4A3 /4A4</b>
<b>SDG NO. 3</b>	<b>ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES</b>	
3.1	"By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births"	<b>2.C / 4.B / 5.C.1</b>
3.2	"By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births"	<b>2.C / 4.B / 5.C.1</b>
3.3	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	<b>4.B / 5.C.1</b>
3.6	"By 2020, halve the number of global deaths and injuries from road traffic accidents"	<b>4.C</b>
3.8	"Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all"	<b>4.B / 5.C.1</b>
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	<b>3.C</b>
3.d	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	<b>4.B / 4.C / 5.B / 5.C.1</b>
<b>SDG NO. 4</b>	<b>ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL</b>	
4.1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	<b>5.C.1</b>
4.2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	<b>5.C.1</b>
4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	<b>4.D</b>

4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	<b>4.D</b>
4.5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	<b>5.C.1 / 4.D</b>
4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy	<b>5.C.1</b>
4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	<b>3.B / 4.D</b>
<b>SDG NO. 5</b>	<b>ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS</b>	
5.1	End all forms of discrimination against all women and girls everywhere	<b>4.A.3 / 4.A.5</b>
5.5	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	<b>4.A.3 / 4.A.5</b>
5.a	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	<b>4.A.3 / 4.A.5</b>
5.c	Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	<b>4.A.3 / 4.A.5</b>
<b>SDG NO. 6</b>	<b>ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL</b>	
6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	<b>Editorial / 2.C / 5.C.1</b>
6.2	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	<b>2.C / 3.C / 3.D</b>
6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	<b>2.C / 3.C / 3.D</b>
6.4	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	<b>2.D / 3.A / 3.C</b>
6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	<b>3.C</b>
6.b	Support and strengthen the participation of local communities in improving water and sanitation management	<b>3.C</b>
<b>SDG NO. 7</b>	<b>ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL</b>	
7.1	By 2030, ensure universal access to affordable, reliable and modern energy services	<b>Editorial / 2.C</b>
7.2	By 2030, increase substantially the share of renewable energy in the global energy mix	<b>2.D</b>
7.3	By 2030, double the global rate of improvement in energy efficiency	<b>3.A / 3.B / 3.D</b>
7.a	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	<b>Editorial / 2.C</b>

7.b	By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programs of support	2B/2C
<b>SDG NO. 8</b>	<b>PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL</b>	
8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	4.A.2 / 4.A.3 / 4.A.4 / 4.B
8.2	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors	2.C / 2.D
8.3	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	4.A.2 / 4.A.3
8.4	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programs on Sustainable Consumption and Production, with developed countries taking the lead	Editorial / 2.C / 3.A / 3.B / 3.C / 3.D
8.5	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	4.A.2 / 4.A.3 / 4.A.4
8.6	By 2020, substantially reduce the proportion of youth not in employment, education or training	4.D
8.7	Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labor, including recruitment and use of child soldiers, and by 2025 end child labor in all its forms	4.A.1
8.8	Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	4.B / 4.C
<b>SDG NO. 9</b>	<b>"BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION"</b>	
9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	2.A / 2.C
9.2	Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	4.A.2
9.4	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	1.D.1 / 2.A / 2.B / 3.C
9.a	Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States	5.C.1
<b>SDG NO. 11</b>	<b>MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE</b>	
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	2.C
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	2.C
11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Editorial / 1.B

11.5	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	2.C
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	2.B / 3.C / 3.D
11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	2.B
<b>SDG NO. 12</b>	<b>ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS</b>	
12.2	By 2030, achieve the sustainable management and efficient use of natural resources	3.A / 3.B
12.4	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	3.A / 3.C / 3.D
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	3.C
12.6	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	5.D
12.a	Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	2.A / 2.B / 3.A / 3.B / 3.C / 3.D
<b>SDG NO. 13</b>	<b>TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS</b>	
13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	3.D
<b>SDG NO. 14</b>	<b>CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT</b>	
14.1	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	3.C
14.3	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	2.B / 3.A / 3.C / 3.D
<b>SDG NO. 15</b>	<b>"PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS"</b>	
15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	3.C
<b>SDG NO. 17</b>	<b>"STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT"</b>	
17.6	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism	2.D
17.7	Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed	2.B
17.17	Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	Editorial / 5.A / 5.C.1

# ANNEXE IV

## NOTE ON METHODOLOGY

### 1. OVERVIEW

French Law no 2010-788 promulgated on July 12, 2010 concerning the national commitment to the environment and known as «Grenelle II» called for greater transparency and more extra-financial reporting, which until then had been required by the NRE Law of 2001.

The law was supplemented by two implementing decrees: the Decree of April 24, 2012, which defines the thresholds for applying the law and lists the disclosures to be made, and the decree of May 13, 2013 which prescribes the manner in which an independent third-party organization must perform its verification.

Although not directly concerned by the Act, the Eranove Group has decided voluntarily to comply with these decrees since fiscal year 2015.

The indicators used were selected both to meet the requirements of Article R. 225-105-1 of the so-called Grenelle II law in the French Commercial Code and to represent the Group's business activities.

In addition to the indicators that quantify Eranove's impact on the environment and its stakeholders, this report presents the strategy, commitments, accomplishments and plans of the Eranove Group in terms of sustainable development for 2016.

Moreover, the Eranove Group has tried in its report to apply the principles of the Global Reporting Initiative (GRI) with respect to producing sustainable development reports, specifically: thoroughness, clarity, timeliness, balance and accuracy.

This second extra-financial report is the result of the Eranove Group's best efforts to implement throughout the Group's scope of consolidation a reporting system that satisfies Grenelle II.

Eranove is engaged in a multi-year process of ongoing progress and improvement in order to enhance its internal reporting system, make its data reliable and expand the number of actions and indicators it tracks to give the most accurate picture possible of its footprint.

### 2. METHODOLOGICAL ISSUES IN THE REPORTING SYSTEM: PROCEDURE AND TOOLS OF THE REPORTING SYSTEM

Given the increasing importance of sustainable development in the Eranove Group, in order to broaden reporting to all sustainability topics and improve the monitoring of the sustainable development of the companies, in November 2014 the senior management of Eranove Group began a project for extra-financial reporting.

In this regard, a computerized system for the collection and consolidation of social, environmental and societal data was put in place using software known as OPERA, which has been selected and deployed. The sustainable development indicators have been integrated into this configured software, which includes historical data from 2012 to 2016.

The information contained in the software has become the points of reference used by the Group. For each indicator this includes: a unique identifying number, a name, a definition, a calculation methodology or formula, a unit of measure, the reporting period, the scope covered, sources and persons responsible, comments and yearly columns for reporting the data.

### 3. CHOICE OF INDICATORS

The indicators used were first selected to meet the requirements of Article R. 225-105-1 of the so-called Grenelle II law in the French Commercial Code.

The list is added to each year by in-house contributors to give a better picture of the major impacts of the operating companies and the special factors at each company.

