



# eranove



## SUSTAINABLE DEVELOPMENT REPORT 2015



## CONTENTS

### **CHAPTER 01**

REMEDYING THE LACK OF ACCESS  
OF CURRENT GENERATIONS  
WHILE PRESERVING THE NEEDS  
OF FUTURE GENERATIONS P. 6

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### **CHAPTER 03**

PROMOTING ETHICS AND  
RESPONSIBILITY, THE FOUNDATION  
OF OUR INTERCULTURAL AND  
DECENTRALIZED GOVERNANCE P. 22

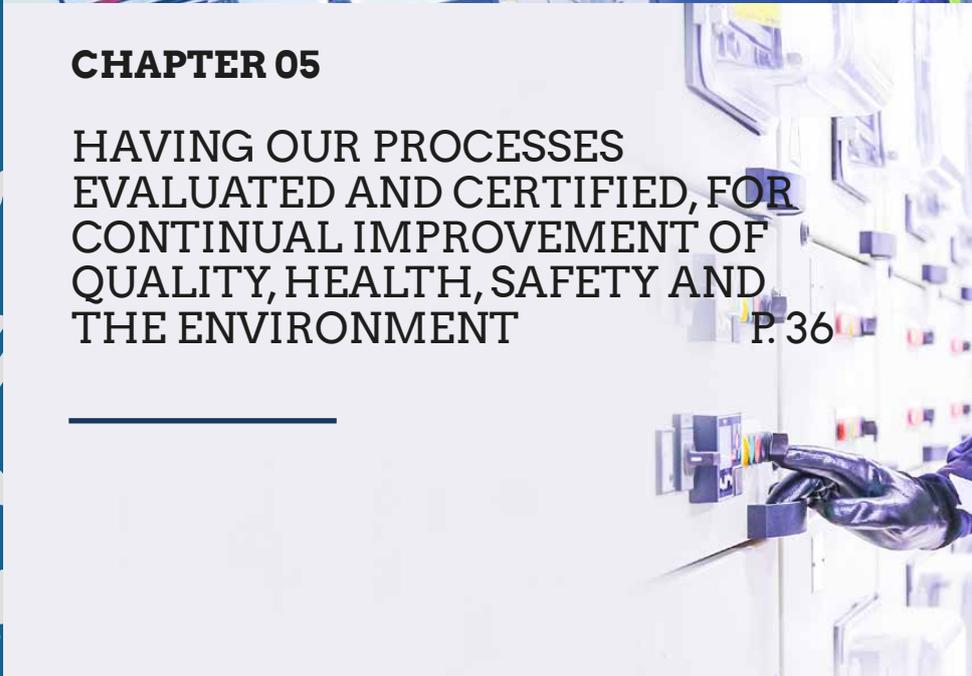
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### **CHAPTER 05**

HAVING OUR PROCESSES  
EVALUATED AND CERTIFIED, FOR  
CONTINUAL IMPROVEMENT OF  
QUALITY, HEALTH, SAFETY AND  
THE ENVIRONMENT P. 36

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## **CHAPTER 02**

### **PRESERVING THE ENVIRONMENT AND INCORPORATING CLIMATE CHANGE INTO OUR CORE BUSINESSES**

**P. 12**

## **CHAPTER 04**

### **ACTUATING THE MOSAIC OF AFRICAN SKILLS FOR LONG-TERM PERFORMANCE**

**P. 26**

## **CHAPTER 06**

### **CONTRIBUTING TO THE DEVELOPMENT OF OUR LOCAL COMMUNITIES**

**P. 44**

**CONCLUSION P. 48**

**APPENDICES P. 50**

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# CONTRIBUTING TO GREEN GROWTH ON THE AFRICAN CONTINENT BY PUTTING PUBLIC AND PRIVATE PARTNERSHIP TO WORK

The issue of sustainable development is an intrinsic part of the Eranove Group's core business, which is to give people access to the services essential for life. Access to water and sanitation, declared to be fundamental human rights in the 64th General Assembly of the United Nations, and universal access to sustainable energy services, have come to the fore as the pillars of green growth that is socially inclusive, which is to say, it benefits everyone. Lifelong, universal access to training and education through quality schooling, or thanks to access to the internet and intranets, is an essential condition for sustainable development, equal opportunity and the elimination of poverty.

In 2012, the member states of the United Nations adopted the Rio+20 Declaration: "The Future We Want." They highlighted the role of the private sector in the development of green growth, especially in Africa where nearly 620 million people do not have access to electricity<sup>1</sup> and 319 million lack access to drinking water<sup>2</sup>.

In September 2015, the adoption of Agenda 2030 made it even more imperative for the Group to pay attention to sustainable development: of 17 sustainable development objectives proposed<sup>3</sup>, seven related directly to the Group's core business and seven others received an indirect positive benefit from the impact of the Group's operations.

1 - Source : World Energy Outlook 2014, International Energy Agency, 2014

2 - Source : Progress on drinking water and sanitation, OMS/UNICEF, 2015 update

3 - <https://sustainabledevelopment.un.org/post2015/transformingourworld/>; [http://www.ci.undp.org/content/Côte d'Ivoire/fr/home/post-2015/sdg-overview/](http://www.ci.undp.org/content/Côte%20d'Ivoire/fr/home/post-2015/sdg-overview/)

**FIGURE 1 - 14 SUSTAINABLE DEVELOPMENT GOALS OF THE ERANOVE GROUP**



The Eranove Group, through its subsidiaries, has been working in Africa for over 50 years. Its history and its development are proofs of successful partnerships with national governments, striving to balance service quality, sustainable development goals and assistance to governments in their strategic objectives for their concessioned industries. This partnering has not been limited just to the public authorities. It involves, in a variety of ways, all of the Group's stakeholders: employees, technical and financial partners, consumers, suppliers, NGOs and local communities. It has gradually built a shared vision of sustainable development goals that the Group and its stakeholders can contribute to, each in its own way. Public services manager, pan-African producer of water and electricity, developer of high-speed data transmission capabilities and training solutions in its core businesses.

To bind together all its partners and take the actions that will help give the greatest number of people access to essential services, Eranove has designed a sustainable development program with six strategic thrusts :

As 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.



- ☀ Remediating the lack of access of current generations while preserving the needs of future generations
- ☀ Incorporating climate change into all our core businesses
- ☀ Promoting ethics and responsibility, the foundation of our intercultural and decentralized governance

- ☀ Actuating the mosaic of African skills for long-term performance
- ☀ Having our processes evaluated and certified, for continual improvement of quality, health, safety and the environment
- ☀ Contributing to the development of our local communities.

This sustainable development report is the first to be edited by Eranove. It presents our commitments and actions taken in 2015 to contribute to the green growth of the African continent.

It is established taking into account the requirements of the Grenelle II Law and the guidelines of the Global Reporting Initiative V4.

we wish you a good reading.