#### • DEFINITION OF GROUP-WIDE ENVIRONMENTAL AND SOCIAL INDICATORS

A first series of indicator definitions was proposed by Eranove in keeping with a set of external benchmarks. These definitions were reviewed by each subsidiary to ensure that reporting the initial definition of an indicator was doable and pertinent.

A number of working sessions at each subsidiary and between each subsidiary and the parent company, particularly in the sustainable development management group, ensured the consistency of the indicators across the subsidiaries and their accurate reflection of the realities of each business line. Definitions were then adjusted and the scopes refined.

For reasons of stability, if a change in the definition of the indicator made in 2016 changes the value of the 2015 indicator, it has been decided not to carry forward the calculation of the 2015 indicator, except as otherwise provided in the commentary.

## • CHANGES IN INDICATORS FROM 2015 TO 2016

The indicators adopted for purposes of sustainable development reporting experienced considerable change from 2015 (when the first indicators were worked out) until 2016. This change consisted of the inclusion of new indicators and the reformulation and removal of some of indicators.

### With regard to the social indicators (Human Resources)

The insertion of a heading «Indicator Definition» to give a consistent understanding of the indicators chosen among the companies.

The insertion of six (6) indicators in the sheaf of social indicators related to the «**distribution of the company workforce by country**»:

- total workforce France;
- total workforce Côte d'Ivoire;
- total workforce Senegal;
- total workforce Mali;
- total workforce RD Congo;
- total workforce Saudi Arabia.

The reformulation of the indicators referring to «**The company workforce suffering from disability**», made with company doctors and social workers, has proved to be necessary for a better understanding and a classification suited to the practices in companies such as CIE, SODECI and SDE. This reformulation resulted in the following three (3) indicators:

- workforce with disability at hiring;
- workforce with total disability after hiring;
- workforce with partial disability after hiring.

The reformulation and the insertion of indicators as to «**gross annual wages**» by occupational category and by category for females. These are:

- gross annual pay, Managers;
- gross annual pay, Supervisors;
- gross annual pay, Workers;
- gross annual pay, Female Managers;
- gross annual pay, Female Supervisors;
- gross annual pay, Female workers.

The refinement of the indicators as to «**recruitment**» and «**workforce leaving the Company**» has prompted the following indicators:

- number hired on fixed-term contracts (CDD);
- number hired on permanent contracts (CDI);
- number hired of young people between 18 and 25 years;
- number of dismissals on fixed-term contracts (CDD);
- number of dismissals on permanent contracts (CDI);
- number of voluntary departures of fixed-term employees (CDD);
- number of voluntary departures of permanent employees (CDI);
- number of departures of fixed-term employees at termination (CDD);
- number of departures of permanent employees (CDI) at termination.

The insertion of an indicator related to «occupational illness». The appearance of two (2) indicators as to «**Expenditures for social policy**» :

- voluntary expenditures on social benefits
- funds used for internal loans.

### With regard to environmental indicators

The addition of a new indicator related to «**water drilling**» affecting only the Société Sénégalaise Des Eaux (**SDE**)

The appearance of two (2) new indicators as to «**consumption of paper and computer products**» which are:

- paper consumption;
- consumption of printer toners (Ink).

The permanent elimination of two (2) indicators related to polychlorinated biphenyls (**PCBs**) which are:

- quantity of PCBs;
- mass of PCBs.

The identification of three indicators related to PCBs, namely :

- total pieces of equipment containing PCB;
- pieces of equipment contaminated with PCBs to be decontaminated;
- pieces of equipment contaminated with PCBs to be eliminated.



The removal of six (6) indicators related to the **workforce of the customers** of each company and their reconversion into societal indicators. These indicators were deleted from the environment component because they were not relevant to it. These are :

- number of Electricity Customers;
- number of Water Customers;
- number of Sanitation Customers;
- number of Telecom Network Customers;
- subsidized connections to the Electric grid;
- subsidized connections to the Water grid.

### **With regard to societal indicators**

This series of indicators did not exist for 2015 reporting. Included in 2016, it is composed of six (6) indicators related to the **workforce of Company customers** listed below.

- number of Electricity Customers;
- number of Water Customers;
- number of Sanitation Customers;
- number of Telecom Network Customers;
- subsidized connections to the Electric grid;
- subsidized connections to the Water grid.

To these indicators have been added three (3) new ones that relate to support, sponsorship, partnership and anti-corruption measures :

- expenditures related to support, sponsorship and partnership;
- expenditures made to combat corruption;
- people trained/sensitized to anti-corruption.

## **4. REPORTING**

### **• REPORTING SOFTWARE**

The reporting software, referred to as OPERA, was configured by the French company AMELKIS on the basis of the indicators selected and validated for fiscal year 2016. It has the following features :

Connection mode : SaaS (Software as a Service): Direct access by Internet with a special code;

Users of the software :

- Sustainable development managers and liaisons of the companies;
- Central staff: DSMES GS2E,
- End-user: ERANOVE,
- Technical Support: AMELKIS;
  - ✓ scopes and periods (years) established centrally;
  - ✓ direct input of data by companies' sustainable development managers;
  - ✓ save and check workflow;
  - ✓ reporting system indicator tracking with messaging option;
  - ✓ option to export reports in Excel by entity, with historical data (creation of its own set of Sustainable Development indicators);
  - ✓ automatic consolidation of Group data;
  - ✓ able to get different reports in real time.

A user manual designed in coordination with the developer of the software has been forwarded to each Group company to ensure proper use of the application.

## 5. REPORTING MANUAL

The reporting system manual, with the installation of the software, describes a seven-step process with well defined tasks and responsibilities :

N°	STEP/PROCESS	TASKS	IN CHARGE
1	Report request	Define framework and guidelines of the reporting.	<b>ERANOVE Senior Management</b>
		Prepare broad scheduling of the reporting.	<b>ERANOVE Sales and Customer department</b>
		Transmit the guidelines and the schedule for the reporting to the companies.	<b>ERANOVE Sustainable Development managers</b>
2	Configuration of the Opera software for the reporting system	Identify deletions and additions of indicators	<b>DSMES GS2E</b>
		Seek software update from the vendor	<b>DSMES GS2E</b>
		Perform technical operations to incorporate the updates made	<b>DSMES GS2E</b>
		Set the reporting period(s) into the software	<b>DSMES GS2E</b>
3	Reporting data collection and entry by the companies	Define within the Company the reporting guidelines and schedule	<b>Company SD Mgr.</b>
		Prepare the reporting data indicators	<b>Data Mgr.</b>
		Check the reliability of data produced by employees	<b>Relevant department</b>
		Collect data from those responsible for producing the data	<b>Company SD Mgr.</b>
		Enter and save the data in Opera	<b>Company SD Mgr.</b>
		Create the reproductions of the Company's data	<b>Company SD Mgr.</b>
4	Consolidation of data entries and development of Group statements	Audit data entry and check the data in Opera	<b>SM representative</b>
		Check for each company the effectiveness of the submission of data entered into the software	<b>DSMES GS2E</b>
		Consolidate the data submitted by the companies	<b>DSMES GS2E</b>
5	Check of the Group's extra-financial CSR reporting	Prepare the Group data retrieval statements	<b>ERANOVE Sustainable Development managers</b>
		Perform an internal audit for thoroughness, reliability and consistency of the reporting data	<b>ERANOVE Sustainable Development managers</b>
		Check and certify the reliability and the compliance of the CSR reporting data with current standards	<b>Approved independent third party organization</b>
6	Validation and publication of extra-financial reporting in Board of Directors	Submit the Company's CSR information to the Company's Board for validation	<b>Company SM</b>
		Validate the Company's CSR information	<b>Company BoD</b>
		Circulate the Company's CSR information	<b>Company SM</b>
		Submit the Group's CSR information to the Group's Board for validation	<b>ERANOVE SM</b>
		Validate the Group's CSR information	<b>ERANOVE BoD</b>
7	Preparation of the Sustainable Development Report (Group)	Circulate the ERANOVE Group's CSR information	<b>ERANOVE BoD</b>
		Write the Group's Sustainable Development Report	<b>ERANOVE writing committee</b>
		Circulate the Group's Sustainable Development Report	<b>ERANOVE writing committee</b>

## 6. REPORTING SCOPE

In 2015, only CIE, SODECI, CIPREL and SDE were concerned by environmental data.

In 2016, the information, whether social, societal or environmental, published in this report, covers the whole of the active companies of the Eranove Group, namely: CIE, SODECI, CIPREL, SDE, ERANOVE CI, ERANOVE SA, AWALE CORPORATION and GS2E. Only those entities now being created, having no operational workforce at the end of 2016 (SIDIP, Eranove Academy, AWALE ENERGY and Kénié) are not affected.

Work done under management or services contracts is also left out of the reporting system. For all information, year-on-year comparisons are based on like-for-like scope. For each of the indicators, the companies concerned are specified.

## 7. DISCLAIMER AND LIMITATIONS ON THE METHODOLOGY

- In the absence of a standard definition of disability in the Côte d'Ivoire and Senegal, the definition of this indicator has been reviewed with the support of occupational physicians in light of the practices in force in the companies such as CIE, SODECI and SDE.
- The severity rate and the frequency of lost time are calculated on theoretical hours worked, appearing in the denominator as product of the workforce as of the end of the month times the monthly hours for a 40-hour work week (in Côte d'Ivoire and Senegal) or 35-hour work week (in France) multiplied by 12 months. I.e., (35 h/wk \* 52 wk/year/12 months/yr) 151.67 hours/month in France and (40 h/wk \* 52 wk/year/12 months/yr) 17.33 hours/month in the Côte d'Ivoire and Senegal.
- Absenteeism is calculated on absences for workplace accidents, unauthorized absences, sick days and lay-offs.
- The calculation of the workplace accidents includes student interns at the CME and CMEAU training centers.
- Regarding the production and distribution of water, network efficiency is the ratio of water billed to the customer over the drinking water supplied to the network (i.e., the treated water plants and, for the SDE, water from the wells connected to the network after chlorination). Technical distribution efficiency refers to Dakar and Abidjan, for which the flow of water into these capitals is measured.
- The indicator of consumption of total energy sums the electrical energy consumed and the consumption of natural gas, DDO/HVO and Diesel/Diesel Oil

$ENV\ 410 = ENV420 + ENV430 + ENV440 * 0.00901067 + (ENV450 + ENV460) * 0.01 + ENV470 * 0.00985833$

The conversion factors are based on the PCI and density data from ADEME's GHG assessment site (<http://www.bilansges.ademe.fr/>):

- Natural gas: 49.6 GJ/t. – 654 kg/m<sup>3</sup>
- HVO/DDO: 10 GJ/t – 900 kg/m<sup>3</sup>
- Fuel oil/Diesel oil: 42 GJ/t – 845 kg/m<sup>3</sup>

The calculation of greenhouse gas emission was done on the ADEME carbon basis using conversion factors revised from 2015 (ADEME = French Agency for Environment and Energy Management) (<http://www.bilansges.ademe.fr/>):

Electricity consumption of headquarters, offices and plants:

- Côte d'Ivoire electricity EF = 0.445 kgCO<sub>2</sub>e/kWh;
- Senegal electricity EF = 0.637kgCO<sub>2</sub>e/kWh;
- France electricity EF = 0,082kgCO<sub>2</sub>e/kWh
- fuel: Gasoline EF = 2.8 kgCO<sub>2</sub>e/l.;
- Road diesel EF = 3.16 kgCO<sub>2</sub>e/l.;
- DDO and HVO Heavy Fuel Oil EF = 3.25 kgCO<sub>2</sub>e/ l.;
- natural gas: Natural Gas EF = 2.53 kg CO<sub>2</sub>e/m<sup>3</sup>
- fuel oil/Diesel used in electrical generators: Diesel EF = 3.16 kgCO<sub>2</sub>e/l.

# APPENDIX V

## 2015 AND 2016 PERFORMANCE INDICATORS

- Employment indicators

PERFORMANCE INDICATORS	DEFINITION	UNIT	2015	2016
<b>1 - COMPANY WORKFORCE</b>				
<b>TOTAL COMPANY WORKFORCE</b>		<b>No. of individuals</b>	<b>8,351</b>	<b>8,579</b>
Total workforce, Managers (MA)	Total number of the Company's Managers (MA), consisting of those on current permanent contracts (CDI) and those on current fixed-term contracts (CDD).  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	831	857
Total workforce, Supervisors (S)	Total number of the Company's Supervisors (S), consisting of those on current permanent contracts (CDI) and those on current fixed-term contracts (CDD).  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	3,750	3,807
Total workforce, workers (W)	Total number of the Company's Workers (W), consisting of those on current permanent contracts (CDI) and those on current fixed-term contracts (CDD).  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	3,770	3,915
<b>TOTAL FEMALE WORKFORCE</b>		<b>No. of individuals</b>	<b>2,023</b>	<b>2,050</b>
Total workforce, female Managers (MA)	Total number of the Company's female Managers (MA), consisting of those on current permanent contracts (CDI) and those on current fixed-term contracts (CDD).  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	230	241
Total workforce, female Supervisors (S)	Total number of the Company's female Supervisors (S), consisting of those on current permanent contracts (CDI) and those on current fixed-term contracts (CDD).  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	1,139	1,152
Total workforce, female workers (W)	Total number of the Company's female Workers (W), consisting of those on current permanent contracts (CDI) and those on current fixed-term contracts (CDD).  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	654	657
<b>TOTAL WORKFORCE, EXPATRIATE</b>		<b>No. of individuals</b>	<b>7</b>	<b>7</b>
Total workforce, expatriate Managers	Total number of Managers employed by the Company under current permanent (CDI) and fixed-term (CDD) expatriate contacts. The concept of an expatriate has nothing to do with nationality. It reflects the nature of the contract signed.  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	7	7
Total workforce, expatriate Supervisors	Total number of Supervisors (S) employed by the Company under current permanent (CDI) and fixed-term (CDD) expatriate contacts. The concept of an expatriate has nothing to do with nationality. It reflects the nature of the contract signed.  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	-	-
Total workforce, expatriate workers	Total number of Workers (W) employed by the company under current permanent (CDI) and fixed-term (CDD) expatriate contacts. The concept of an expatriate has nothing to do with nationality. It reflects the nature of the contract signed.  NB: Not included are contracts of interns, apprentices, volunteers, consultants, temporaries, day-workers or subcontractors.	No. of individuals	-	-