## 7 SUSTAINABLE DEVELOPMENT GOALS

Indirect positive impacts



# 1

# REMEDYING THE LACK OF ACCESS OF CURRENT GENERATIONS WHILE PRESERVING THE NEEDS OF FUTURE GENERATIONS

In 2015, Africa's population is 1.2 billion, which is projected to double by 2050<sup>4</sup>. But nearly 620 million lack access to electricity<sup>5</sup> and 319 million lack access to drinking water<sup>6</sup>. These challenges present opportunities for the private sector to step in and contribute. Government money for development and national budgets are not enough to fill the current gap. The Eranove Group has committed to help fill this gap in the short and medium term, i.e. for current generations. At the same time, the demographic and social outlook for the continent requires us to preserve the needs of future generations, as well as our own outlook for long-term growth.

4 - Source: *World population prospects, United Nations, 2015*

5 - Source: *World Energy Outlook 2014, International Energy Agency, 2014*

6 - Source: *WHO/UNICEF - Progress on drinking water and sanitation*



Key figures for 2015



1,247 MW of interconnected capacity in use

50,387 Social outreach connections (subsidized connections to the grid) at Group scale

1,519,000 Customers in the water sector in Côte d'Ivoire and Senegal

1,432,000 Customers in the electricity sector - Côte d'Ivoire

4,138,000 MWh of total net electrical production

399,000,000 M<sup>3</sup> of drinking water produced - Côte d'Ivoire and Senegal



The Group's contribution to Agenda 2030 for Africa (<https://sustainabledevelopment.un.org/post2015/transformingourworld>), as part of its existing and future contracts, also includes an increase in the number of homes accessing drinking water, sanitation and electricity, through the constant improvement of its technical and economic performance.

This has resulted in four areas of action :

- ☀ Continue to improve the performance of public utilities for the production, transmission and distribution of potable water and electricity
- ☀ Develop new services through technological innovation
- ☀ Join in actions that will facilitate access by the greatest number of people to essential services
- ☀ Develop new infrastructures.

The Eranove Group, through its subsidiaries, has been active in Africa for over 50 years



## A | IMPROVING THE PERFORMANCE OF EXISTING INFRASTRUCTURES

The Eranove Group believes that improving access means first improving service quality for its customers. This requires optimized operations and maintenance of the production, transmission and distribution infrastructure, along with the development of customer relationships.

Over the past four years, the Group has shown a high level of performance in both the drinking water and electricity sectors. The number of customers receiving our services rose from 1,295,000 to 1,519,000 (+ 17%) in the water sector and from 1,154,000 to 1,432,000 (+ 24%) in the electric sector.

In power generation, performance is measured primarily based on high availability rates in the power plants: 97.8% for CIPREL and 93.9% for CIE<sup>8</sup>. In electricity distribution, the total efficiency of the Côte d'Ivoire national grid<sup>9</sup> has improved by five percentage points from 2012 to 2015 (73.7% to 78.8%), with a higher level of maintenance and a greater elimination of fraud by CIE. Investments by Côte d'Ivoire national government in electrical transmission and distribution infrastructures also fostered performance. Over the next 10 years Côte d'Ivoire plans to invest several billion US dollars in its electricity sector. In mid-December 2015 the government contracted for a loan of over US\$800 million for a program to expand and upgrade its electric power grid. According to the announcements, the program consists of constructing 14 high voltage stations and upgrading 13 other existing high voltage stations. It also includes building 1,555 km of transmission lines will,

purchasing electrical equipment, and electrifying 500 rural localities<sup>10</sup>.

The drinking water segments we track network efficiency as one of the indicators of sustainable use of resources for the sake of future generations. In 2015, the efficiency of the network operated by SODECI was 75.3%, and the efficiency of the SDE network was 80.1%.

97.8%  
Availability rate  
of CIPREL<sup>7</sup> power plants  
in 2015



7 - Availability apart from shutdowns for programmed maintenance

8 - Availability rate of CIE hydraulic production plants in 2015: 88.15%.  
Availability rate of CIE thermal power plants in 2015: 77.6%

9 - Network efficiency = 1 - network losses

10 - <http://www.ecofinagency.com/electricity/1812-33081-Côte d'Ivoire-gets-fcfa-488-billion-from-china-to-develop-power-grid>





## B | DEVELOP NEW SERVICES THROUGH TECHNOLOGICAL INNOVATION

While product quality is necessary to satisfy the populations already receiving the Group's services, this is only a minimum requirement. It must include improvement in service delivery and the development of new services. This means understanding, meeting and anticipating customer needs.

Each Group company employs specific actions it has developed to improve end-user satisfaction: mobile payment, CIE and SOCEDI customer relations centers, agency design, smart metering, etc.

In 2015 the Eranove Group unified its expertise in customer relations in a marketing circle. These actions all contribute to making us a customer-centered company

By emphasizing a customer-centered vision, the Group intends to more closely meet their needs and expectations, and to maximize their satisfaction in the long term.

Mobile payment  
of bills



## C | FURTHERING ACCESS FOR THE VERY POOR

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 the informal economy. Their ability to save is too poor to pay for connection and then bi-monthly or quarterly bills.

Several solutions do make it possible to increase access for the very poor :

☀ **Lower rates** : often called "social tariffs", where the government subsidizes these tariff brackets, open up access for the very poor. In Senegal and Côte d'Ivoire, the Eranove companies apply these tariffs set by the government.

☀ **Social outreach** : reserved for underprivileged households. This has historically been the proven way to reduce the costs of access to drinking water and electricity. Government funding mechanisms support installation of these connections, with the support of development partners. Group companies - CIE, SOCECI and SDE - are responsible for installing

these connections, as part of requests for bids or CSR partnerships. In 2015 SOCECI made 40,842 connections, SDE made 4,781 and CIE made 4,764 (the remainder of a program that had already installed 28,836 connections in 2014).

☀ **Innovative solutions such as PEPT (French acronym for the "Electricity for All" program)** : The Eranove Group, alongside the 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 PEPT in late 2014.

40,842

**Subsidized connections**  
installed by SOCECI in Côte  
d'Ivoire in 2015



34,866

**PEPT connections**  
installed by CIE in Côte  
d'Ivoire in 2015





## CIE, an example of social commitment alongside the granting authorities in Côte d'Ivoire

CIE, the Côte d'Ivoire government and its development partners launched an ambitious project in October 2014, the PEPT or "Electricity for All" program. Its goal is to facilitate access to electricity among the lowest income households. **The program targets 200,000 homes per year over the period 2014 to 2020**<sup>11</sup>.

The model optimizes the technical, governmental and financial processes within a new partnership with the government.

The model optimizes the technical, governmental and financial processes within a new partnership with the government.

To increase its efficiency, this program includes payment by mobile phone and remote reading. In late 2014, the program's initial pilot phase deployed in a

village of the Odienne region. Several surveys carried out testify to the improvement in people's standard of living through electricity. According to the latest survey from June 2015, **1100% of individuals interviewed stated that the PEPT program has slowed migration from the countryside**, and 96.6% feel that the Electricity for All program has had a very positive effect on the village children's school work and testing. In addition, the surveys are very largely in agreement that access to electricity by most households has been a stimulus to the village, particularly its economic development (38%), general safety and security (26%), and to a lesser degree, comfort (11%).