<b>TOTAL WORKFORCE BY AGE GROUP</b>		<b>No. of individuals</b>	<b>8,351</b>	<b>8,579</b>
Total workforce aged 18-25	Total number of employees as of the reporting date aged 18 years or more and strictly less than 26. NB: Until his or her 26th birthday, an employee is still 25 years old.	No. of individuals	214	163
Total workforce aged 26-35	Total number of employees as of the reporting date aged 26 years or more and strictly less than 36. NB: Until his or her 36th birthday, an employee is still 35 years old.	No. of individuals	3,217	3,242
Total workforce aged 36-45	Total number of employees as of the reporting date aged 36 years or more and strictly less than 46. NB: Until his or her 46th birthday, an employee is still 45 years old.	No. of individuals	2,521	2,665
Total workforce aged 46-55	Total number of employees as of the reporting date aged 46 years or more and strictly less than 56. NB: Until his or her 56th birthday, an employee is still 55 years old.	No. of individuals	1,836	1,795
Total workforce aged +56	Total number of employees as of the reporting date aged 56 years or more.	No. of individuals	563	714
<b>WORKFORCE BY TYPE OF CONTRACT</b>		<b>No. of individuals</b>	<b>8,351</b>	<b>8,579</b>
Total workforce on fixed-term contracts (CDD)	Total number of employees on fixed-term contract (CDD) at the close of the reporting period.	No. of individuals	662	539
Total workforce on permanent contracts (CDI)	Total number of employees on permanent contract (CDI) at the close of the reporting period.	No. of individuals	7,689	8,040
<b>TOTAL WORKFORCE BY COUNTRY</b>		<b>No. of individuals</b>	<b>8,351</b>	<b>8,579</b>
Total workforce, France	Total number of fixed-term (CDD) and permanent (CDI) employees working in France.	No. of individuals	20	22
Total workforce, Côte d'Ivoire,	Total number of fixed-term (CDD) and permanent (CDI) employees working in Côte d'Ivoire.	No. of individuals	7,149	7,363
Total workforce, Senegal	Total number of fixed-term (CDD) and permanent (CDI) employees working in Senegal.	No. of individuals	1,177	1,191
Total workforce, Mali	Total number of fixed-term (CDD) and permanent (CDI) employees working in Mali.	No. of individuals	-	-
Total workforce, DR Congo	Total number of fixed-term (CDD) and permanent (CDI) employees working in DR Congo.	No. of individuals	4	2
Total workforce, Saudi Arabia	Total number of fixed-term (CDD) and permanent (CDI) employees working in Saudi Arabia.	No. of individuals	1	1
<b>2 - DISABLED COMPANY WORKFORCE</b>		<b>No. of individuals</b>		
<b>TOTAL WORKFORCE WITH DISABILITIES</b>			<b>57</b>	<b>127</b>
Workforce with disability at hiring	Total number of employees with a disability at hiring. Disability is defined as an infirmity, a congenital or acquired defect in physical or mental ability such that their autonomy and their ability to hold a job are reduced or compromised. The disability is assessed and certified by a company doctor specializing in occupational medicine.	No. of individuals	7	13
Workforce with total disability after hiring	Total number of employees suffering a physical or mental impairment acquired after hiring and leading to a total inability to work. NB: The disability is assessed and certified by a company doctor specializing in occupational medicine.	No. of individuals	-	6
Workforce with partial disability after hiring	Total number of employees suffering a physical or mental impairment acquired after hiring and leading to a partial inability to work at the job for which they were hired. NB: Such an employee is generally transferred to another job. The disability is assessed and certified by a company doctor specializing in occupational medicine.	No. of individuals	50	108
<b>3 - TRAINING</b>				
<b>TOTAL WORKFORCE, TRAINED</b>		<b>No. of individuals</b>	<b>7,918</b>	<b>8,636</b>

Managerial workforce trained	Total number of Managers having attended formal training sessions. NB: A single managerial employee trained during "n" sessions is accounted for "n" times. Training of employees leaving the Company in the course of the year is counted.	No. of individuals	1,088	1,083
Supervisory workforce trained	Total number of supervisory employees having attended formal training sessions. NB: A single supervisory employee trained during "n" sessions is accounted for "n" times. Training of employees leaving the Company in the course of the year is counted.	No. of individuals	3,732	4,151
Workers trained	Total number of Workers having attended formal training sessions. NB: A single Worker trained during "n" sessions is accounted for "n" times. Training of employees leaving the Company in the course of the year is counted.	No. of individuals	3,098	3,402
<b>TRAINING EXPENSES</b>		<b>€</b>	<b>1,626,168</b>	<b>1,491,188</b>
<b>HOURS OF TRAINING</b>		<b>No. of hours</b>	<b>328,492</b>	<b>291,381</b>
Hours of in-house training	Total sum of hours spent by all fixed-term (CDD) and permanent (CDI) employees in training courses in Eranove Group training centers during the reporting period.	No. of hours	214,664	225,504
Hours of external training	Total sum of hours spent by all fixed-term (CDD) and permanent (CDI) employees in training and educational courses in training firms and external training centers during the reporting period.	No. of hours	113,828	65,877 <sup>26</sup>
<b>4 - WAGES AND SALARIES</b>				
<b>TOTAL PAYROLL OF THE BUSINESS</b>	Sum of gross compensation paid to all employees of the business, excluding in-kind benefits and employer contributions.	<b>€</b>	<b>84,165,045</b>	<b>94,290,144</b>
<b>AMOUNT OF GROSS ANNUAL WAGES &amp; SALARIES</b>		<b>€</b>	<b>81,318,663</b>	<b>98,944,580</b>
Gross annual pay, Managers	Sum of compensation paid to all Managers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	22,740,311	29,591,949
Gross annual pay, Supervisors	Sum of compensation paid to all Supervisors in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	36,209,014	41,809,382
Gross annual pay, Workers	Sum of compensation paid to all Workers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	22,369,338	27,543,250
<b>AMOUNT OF GROSS ANNUAL WAGES &amp; SALARIES, WOMEN</b>		<b>€</b>	<b>21,000,444</b>	<b>23,027,757</b>
Gross annual pay, female managers	Sum of compensation paid to all FEMALE Managers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	5,642,139	6,649,372
Gross annual pay, female Supervisors	Sum of compensation paid to all FEMALE Supervisors in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	11,472,293	12,014,595
Gross annual pay, female Workers	Sum of compensation paid to all FEMALE Workers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	3,886,013	4,363,790
<b>AVERAGE GROSS ANNUAL PAY</b>		<b>€</b>	<b>9,738</b>	<b>11,533</b>
Average gross annual pay, managers	Average pay of all Managers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	27,365	34,530
Average gross annual pay, Supervisors	Average pay of all Supervisors in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	9,656	10,982
Average gross annual pay, Workers	Average of all Workers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	5,934	7,035
<b>AVERAGE GROSS ANNUAL PAY, WOMEN</b>		<b>€</b>	<b>10,381</b>	<b>11,233</b>
Average gross annual pay, female managers	Average female Managers' pay in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	24,531	27,591
Average gross annual pay, female Supervisors	Average pay of female Supervisors in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	10,072	10,429
Average gross annual pay, female Workers	Average of all female Workers in the Company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	€	5,942	6,642

## 5 - WORKPLACE ACCIDENTS

<b>WORKPLACE ACCIDENTS</b>	An unforeseen event befalling an employee causing injury due to or in connection with his or her work, for whatever reason.	<b>Number</b>		
Accidents du travail avec et sans arrêt hors trajets	Accidents to employees with and without lost time, excluding accidents during trips between home and the workplace and between the workplace and the location of meal breaks.  NB: A commuting accident is an accident that occurs - between the home and the workplace - between the workplace and the place where the employee goes to take his or her meal	Number	198	143
Accidents, besides commuting, with time lost	Accidents to employees with medically prescribed, paid lost time (allocation paid by the social security agency as compensation for wages suspended by the employer), excluding accidents during trips between home and the workplace and between the workplace and the location of meal breaks, as well as fatal workplace accidents.	Number	180	132
Workplace accidents causing a death	Workplace accidents involving the immediate or subsequent death of the employee.	Number	2	1
Number of days lost	Sum of medically prescribed days lost allowing employees to interrupt their job with payment of a daily compensation to make up for.	days	3,977	3,119
Severity rate (per 1,000 hours)	The severity rate represents the number of paid days of lost time per 1,000 hours worked, i.e., number of days lost for temporary disability per 1,000 hours worked.	Days per 1,000 Hours Worked	0.23	0.18
Frequency Rate (number with time lost per thousand hours worked)	Frequency is the number of accidents with lost time greater than one day, occurring in a given time per million hours of work.	Number per 1 million hours of Work	10.4	7.6

## 6 - WORK TIME

<b>COMPANY THEORETICAL WORKING TIME</b>		Hours	<b>17,350,167</b>	<b>17,279,301</b>
Managers, theoretical working time	Time to be worked by Managers per regulations.	Hours	1,715,192	1,748,964
Supervisors, theoretical working time	Time to be worked by Supervisors per regulations.	Hours	7,795,345	7,750,477
Workers, theoretical working time	Time worked by Workers per regulations.	Hours	7,839,630	7,779,860
<b>COMPANY OVERTIME</b>		Hours	<b>647 188</b>	<b>655 217</b>
Overtime, Managers	Hours worked by Managers beyond the current legal number.	Hours	-	-
Overtime, Supervisors	Hours worked by Supervisors beyond the current legal number.	Hours	324,753	322,034
Overtime, Workers	Hours worked by Workers beyond the current legal number.	Hours	322,435	333,183

## 7 - ABSENTEEISM

<b>TOTAL TIME OF ABSENCE (TTA)</b>		Hours	<b>1,836,449</b>	<b>2,114,842</b>
Absences for statutory holidays (ASH)	Duration of legal leave taken yearly by the employees of the Company.	Hours	1,618,218	1,834,283
Absences for maternity leave (AML)	Duration of maternity leave taken by the employed women.	Hours	32,106	37,712
Absences for unpaid time off (AUT)	Duration of time off taken without pay for personal convenience.	Hours	14,656	24,264
Absences due to layoffs (ADL)	Duration of absences of employees having received a temporary suspension of their employment contract as a disciplinary measure.	Hours	4,320	15,128
Permanent absences, non-legal (PAN)	Duration of absences authorized by the employer on the basis of family events duly justified by the employee and non-deductible from regulatory leave. These absences are defined by the Labor Code, collective agreements or the internal regulations: marriage, death, birth, etc.	Hours	-	1,757
Absences for illness (AI)	Length of time of interruptions of employees' work recommended by a doctor (company or otherwise) during the reporting period.	Hours	125,630	148,540
Absences for workplace and commuting accidents (AA)	Length of absences of employees for workplace accidents and commuting accidents.	Hours	32,787	41,194
Unauthorized absences (UA)	Length of unlawful and unexcused absences by employees	Hours	8,732	11,964

Rate of absenteeism	The quotient of the number of hours of absence (apart from ASH, AML, AUT and PAN) in relation to the number of hours of theoretical work of the employees on permanent (CDI) and fixed-term (CDD) contracts current at the end of the reporting period.	%	0.99%	1.25%
Attendance rates	The ratio corresponding to the gap between the time of theoretical work of employees under permanent (CDI) and fixed-term (CDD) contracts and the total length of absences (besides ASH, AML, AUT and PAN) .	%	99.01%	98.75%

## 8 - HIRES

<b>WORKFORCE HIRES, COMPANY</b>		<b>No. of individuals</b>	-	<b>1,223</b>
Number hired on fixed-term contracts (CDD)	All individuals who signed a fixed-term employment contract (CDD) for the reporting period.	No. of individuals	-	718
Number hired on permanent contracts (CDI)	All individuals who signed a permanent (CDI) employment contract for the reporting period.	No. of individuals	-	505
Number hired of young people between 18 and 25 years	All individuals who signed a permanent (CDI) or a fixed-term (CDD) employment contract in the reporting period and were at the date of signature of the contract of an age greater than or equal to 18 years and strictly less than 26 years.  NB: Until his or her 26th birthday, an employee is still 25 years old.	No. of individuals	-	36

## 9 - DEPARTURES

<b>WORKFORCE DEPARTURES, COMPANY</b>		<b>No. of individuals</b>	-	<b>195</b>
<b>DISMISSALS</b>		<b>No. of individuals</b>	-	<b>42</b>
Number of dismissals on fixed-term contracts (CDD)	Number of fixed-term (CDD) employees dismissed  NB: Departures during an employee's trial period are also counted.	No. of individuals	-	6
Number of dismissals on permanent contracts (CDI)	Number of permanent (CDI) employees dismissed  NB: Departures during an employee's trial period are also counted.	No. of individuals	-	36
<b>VOLUNTARY DEPARTURES</b>		<b>No. of individuals</b>	-	<b>83</b>
Number of voluntary departures of fixed-term (CDD) employees	Number of fixed-term (CDD) employees who of their own accord left the Company employing them during the reporting period  NB: Departures during an employee's trial period are also counted.	No. of individuals	-	4
Number of voluntary departures of permanent (CDI) employees	Number of permanent (CDI) employees who of their own accord left the Company employing them during the reporting period  NB: Departures during an employee's trial period are also counted.	No. of individuals	-	79
<b>DEPARTURES DUE TO CONTRACT TERMINATION</b>		<b>No. of individuals</b>	-	<b>70</b>
Number of departures of fixed-term (CDD) employees at termination	All employees who left because their employment contract came to its planned termination	No. of individuals	-	41
Number of departures of permanent (CDI) employees at termination	All employees who left because their employment contract came to its planned termination.	No. of individuals	-	29