Given this early success, CIE expanded the PEPT in 2015 with 24 villages benefiting from the Electricity for All program. In only five months, since the program started at the end of July 2015, CIE installed 35,000 connections in Côte d'Ivoire, and plans to install 140,000 more in 20.

11 - Source: Statement from the Council of Ministers of the Republic of Côte d'Ivoire, May 27, 2014

## D | DEVELOPING NEW INFRASTRUCTURES

The water and electricity sectors have to take up the challenge of financing infrastructure to meet immediate needs and anticipate future demand. Developing the electricity sector in Sub-Saharan Africa will require an annual investment of US\$40.8 billion<sup>12</sup>, plus US\$21.9 billion per year for drinking water and sanitation<sup>13</sup>.

To help meet this challenge, the Group is pursuing a growth strategy, with the ambition of becoming a leading pan-African industrial group in public utilities management and in the production of electricity and drinking water. In that regard, it has been looking into several projects for developing the continent's electrical production capacity.

Two projects stand out for the progress they made in 2015.

CIPREL has shown its ability to develop and operate power generation infrastructure in Africa with completion of construction on the combined cycle (CIPREL IV), put into commission on February 17, 2016. An investment of about €340 million (FCFA 223 billion) was structured for the project, mainly from international institutions such as the International Finance Corporation (SFI/IFC), Proparco, and the African Development Bank (ADB). Thanks to this investment, CIPREL's total contracted power rose from 321 MW to 543 MW, or a 70% growth in capacity, for additional electricity production projected at 1,600 GWh/year. The CIPREL IV combined cycle improves CIPREL's energy efficiency due its steam turbine (TAV1), thereby avoiding yearly emissions of 500,000 metric tons of CO<sub>2</sub> equivalent into the atmosphere. In 2016, CIPREL will add a Dry Low NO<sub>x</sub> system to the two natural gas

turbines of its combined cycle (TAC9 and TAC10) to limit the emission of atmospheric pollutants. It inaugurates the more sustainable thermal electric power production systems that companies will deploy on the continent. (See also paragraph 2-A "Making sustainable use of the resources we exploit" and 2-D "Incorporating climate change into our core businesses.").

KENIE is a 42 MW hydroelectric plant in Mali, and its concession agreement was signed on June 18, 2015. It demonstrates Eranove's ability to expand beyond its historical boundaries and its commitment to developing renewable energy in Africa.

**+222 MW**

of power added by combined cycle with CIPREL IV in Côte d'Ivoire 2013-2015



**+42 MW**

of hydroelectric power under development by KENIE in Mali in 2015



12 - Source: African Development Bank, A study relative to diagnosing and assessing needs for increased capacity in the energy sector, 2014.

13 - Source: World Bank, African infrastructures: imperative transformation, 2011.





## The Kenié hydroelectric plant in Mali

June 18, 2015, The government of the Republic of Mali and Kenié Energie Renouvelable, a subsidiary of the Eranove Group, signed a concession agreement for a term of thirty years (from signing) for the financing, development, construction and operation of the Kenié hydroelectric dam in Baguinéda on the Niger River, 35 km east of Bamako.

This marks an important step for the Republic of Mali. Mali's present installed power of about 414 Megawatts (MW)<sup>14</sup>, only covers half of the country's potential demand as estimated by the World Bank. With an installed power of 42 MW, this upgrade to Kenié's hydroelectric base will help meet this energy challenge. According to initial simulations, the Kenié dam would produce about 175 GWh/year depending on the scenario used, which represents the yearly usage of 175,000 household equivalents<sup>15</sup>. With this plant, Mali will be able to make greater use of its hydroelectric potential.

14 - Source : Energie du Mali

15 - Africa Energy Outlook 2014 - demand per electrified household in West Africa of 1,000 KWh, International Energy Agency 2015



# 2

## PRESERVING THE ENVIRONMENT AND INCORPORATING CLIMATE CHANGE INTO OUR CORE BUSINESSES

Developing water and electricity infrastructure in Africa and improving access to services constitute urgent needs in order to remedy the accumulated deficit. These developments must occur while preserving the needs of future generations, particularly by limiting their impact on the planet. The issue is all the more pressing that Africa, according to the World Bank, was the source of less than 5.6% of the world's greenhouse gas emissions in 2011, and will be the continent most affected by climate change. Then again, this challenge is a source of opportunity to foster innovative development based on a sustainable use of resources in the energy and water sectors.

### Key figures for 2015



604

of power generated from hydroelectric plants



+111

MW of installed power with the CIPREL IV steam turbine



500,000

eqT of CO2 avoided per year with the CIPREL IV combined cycle





**afaq**

**ISO 14001**

**Environment**

**CIE Scope** Interconnected production, transmission and delivery of power

**CIPREL Scope** Management of power plant construction projects and the operation and maintenance of those plants

**SDE** All scopes, with the exception of the Khor plant (certified as to quality and safety)

**SODECI Scope** Plants producing drinking water for Abidjan



## A | MAKING SUSTAINABLE USE OF THE RESOURCES WE EXPLOIT

The Eranove Group attaches great importance to the conservation of resources, especially those that are crucial to conduct its operations-essentially the natural gas it converts into electricity and the raw water it converts into drinking water and into electricity. This issue is pressing, for both present and future generations. It is also a principle for action in terms of both production and distribution systems.

Continual monitoring of raw materials consumed



The Group monitors the consumption over time of resources in its production processes :

- ☀ Water consumption by drinking water production plants was 8.4 million m<sup>3</sup> in 2015<sup>16</sup>.
- ☀ The energy consumption of power plants calls for close monitoring of base fuels (natural gas) and backup fuels (HVO and DDO) :

16 - Water loss in water production plants for operating needs (washing of decanters, filters, etc.)



730,385,809 m<sup>3</sup>  
Total quantity of natural gas used by gas turbines

161,201 m<sup>3</sup>  
Total quantity of heavy oil used by gas turbines

1,798 m<sup>3</sup>  
Total quantity of distillate diesel oil used by gas turbines

18,158 m<sup>3</sup>  
Total quantity of fuel oil used by electrical generators for operations

Energy efficiency is a strategic topic for the Eranove Group and takes concrete form in several of our actions :

- ☀ Sustainable production: Construction of the CIPREL IV combined cycle demonstrates the development of sustainable production systems within the Group and its intent to develop its energy efficiency. The combined cycle recycles the warm exhaust gases emitted by two natural gas turbines and feeds them into a steam turbine. This steam turbine, with a power of 111 MW, produces energy without the further consumption of natural gas. (See also paragraph 2-D "Incorporating climate change into our core businesses.")
- ☀ Energy audits: Our water companies, SODECI and SDE, are heavy users of electricity, particularly for the production and transmission of water. There are a number of studies underway to improve energy efficiency in the two companies, with the first action plans being carried out at SDE
- ☀ The Eranove Group is aiming for ISO 50 001 (Energy Management) certification of its operating companies, in order to implement an energy management system that will allow them to make better use of energy in their operations. The Group wants to pass along this energy efficiency to its customers by developing energy diagnostics and advisory services
- ☀ Information technology: In 2015, CIE initiated a pilot project for the development of a smart grid in public lighting. The use of information technologies and smart grids should make it possible to reduce electricity consumption while, at the same time, improving public lighting..