## 10 - OCCUPATIONAL ILLNESSES

Occupational illnesses	Occupational illnesses are codified in a table provided by the social security organization, which also determines the conditions for contraction of these illnesses.	No. of individuals	-	0
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## 11 - EXPENDITURE IN RESPECT OF SOCIAL POLICY

<b>EXPENDITURE IN RESPECT OF SOCIAL POLICY</b>		<b>€</b>	-	<b>10 773 552</b>
Voluntary expenditures on social benefits	Financial contribution by the Company to the funds dedicated to the solidarity, health and retirement of employees (Solidarity Fund, Health Solidarity Fund, Health Insurance for pensioners: ASMAR, etc.)	€	-	4,979,293
Funds used for internal loans.	The funds placed at the disposal of employees to help them undertake personal projects to acquire property or investments to improve their income.	€	-	5,794,259



## • ENVIRONMENTAL INDICATORS

INDICATORS	DEFINITION	UNIT	2015	2016
<b>1 - PROVISIONS &amp; GARANTIES RISQUES ENVIRONNEMENT</b>				
PROVISION POUR GARANTIE ET RISQUES ENVIRONNEMENTAUX	Montant planifié dans le budget pour assurer la gestion des risques en matière d'environnement.	€	38,112	1,460,461
<b>2 - WATER CONSUMPTION</b>				
<b>WATER CONSUMPTION</b>		<b>m<sup>3</sup></b>	<b>8,991,401</b>	<b>7,359,016</b>
Water consumption by headquarters, agencies, offices	The quantity of drinking water consumed in administrative and sales facilities, i.e., headquarters, sales agencies and offices.	m <sup>3</sup>	578,136	510,367
Water consumption by thermal power plants	The quantity of water used by thermal electric power plants.	m <sup>3</sup>	13,265	170,902
Water consumption by water production plants	The quantity of water used in water production plants for operating needs (washing of decanters, filters, etc.)	m <sup>3</sup>	8,400,000	6,677,748
<b>3 - PRODUCTION &amp; DISTRIBUTION OF WATER</b>				
<b>PRODUCTION AND DISTRIBUTION OF WATER</b>		<b>m<sup>3</sup></b>		
Raw water, plants	Quantity of raw water used for the production of drinking water.	m <sup>3</sup>	305,749,460	320,662,816
Raw water, drilling	Quantity of raw water going into the Company's drilling operations (besides wells supplying the water production plants).	m <sup>3</sup>	103,597,507	112,872,012
Treated water, plants	Quantity of water treated to be bacteriologically and chemically clean enough to drink.	m <sup>3</sup>	295,880,773	309,965,048
Total drinking water produced		m <sup>3</sup>	399,478 280	422,837 060
Internal efficiency of water production plants	The ratio of the quantity of treated water produced by the plants to the quantity of raw water used by these plants.	%	96.8%	96.7%
Network efficiency	The ratio of the quantity of water invoiced to customers to the quantity of water put into the water system by the production facilities and operating wells.	%	77.4%	77.0%
Technical efficiency of water distribution	The ratio of the quantity of water invoiced to customers to the quantity of water distributed.	%	74.6%	74.6%
Volume of water sold	Quantity of water as read on meters and invoiced to customers.	m <sup>3</sup>	309,000,000	325,763,074
<b>4 - ENERGY CONSUMPTION</b>				
<b>TOTAL ENERGY CONSUMPTION</b>		<b>GWh</b>	<b>6,583,402</b>	<b>8,871,973</b>
Electric power consumption by headquarters, agencies, offices	Total quantity, taken from meters, of electrical energy used by all sales agencies, offices and other administrative centers.	GWh	56	67
Electric power consumption by water production and electricity generation plants	Total quantity, taken from meters, of electrical energy used by all water production and electricity generation facilities.	GWh	370	439
Gas consumption	Total quantity of natural gas used by gas turbines, mechanically measured.	m <sup>3</sup>	730,385,809 <sup>27</sup>	984,515,590
HVO consumption	Total quantity of heavy oil used by gas turbines, mechanically measured.	m <sup>3</sup>	160,798	22,918
DDO consumption	Total quantity of distillate diesel oil used by gas turbines, mechanically measured.	m <sup>3</sup>	1,798	1,426
Diesel/Diesel oil consumption of electrical generators	Total quantity of fuel oil used by electrical generators for operations.	m <sup>3</sup>	8,611	7,955
<b>TOTAL VEHICLE FUEL CONSUMPTION</b>		<b>L</b>	<b>4 829 420</b>	<b>5 502 237</b>
Diesel consumption of vehicles	Total quantity of diesel used by vehicles used in operations.	L	4 313 442	4 801 005
Gasoline/Hi-test gasoline consumption by vehicles	Total quantity of gasoline/hi-test used by vehicles used in operations.	L	515 978	701 231

<sup>27</sup> CIPREL - decline in gas supplied by the State in 2015; therefore greater use of HVO/DDO as fuel in 2015

## 5 - GENERATION & DISTRIBUTION OF ELECTRICITY

<b>TOTAL INTERCONNECTED CAPACITY IN USE</b>		<b>MW</b>	<b>1,247</b>	<b>1,247</b>
Total interconnected THERMAL capacity	Total capacity of interconnected thermal production equipment in operation, on an actual capacity basis.  This is the sum total of maximum (or theoretical) power of all generators installed on the grid.	MW	643	643
Total interconnected HYDROELECTRIC capacity	Total capacity of interconnected hydroelectric production equipment in operation, on an actual capacity basis.	MW	604	604
<b>TOTAL INTERCONNECTED ELECTRICAL GENERATION</b>		<b>GWh</b>	<b>4,138</b>	<b>5,268</b>
Total electric generation from THERMAL power plants	Total net delivered production of electricity of installed interconnected thermal production equipment.	GWh	2,785	3,739 <sup>28</sup>
Total electric generation from HYDROELECTRIC power plants	Total net delivered production of electricity of installed interconnected hydroelectric production equipment.	GWh	1,352	1,529
Total electrical generation efficiency	Ratio of power put onto the transmission network (net production) to power coming out of the alternator (gross production) of a generator. The difference between the two levels of power is consumed by the auxiliaries of the generator (various ancillary equipment necessary to the operation of the generator).	%	98,71%	98,81%
Electrical generation efficiency, Abidjan	Ratio of power generated in Abidjan and put onto the transmission network (net production) to power coming out of the alternator (gross production) of a generator. The difference between the two levels of power is consumed by the auxiliaries of the generator (various ancillary equipment necessary to the operation of the generator).	%	98,90%	99,40%
Uptime of electrical power generators, exc. scheduled shutdowns	Performance measurement of electric generators defined as the ratio of the length of time the generators are operational and length of time they ought to have ideally operated, i.e. 100% of the time excepting intermittent surges.  NB: What is meant is availability apart from scheduled shutdowns.	%	95,50%	95,05%
<b>AVAILABLE ENERGY</b>		<b>GWh</b>	<b>4,847</b>	<b>6,173</b>
Available THERMAL energy	Total energy of all the thermal power production that the generators coupled on the grid supply during a given time. This power depends on the total capacity in use.	GWh	3 494	4 422 <sup>29</sup>
Available HYDROELECTRIC energy	Total energy of all the hydroelectric power production that the generators coupled on the grid supply during a given time. This power depends on the total capacity in use.	GWh	1 352	1 752
<b>TOTAL ELECTRICAL EFFICIENCY</b>	This is the ratio of gross production (energy out of the alternator) to energy actually consumed by the final customer. This ratio factors in therefore production, transmission and distribution losses.  Note: customers supplied directly by the transmission network experience only production and transmission losses.	%	<b>79,00%</b>	<b>80,00%</b>