In addition, the Group tracks the consumption of secondary resources used in its core businesses, to make more efficient use of them.

Indicators	2015	Unit
Oils	119,835	L
Chlorine gas	712	T
Lime	13,162	T
Calcium hypochlorite	2,860	T
Aluminum sulfate	17,741	T
SF6	481	Kg

The Group has not yet specifically measured land usage. For the time being, it primarily operates plants built by the government. All operating facilities are nonetheless in compliance with environmental audits conducted by government agencies. As to the impacts of plants built by the Eranove Group, they have been the subject of an impact study and an environmental management plan in compliance with the requirements of the international financial institutions.

Likewise, the Group has not yet taken significant specific measures to preserve biodiversity at the sites it operates, or in the countries where it works. Nonetheless, the social and environmental impact plans of the projects under development do include biodiversity, as required by the international financial institutions.

## B | ENCOURAGING SUSTAINABLE CONSUMPTION, BY THE GROUP AND BY CONSUMERS

The Eranove Group began a program to limit internal consumptions, primarily through daily eco-friendly actions, and by its customers, encouraging them to consume more intelligently.

Group companies have committed to a plan for limiting internal consumption.

Awareness about eco-actions to limit in-company consumption



415,757<sup>m3</sup>

Water consumption by headquarters, agencies, offices

13,265<sup>m3</sup>

Water consumption by thermal power plants

56<sup>GWh</sup>

Electric power consumption by headquarters, agencies, offices

337<sup>GWh</sup>

Electric power consumption by water production plants

4,773,400<sup>L</sup>

Vehicle fuel consumption

This objective has become especially ingrained at CIE, who has taken steps to raise awareness about responsibly using water and electricity. Automobile fleet renewal occurs when appropriate, and trips organized by GPS to optimize work-related travel and reduce fuel consumption.

Drinking water and power production plants use other resources such as water, electricity.

Keeping track of consumption involves :

- ☀ Monitoring the consumption of resources (water, electricity, treatment products, etc.),
- ☀ Educating people about routine eco-friendly actions,
- ☀ Putting not-to-exceed objectives into electrical contracts,
- ☀ Digitalization of reporting.

Lastly, we promote limiting consumption to our companies' end-users. In Côte d'Ivoire, SODECI and CIE publish consumer booklets for residential customers that list recommendations on keeping tabs on their consumption of drinking water and electricity. In 2015, CIE produced an awareness campaign on Ivorian national television to encourage consumers to adopt energy saving practices. With regard to industrial customers, CIE launched its Energy Pro program of customized assistance to private-sector industrial customers as a way to improve service quality, and eventually perform energy audits for its customers.

## C | DEVELOPING AN ENVIRONMENTAL MANAGEMENT SYSTEM & IMPROVING WASTE MANAGEMENT

Limiting the Group's environmental impacts has led to a joint effort across all its companies. It is based on environmental management systems covering, among other things, handling the waste produced, noise pollution from its industrial operations, wastewater for the drinking water and sanitation sectors and monitoring emissions of atmospheric pollutants. Since the latter are sources of direct and indirect greenhouse gases, they are included in a program for recognizing climate change issues (see also paragraph 2-D "Incorporating climate change into our core businesses").

### Our environmental efforts

The Eranove Group encourages its companies to gradually develop environmental management systems. This effort consists of identifying environmental impacts, assessing them and specifying actions to reduce their effects.

To guarantee the performance of its processes for environmental management, each company is working toward environmental certification under ISO 14001. (See also, paragraph 5-A "Having our processes evaluated and certified, for continual improvement of quality, health, safety and the environment.").

Making these environmental efforts and having them certified is led by our QSE (Quality, Safety, Environment) departments and the QSE managers in each certified scope. The environmental management work instructions review all of the impacts identified and the steps taken. The line personnel are responsible for applying them, supported by the QSE staff. One of the issues is environmental training for employees.



#### Sidebar: environmental training - a few of SDE's actions

SDE holds sharing sessions on best practices in environmental management at several of its sites (senior management, regional management and plants). These interactive meetings bring together the employees involved at each site for an awareness/training session on environmental questions specific to their site. The topics discussed especially include the ISO 14001 standard, solid waste, liquid and gaseous emissions, noise pollution, water pollution, soil pollution, air pollution and consumption of natural resources.

Moreover, SDE regularly publishes pieces on best practices in environmental management in its weekly FLASH INFOS, in addition to articles published in its quarterly magazine, SDE INFOS.

Besides the environmental program at our operating units, for new constructions like CIPREL IV in 2013-2015, the environmental impacts are monitored through a social and environmental impact plan (S&EA). The S&EA specifies the human and financial assets employed in every environmental action.







## Waste treatment

Waste treatment is one of our environmental concerns. The guiding principles issued serve to minimize the waste emitted by the Group's activities.

The main wastes emitted by CIE are industrial waste such as used filters and spent oils, dirty rags and reams of paper. The main wastes emitted by CIPREL are industrial wastes, used filters, spent HVO and DDO, and rags soiled with hydrocarbons or oil.

With regard to hazardous waste, regulations require monitoring of hazardous materials, and that they be traceable up to the point of elimination by government-approved companies. To ensure compliance with the regulation, waste is tracked using a registry. CIAPOL<sup>17</sup> oversees this process in Côte d'Ivoire, and they provide a certificate attesting to elimination of the product.

Oils and plastics are recovered and converted. However, opportunities for conversion of waste remain under-developed in the countries where the Group operates, which has an impact on its objective of having its waste fully converted or eliminated.

Waste for which there is no elimination industry, such as batteries and light bulbs, is stored on site while the company looks for removal solutions. Suppliers recover obsolete products and their packaging for elimination. Group companies are encouraged to favor suppliers who take back waste from products procured from them.

17 - Côte d'Ivoire Antipollution Center



## Treatment of PCBs

In terms of hazardous waste, CIE has taken steps to limit the risks of pollution from polychlorinated biphenyls or PCBs. PCBs' properties as electrical insulators and lubricants and their un-inflammability were the reason for their use. They served as insulators in electrical transformers and condensers and as lubricants or as oil additives. They present significant risks due to their toxicity. Any waste containing over 50 ppm of PCBs (50 mg/kg) is considered to be a PCB.

Among its concessioned assets, CIE manages a group of transformers important to production, transmission and distribution. To curb the risks of PCB pollutants, the company has begun an inventory and analysis of the contaminated transformers in order to have a workable elimination plan. It has made use of the regional PCB program led by the Basel and Stockholm Conventions Regional Center for the Countries of French-speaking Africa (French acronym CRCBS-AF). These inventories include all transformers in the assets under concession, for production, transmission and distribution.

Among the measures taken to lessen the risks of

contamination are the introduction of PCBs into QSE risk analysis, with emergency testing; awareness campaigns with the personnel affected; inspections for leaks, and retention to reduce the risks of infiltration.

In addition, in 2015 an operation began to remove transformers with a PCB level above 500 ppm and to eliminate them in special facilities. Transformers with a PCB level between 50 and 500 ppm will be processed in 2016-2017.

Similar to its PCB efforts, CIE has taken action to lessen the risk of pollution from the operation of thermal power plants which are not connected to the national grid.





## Noise pollution

Located in the Vridi industrial zone, CIE's and CIPREL's thermal power plants are far from populated areas. Nevertheless, the operation of combustion turbines by CIE and CIPREL may create noise pollution, especially for the employees. As a routine matter, the work instructions created and implemented in the QSE program require individual protection (e.g., industrial ear muffs, ergonomic ear plugs) to be worn on the thermal power station sites.

In the construction of its CIPREL IV combined cycle in 2013-2015 the social and environmental impact plan (S&EA) covers this issue. CIPREL placed soundproof housing around the noisiest equipment (> 85 dB) in the new section and also plans to reduce the noise emitted by the noisiest pre-existing turbines.

## Discharges into the natural environment - Production of drinking water

On a daily basis, water treatment plants will discharge liquid effluents and solid sludge with variable physico-chemical characteristics. These discharges come mainly from purging the decanters, washing the contact basins, coagulation/flocculation, decanting, washing the filters, purging the lime saturators and emptying the reagent tanks.

The parameters of these effluents are principally: pH, total suspended solids (TSS), aluminum, COD and to a lesser extent, fluoride. Effluent management complies with national law and within the ISO 14001 environmental plans.



### Managing discharged effluents in the production of drinking water at SDE

Most plants treat effluents in ponds before discharge to the outside. Once they come into the ponds, the effluents are stored for several hours, the time it takes to let the suspended solids decant before discharging the supernatant to the outside environment by opening the sluice gates. In this way the decanted solid matter forms over time a thick sludge scooped out after drying and then stored within the plant.

In accordance with national regulations governing the discharge of liquid effluents (Senegalese Standard NS-05061), in-house inspection of the effluents discharged from plants occurs on a monthly basis. This inspection consists of running laboratory analyses on the physico-chemical and even microbiological quality of the effluents discharged into the ponds. In addition, for greater transparency and reliability, SGS, an outside laboratory, carries out these analyses every six months.

The monthly inspection analyzes and processes variances noted, to identify the causes and apply corrective measures. Based on the variances, the corrective measures can take several forms, such as cleaning out the ponds, renovating the ponds, revising the process for treating drinking water and discharged effluents, educating the employees involved, etc.

In those drinking water production plants that do not have ponds, there can be no assurance that the discharges are in compliance. For this reason the authorities are being lobbied to install the appropriate infrastructure.

The Group companies did not recognize an accounting provision or coverage for environmental risk with respect to FY2015. See indicator 1.0 – “Amount of provisions and coverage for environmental risks”.

In our businesses, limiting solid, liquid and noise pollution is a priority



## INCORPORATING CLIMATE CHANGE INTO OUR CORE BUSINESSES

Eranove Group's business activities reflect the African changes of seasons. The warm seasons increase the consumption of electricity, for air conditioning, and drinking water, while the lack of rain lowers the volume of surface water used by the hydroelectric stations and the water production plants. Climatic variability within a single year and the climatic variation over several years will substantially influence the supply and demand balances for water and electricity.

The Group, in fact, attaches great importance to factoring climate change into its operations. The actions it takes in this regard complement those taken in support of a sustainable consumption of resources. (See also paragraph 2-B "Encouraging sustainable consumption, by the group and by consumers.").

In mitigating and adapting to climate change, the Group adds to its status as a green electrical producer in Africa. Out of an interconnected electrical production capacity in operation by the Eranove Group of 1,247 MW (543 MW at CIPREL plus 704 MW at CIE), the hydraulic capacity

is 604 MW while the thermal production capacity is 643 MW, 111 MW of which represents the CIPREL IV steam turbine.

As part of our thermal power production, we monitor direct greenhouse gas emissions (CO<sub>2</sub>) and the atmospheric pollutant nitrogen monoxide (NO<sub>x</sub>). CIE produces yearly, and CIPREL quarterly, studies on emissions of greenhouse gases and atmospheric pollutants with Bureau Veritas (monitoring of NO<sub>x</sub> and CO<sub>2</sub>).

The development of a system of sustainable electricity production in 2015 moved forward when the concession agreement on the Kenié project in Mali was signed (see Chapter 1 "Remedying the lack of access of current generations while preserving the needs of future generations") and completing the CIPREL IV combined cycle in Côte d'Ivoire.



### Side-bar: CIPREL IV, helping to mitigate climate change

Both because of the success of the first three development phases of the power station and because of its strict adherence to its commitments in terms of budget and schedule to the Côte d'Ivoire government and the lenders, on December 20, 2011 CIPREL received a new expansion of its electric generating station to assist the country's economic recovery-Project CIPREL IV».

The combined cycle consists of a new natural gas turbine (TAC 10 - Project CIPREL IV), the natural gas turbine CIPREL III (TAC 9), two heat recovery exchangers for the exhaust gases of this equipment and a steam turbine (Project CIPREL IV B). This system allows additional capacity of about 222 MW of electricity, 111 MW of which is from the steam turbine (TAV 1) and 111 MW from the natural gas turbine (TAC 10), with no additional consumption of natural gas, and improves the plant's energy efficiency. Thus it conserves Côte d'Ivoire's natural resources by reducing the consumption of natural gas.

CIPREL IV helps to mitigate climate change, since its steam turbine (TAV1) avoids emitting 500,000 metric tons of CO<sub>2</sub> equivalent into the atmosphere per year. In 2016, CIPREL will add the Dry Low NO<sub>x</sub> system to the two natural gas turbines of its combined cycle (TAC9 and TAC10) to limit the emission of atmospheric pollutants.



Tracked greenhouse gas emissions :



kg CO<sub>2</sub>eq  
**179,810,589**  
Total greenhouse gas emissions

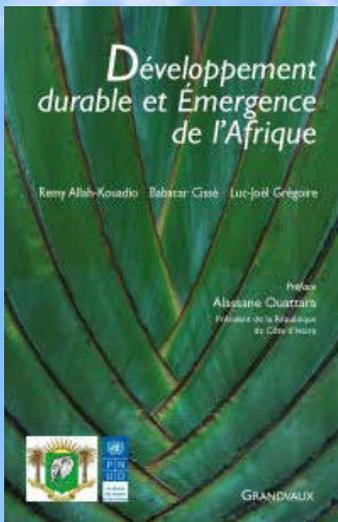
Of which : kg CO<sub>2</sub>eq  
**178,267,112**  
Greenhouse gas emissions from interconnected production of electricity

Moreover, during the preparations for the 21st Conference of Parties to the United Nations Framework Convention on Climate Change (COP21), CIE, CIPREL and SODECI helped organize the Cities and Regions of Africa Climate Summit in Yamoussoukro, Côte d'Ivoire. This project fits into the Group's desire to educate the regional authorities about mitigation and the incorporation of climate change in the water and electricity sectors.