## 6 - CONSUMPTION OF RAW MATERIALS & INPUTS

<b>CONSUMPTION OF RAW MATERIALS &amp; INPUTS</b>		<b>L</b>		
Oils	Quantity of oils used in operating the plants.	L	127,084	193,269 <sup>30</sup>
Chlorine gas	Quantity of chlorine gas used in operations.	T	712	738
Lime	Quantity of lime used in operations.	T	13,170	12,834
Calcium hypochlorite	Quantity of Calcium hypochlorite used in operations.	T	1,363	1,431
Aluminum sulfate	Quantity of aluminum sulfate (Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ) used in operations.	T	5,763	6,057
SF <sub>6</sub> gas	Quantity of SF <sub>6</sub> gas used in operating and maintaining the plants.	Kg	481	691

<sup>28</sup> Increase related to the implementation of the CIPREL IV combined cycle (+111 MW)

<sup>29</sup> Increase related to the implementation of the CIPREL IV combined cycle (+111 MW)

## 7 - ATMOSPHERIC POLLUTANTS: CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>

<b>GREENHOUSE GAS EMISSIONS (GHGE)</b>		<b>kgCO<sub>2</sub></b>	<b>2,646,211,696</b>	<b>2,876,731,422</b>
GHGE besides electrical generation	Quantity of greenhouse gas emissions into the atmosphere besides those related to the consumption of gas for the production of electricity.	kgCO <sub>2</sub>	269,895,869	306,789,256
GHGE of interconnected electrical production excluding generators	Quantity of greenhouse gas emissions into the atmosphere related solely to the interconnected production of electricity, excluding generators and of the electricity consumed by the electric generation plants.	kgCO <sub>2</sub> e	2,376,315,827	2,569,942,167
Electricity production CO <sub>2</sub> emissions/MWh produced (interconnected)	Amount of CO <sub>2</sub> released for the production of a MWh.	kgCO <sub>2</sub> e/MWh	574	488
Greenhouse gas emissions during the production of electricity	Quantity of greenhouse gas emissions into the atmosphere during the production of electricity.	% gaz sec	5,54%	3,41%
NO <sub>x</sub> emissions, electricity production	Releases of nitrogen oxides (NO <sub>x</sub> ) during the production of electricity.	mg/Nm <sup>3</sup>	244	248
SO <sub>x</sub> emissions, electricity production	Releases of sulfur oxides (SO <sub>x</sub> ) in electrical production.	mg/Nm <sup>3</sup>	0	0

## 8 - EQUIPMENT CONTAINING PCBs

<b>PIECES OF EQUIPMENT CONTAINING PCB</b>		<b>Number</b>	<b>372</b>	<b>372</b>
Pieces of equipment contaminated with PCBs to be decontaminated	Total number of devices (transformers, capacitors, turbines, pumps, etc.) whose fluid (oil), used as a dielectric fluid or lubricant, contains a PCB content which can be treated and reduced by a specialized company in order to restore these devices to service at the end of the period.	Number	299	299
Pieces of equipment contaminated with PCBs to be eliminated	Total number of devices (transformers, capacitors, turbines, pumps, etc.) whose fluid (oil), used as a dielectric fluid or lubricant, contains a very high PCB content, such that these devices must be removed and isolated from the operating system, and then placed at the disposal of a company specializing in the elimination of PCBs, at the end of the period.	Number	73	73

## 9 - CONSUMPTION OF PAPER & COMPUTER PRODUCTS

<b>CONSUMPTION OF PAPER &amp; COMPUTER PRODUCTS</b>		<b>Kg</b>		
Paper consumption	Quantity of sheaf paper used either for printing on the printer or for taking notes.	Kg	-	150,728
Consumption of printer toners (Inks)	Quantity of ink cartridges (toner) used for printing by all of the printers in the Company, whether they are leased and for shared use or allocated specifically to persons.	Kg	-	4,667

\* CIPREL - decline in gas supplied by the State in 2015; therefore greater use of HVO/DDO as fuel in 2015