## CITIES AND REGIONS OF AFRICA CLIMATE SUMMIT

IN PRELUDE TO PARIS 2015, 21ST UNITED NATIONS CONFERENCE ON CLIMATE CHANGE

Support of CIE and SODECI in holding the Cities and Regions of Africa Climate Summit



As Côte d'Ivoire made preparations for the COP21 Paris conference on climate change and prepared its sustainable development goals, Eranove was frequently asked to describe its CSR activities. In the joint publication "Sustainable Development and the Emergence of Africa" produced under the aegis of the Ivorian Ministry for the Environment (MINESUDD) and the United Nations Program for Development[1], the company's Chief Executive Officer authored an article relating how the Eranove Group has contributed to green growth in West Africa. Eranove also made a presentation at the REVE Côte d'Ivoire conference[2] "Challenges and Opportunities of Climate Change for the Ivorian Economy."

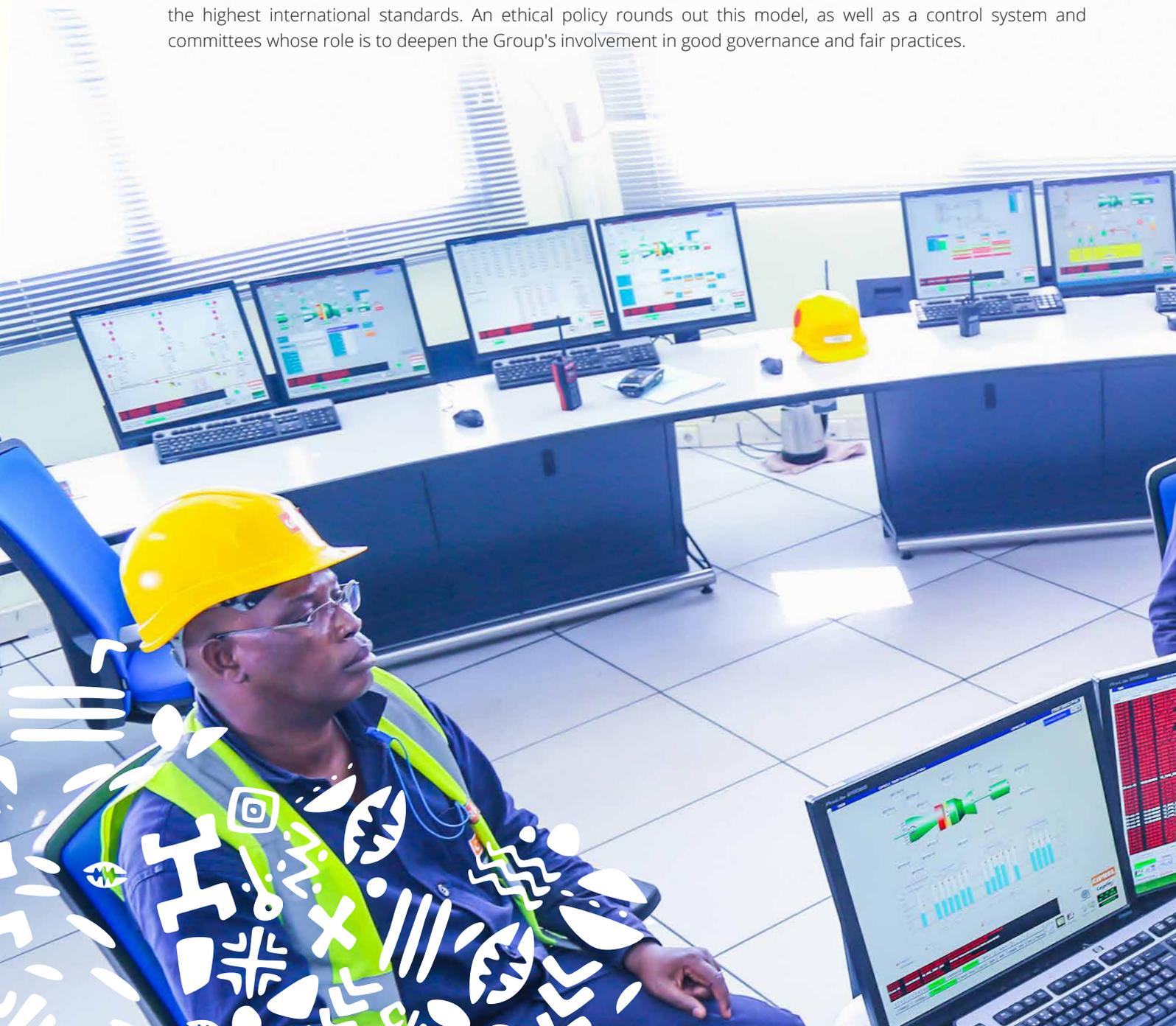
[1] Éditions GRANDVAUX - Authors: Remy Allah-Kouadio, Minister of the Environment and Sustainable Development of Côte d'Ivoire; Babacar Cissé, Deputy Special Representative of the Secretary General of the UN and Coordinator of UNS agencies in Côte d'Ivoire; Luc-Joël Grégoire, Country Director of the United Nations Program for Development in Côte d'Ivoire

[2] REVE: French acronym for Côte d'Ivoire network for the green economy and the environment



# 3 PROMOTING ETHICS AND RESPONSIBILITY, THE FOUNDATION OF OUR INTERCULTURAL AND DECENTRALIZED GOVERNANCE

African cultural norms and the best international standards expected in its business sectors permeate the Eranove Group's model of governance. It is based on an intercultural, decentralized management that encourages its subsidiaries and employees to take responsibility. Everyone works toward a common goal: to develop appropriate, innovative solutions that help the greatest number of people have access to services essential for life, while observing the highest international standards. An ethical policy rounds out this model, as well as a control system and committees whose role is to deepen the Group's involvement in good governance and fair practices.





Implementation of systems for overseeing ethics in Eranove Group companies



Intercultural management allying the diversity of African cultures with international standards



Decentralized management and responsabilising from its subsidiaries and employees



Governance bodies guaranteeing transparency and consistent practices



## A | PROMOTING AN INTERCULTURAL, DECENTRALIZED, EMPOWERING MANAGEMENT MODEL

The management model promoted in Eranove Group companies reflects cultural values, a business culture and a technological culture. It takes African cultural contexts into account, and views them in the perspective of international standards of management and performance. The Group puts forward, it is founded on local culture, an understanding of people and their values and a knowledge of the countries and our lines of business.

This approach has resulted in a decentralized, empowering model of management. Primarily at CIE and SODECI, the managerial pyramid has given way to a flatter structure with a limited number of hierarchical levels. Collective negotiation takes place for objectives at each level of operations. Together the employees define their needs, resources and objectives, then they are transferred to the information system into a set of performance indicators. Results are tracked and analyzed. Each person shares jointly in the decision-making process. This participative management by

objectives decentralizes decisions, delegates authority and empowers the employees of the Group. The first management tool is the separation of organizational duties: the person who initiates an action must not complete it, especially if it has a financial impact. The second combines a methodical organization of processes with the work instructions, supplemented by an internal audit system.

Tracking and measuring instruments that are part of the reporting cycle specific to risk management facilitate functional organization.

## B | ETHICS

Ethics and fair practices are central concerns of the Group. Each company has established ethical charters and organizations as well as codes of ethics. CIE, GS2E, SODECI and SDE have already put these in place, and CIPREL's implementation is in progress. Ethical charters, beyond complying with laws and regulations, primarily focus on complying with human rights, and combating corruption and fraud. They prevent conflicts of interest and promote respect for the customer, relationships based on trust with suppliers and subcontractors and the professionalism of all. Promoting ethics is thus an integral part of the Group's commitment to sustainable development.

The first phase in implementing ethical systems conducted in 2015 informed employees about ethical charters, produced the first internal communications tools (posters, office charters), and introduced reporting systems. The program will be continued and enhanced in 2016.

In addition, an independent company will assess the ethical systems applied by the companies (charter, organization, training, etc.) in 2016 in a continual improvement process for ethical oversight in the Group. This first assessment will allow us to draw up a three-year action plan for each company in order to accelerate ethical performance.

An ethics policy  
carried out across  
the Group



Respecting human  
rights, combating  
corruption and fraud





## C | GOVERNANCE COMMITTEES

In addition to the Board of Directors, the governance bodies of the Eranove Group guarantee transparent and consistent practices. The Group has created five principal committees with this in mind.



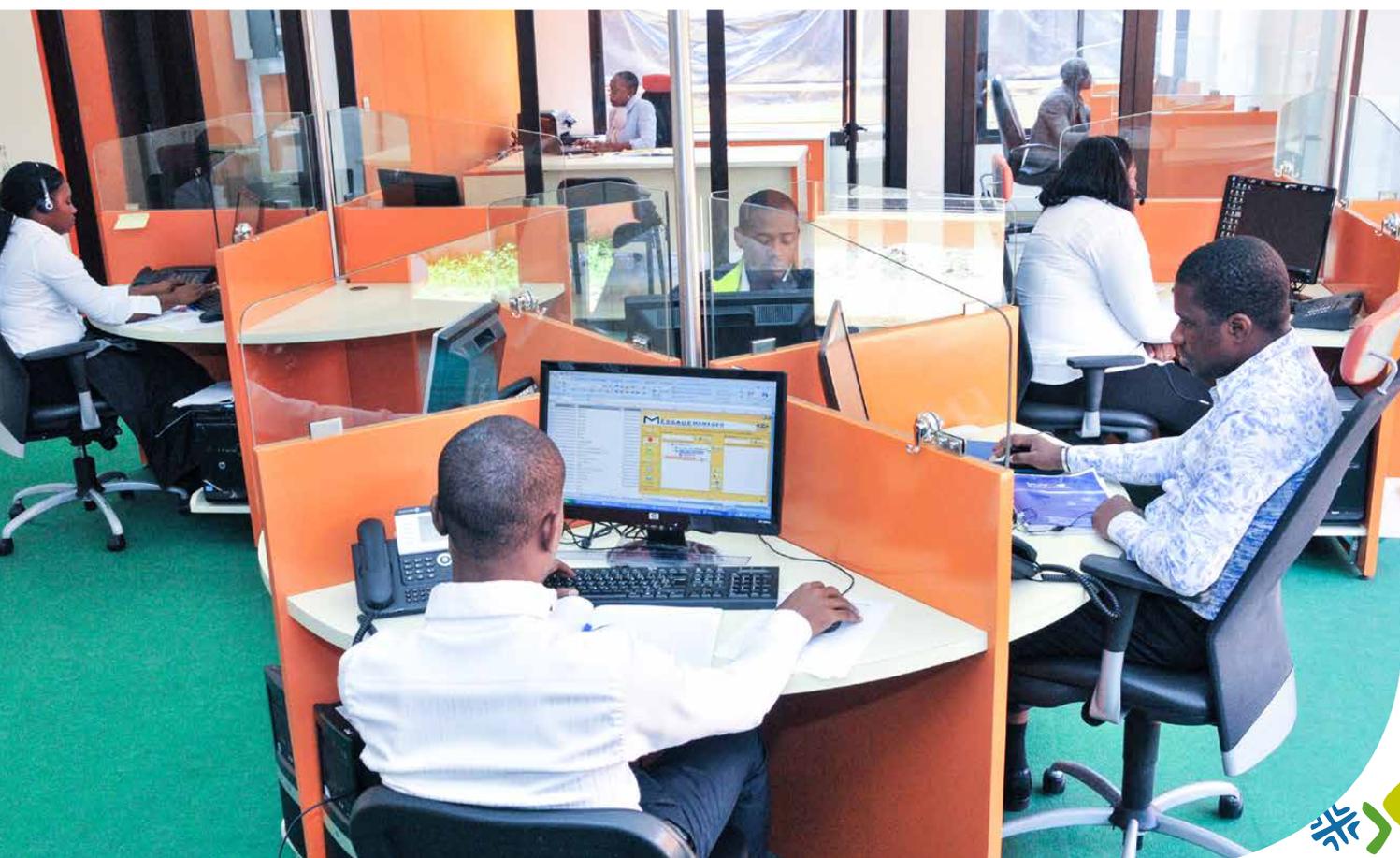
### Committees reporting to the Board Of Directors :

- **The Strategy Committee**, chaired by the Chief Executive Officer of the Eranove Group, has to review development proposals involving the Eranove Group. To do so, the project staff forwards digests of the conclusions from the technical, environmental, legal, human, economic and financial investigations of development projects to the committee. In particular it examines major proposals involving the Group. The Strategy Committee then submits the projects it receives to the Board of Directors before they are carried out.
- **The Audit Committee** broadly oversees issues relating to the preparation and control of accounting and financial information, especially the integrity of the Eranove Group's financial statements and the financial information preparation process, and the effectiveness of the internal control and risk management systems in providing financial and accounting information. The Board of Directors appoints members to the Audit Committee from among its members.
- **The Compensation and Appointments Committee** analyzes and approves decisions as to the appointment and compensation of the senior executives of the subsidiaries.



### Committees reporting to Senior Management :

- **The Operations Committee** is a decision-making body where the General Managers of the Group's companies present their action plans for improving their operational, social, environmental, contractual and other performance.
- **The Management Committee (COGES)** is the body that oversees the economic and financial results of Eranove Group entities. Each company in the Group has its own Management Committee.



4

# ACTUATING THE MOSAIC OF AFRICAN SKILLS FOR LONG-TERM PERFORMANCE

The Eranove Group pursues an employment policy that is innovative in Africa, creating sustainable jobs, promoting equal opportunity and skills development, and encouraging social solidarity among its employees for the benefit of their families.