## - SOCIAL INDICATORS

INDICATORS	DEFINITION	UNIT	2015	2016
<b>1 - CUSTOMERS</b>				
<b>NUMBER OF CUSTOMERS</b>		Number	<b>3,360,512</b>	<b>3,709,272</b>
Number of Electricity customers	Natural or legal persons having signed a subscription contract for the supply of electricity, which contract was current at the reporting date or in the reporting period.	Number	1,432,779	1,631,443
Number of Water customers	Natural or legal persons having signed a subscription contract for the supply of drinking water, which contract was current at the reporting date or in the reporting period.	Number	1,524,127	1,643,584
Number of Sanitation customers	Natural or legal persons having signed a subscription contract for the supply of drinking water, and paying a fee for sanitation.	Number	403,605	434,242
Number of Telecom Network customers	Number of companies having signed a service agreement with AWALE for the construction of aerial optical fiber or to lease FTTH access and high speed CPL access for the Internet and other services.	Number	1	3
<b>SOCIAL OUTREACH (SUBSIDIZED CONNECTIONS)</b>		Number	<b>84,819</b>	<b>187,550</b>
Subsidized connections to the electric grid	- Grid connections provided at reduced cost (social outreach existing before the PEPT) to facilitate the access of households to electricity. The criteria are defined in a framework social outreach memo.	Number	4,764	144
PEPT connections - (French acronym: Electricity for all)	- Connections to the electric grid made based on relaxation of the connection formalities and the ways of paying the cost of these operations for the benefit of households having no electricity agreement. The Program Electricity For All (PEPT), instituted by the Ivorian state beginning in 2014, is the subject of a framework memo that defines the targets and the eligibility criteria for the program.	Number	34,432	141,385
Subsidized connections to the water grid	<p>Social or subsidized connection is intended to supply a dwelling with the water under the following conditions, all of which must be met :</p> <ul style="list-style-type: none"> <li>the diameter of the connection and of the meter to be installed is 15 millimeters</li> <li>the connection is used only for non-commercial purposes</li> <li>the number of water points from the connection is no more than three (3) with SODECI and unlimited with SDE.</li> </ul> <p>The subsidized connection is made by a contract between the Company and the customer.</p> <p>NB: The connection may not serve :</p> <ul style="list-style-type: none"> <li>a rental dwelling (condition pertaining to SODECI only);</li> <li>a dwelling put up as part of a collective living arrangement (condition pertaining to SODECI only);</li> <li>on a single construction site, a lot can have only one subsidized connection.</li> </ul>	Number	45,623	46,021
<b>2 - SUPPORT, SPONSORSHIP, PARTNERSHIP</b>				
<b>SUPPORT, SPONSORSHIP AND PARTNERSHIP ACTIONS</b>				
Expenditures for support, sponsorship and partnership	Sums set aside and invested in support, sponsorship and partnership in the areas of sport, culture, health and education (including extraordinary contributions to employees).	€	-	990,030
<b>3- ANTI-CORRUPTION MEASURES</b>				
<b>ANTI-CORRUPTION MEASURES</b>				
Expenditures made to combat corruption	Money spent for the implementation of strategy, projects or approaches to the fight against corruption.	€	-	102,733
People trained/sensitized to anti-corruption	Number of people trained/sensitized to anti-corruption.	Number	-	330

ERANOVE

### **Report by the independent third party, on the consolidated CSR information included in the management report**

For the year ended December 31<sup>st</sup>, 2016

*This is a free English translation of the Statutory Auditors' report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.*

### **Report by the independent third party, on the consolidated CSR information included in the management report**

To the Shareholders,

In our capacity as independent third party, certified by COFRAC under number 3-1058<sup>1</sup> and member of Mazars' network, ERANOVE's Statutory Auditor, we hereby report to you on the consolidated CSR information for the year ended December 31<sup>st</sup>, 2016, included in the management report (hereinafter named "CSR Information"), pursuant to article L.225-102-1 of the French Commercial Code (*Code de commerce*).

#### **Company's responsibility**

The Board of Directors is responsible for preparing a company's management report including the CSR Information required by article R.225-105-1 of the French Commercial Code in accordance with the protocols used by the Company (hereinafter the "Guidelines"), summarised in the management report and available on request from the company's head office.

#### **Independence and quality control**

Our independence is defined by regulatory texts, the French Code of ethics (*Code de déontologie*) of our profession and the requirements of article L.822-11 of the French Commercial Code. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, professional standards and applicable legal and regulatory requirements.

<sup>1</sup> whose scope is available at [www.cofrac.fr](http://www.cofrac.fr)

## Responsibility of the independent third party

On the basis of our work, our responsibility is to:

- attest that the required CSR Information is included in the management report or, in the event of non-disclosure, that an explanation is provided in accordance with the third paragraph of article R.225-105 of the French Commercial Code (Attestation regarding the completeness of CSR Information);
- express a limited assurance conclusion that the CSR Information taken as a whole is, in all material respects, fairly presented in accordance with the Guidelines (Conclusion on the fairness of CSR Information).

Our work involved 4 persons and was conducted between February and May 2017 during a 5-week intervention period.

We performed our work in accordance with the professional standards and with the order dated 13 May 2013 defining the conditions under which the independent third party performs its engagement and with ISAE 3000<sup>2</sup> concerning our conclusion on the fairness of CSR Information.

### 1. Attestation regarding the completeness of CSR Information

On the basis of interviews with the individuals in charge of the relevant departments, we obtained an understanding of the Company's sustainability strategy regarding human resources and environmental impacts of its activities and its social commitments and, where applicable, any actions or programmes arising from them.

We compared the CSR Information presented in the management report with the list provided in article R.225-105-1 of the French Commercial Code.

For any consolidated information that is not disclosed, we verified that explanations were provided in accordance with article R.225-105, paragraph 3 of the French Commercial Code.

We verified that the CSR Information covers the scope of consolidation, i.e., the Company, its subsidiaries as defined by article L.233-1 and the controlled entities as defined by article L.233-3 of the French Commercial Code within the limitations set out in the methodological note, presented in the sections "Methodological note" of the management report.

Based on the work performed and given the limitations mentioned above, we attest that the required CSR Information has been disclosed in the management report.

### 2. Conclusion on the fairness of CSR Information

#### *Nature and scope of our work*

We conducted around a dozen interviews with the persons responsible for preparing the CSR Information in the departments in charge of collecting the information and, where appropriate, responsible for internal control and risk management procedures, in order to:

- assess the suitability of the Guidelines in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account industry best practices where appropriate;
- verify the implementation of data-collection, compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and controls based on the nature and importance of the CSR Information with respect to the characteristics of the Company, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practices.

Regarding the CSR Information that we considered to be the most important<sup>3</sup>:

- at parent entity level, we referred to documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, actions), performed analytical procedures on the quantitative information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the management report;

<sup>2</sup> ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information

<sup>3</sup> Social information: headcount; repatriation by gender; repatriation by age; number of training hours; number of lost time accidents; cumulative number of days of absence due to work accident; number of theoretical working days during the year; number of occupational diseases reported during the year;

Environmental information: environmental certification procedures; measures towards prevention, reduction and repatriation of emissions into air, water and soil; water consumption; energy consumption; electricity and water losses; releases of greenhouse gas emissions;

Social information: impact on local and riverside population; actions regarding business ethics.

- at the level of a representative sample of entities selected by us<sup>4</sup> on the basis of their activity, their contribution to the consolidated indicators, their location and a risk analysis, we conducted interviews to verify that procedures are properly applied and we performed tests of details, using sampling techniques, in order to verify the calculations and reconcile the data with the supporting documents. The selected sample represents on average 69% of headcount and between 51% and 100% of quantitative environmental<sup>5</sup> data disclosed.

For the remaining consolidated CSR Information, we assessed its consistency based on our understanding of the company.

We also assessed the relevance of explanations provided for any information that was not disclosed, either in whole or in part.

We believe that the sampling methods and sample sizes we have used, based on our professional judgement, are sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR information cannot be totally eliminated.

### **Conclusion**

Based on the work performed, no material misstatement has come to our attention that causes us to believe that the CSR Information, taken as a whole, is not presented fairly in accordance with the Guidelines.

*Paris La Défense, June 14<sup>th</sup>, 2017*

**MAZARS SAS**

Julien MARIN-PACHE - Partner

Edwige REY - Sustainable Development Partner

<sup>4</sup> SDE: social, environmental and societal information;

CIE: social, environmental and societal information;

CEPREL: environmental information;

<sup>5</sup> Water consumption and energy consumption



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