Key figures for 2015



8,351 employees



745 new hires



Innovative employment policy combining social benefits with death and disability benefits



A training and skills development policy



Two training centers-for occupations in water and in electric power



Its management model and its human resources management strategy have enabled the Group to assemble a mosaic of African skills at each level of its operations. Owing to skills acquired by its employees and their familiarity with their areas, the Group adapts its businesses to different operating contexts, and to develop responses appropriate to the particular characteristics of each country and each occupation.

The Eranove Group encourages the development of these skills and strives to set a high standard by actuating the mosaic of African skills, respecting the cultures of its companies, its employees and the countries where they operate. The Group focuses particularly on the flourishing of its employees, promoting involvement and empowerment. It creates a work environment conducive to their well-being and that helps increase their motivation and ability to innovate.

It aims as well to increase access to training and knowledge. Awale, a startup in the Group, aims to develop high-speed data transmission capacity in Côte d'Ivoire. The Group founded Eranove Academy to develop and deliver educational and research programs in the Eranove Group business sectors. Furthermore, the Group encourages access to the internet, intranets and information systems to improve employee access to knowledge and information.

## A | PROMOTING SUSTAINABLE JOBS

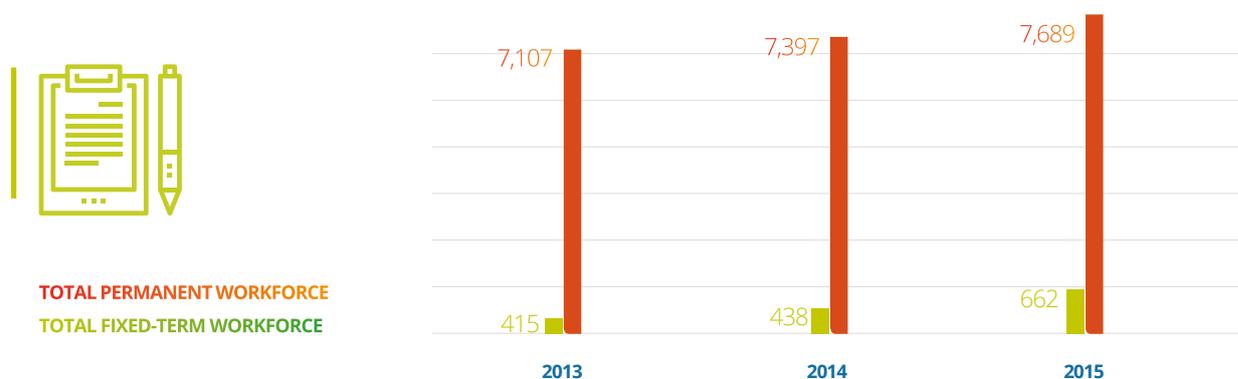
This principle takes the form of creating stable employment, hiring women and young people, employing the workforce in a region, compliance with national regulations and international standards, and promoting a framework for constructive management-labor dialog.

### Compliance with international laws

In compliance with the laws in force in the countries where it operates and with the principles of the International Labour Organization as to child labor, the hiring procedures of Group companies include a minimum age criterion of 18 years. The use of forced labor is naturally prohibited.

### Creating stable jobs, permanent vs. fixed-term contracts

The changes over time in human resources in the Eranove Group reflect the growth of its businesses. The graph below shows the breakdown of the Group's employees by type of contract as of December 31, 2013, 2014 and 2015.



The following graph shows the changes in hiring and dismissals in the Group over that same time :



NUMBER OF HIRES  
NUMBER OF DISMISSALS

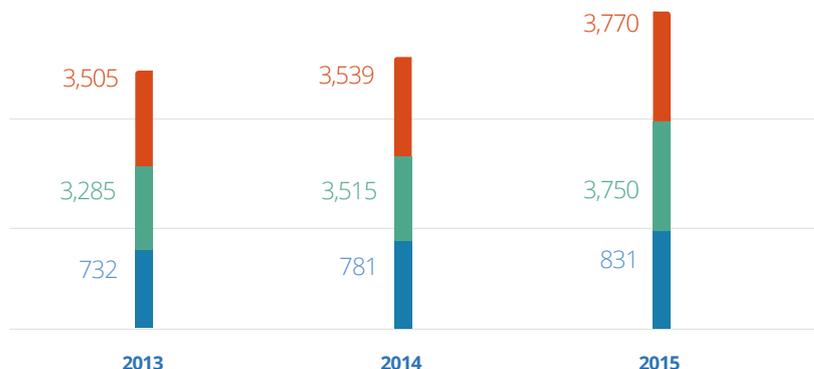


### Encouraging local hiring

The Group encourages hiring skills locally in the countries and regions where it operates. Local hiring is especially important at CIE, SDE and SODECI, which operate throughout their respective countries. This close relationship with the communities in the regions where the Group does business gives it a foothold in each region and improves its performance from a local point of view. That performance is illustrated by the limited number of expatriates working for Eranove SA (8 expatriates in 2015). (See also paragraph 6-A "Including local development in the conduct of our businesses.").



WORKFORCE : WORKERS  
WORKFORCE : SUPERVISORS  
WORKFORCE : MANAGERS

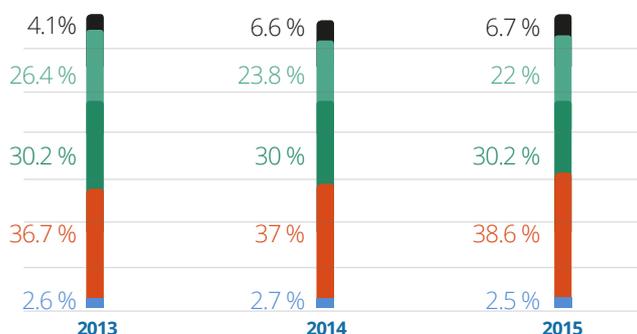


### Encouraging the hiring of young people

Efforts to hire young people have been conducted for several years, so as to ensure generational replacement. The fraction of employees under 36 years old rose from 39% to 41% from 2013 to 2015.



WORKFORCE AGED 56+  
WORKFORCE AGED 46-55  
WORKFORCE AGED 36-45  
WORKFORCE AGED 26-35  
WORKFORCE AGED 18-25



## Observance of working hours

Work schedules in the Group vary depending on the nature of the activity-technical operations, customer management, administration—and on the law of the countries where the work is done.

In Côte d'Ivoire and Senegal, the workday is eight hours long, or 40 hours per week. In France the work week is 35 hours. Hours beyond that for supervisors and workers are considered overtime, subject to legal and company rules and to approval by management.



The following table shows overtime by category for the year 2015 :



Hours  
324,753  
Hours of overtime,  
supervisors

Hours  
322,435  
Hours of overtime,  
workers



## Favoring competitive compensation and encouraging performance

The Eranove Group strives to pay its employees a fair and competitive wage. Each company carries out the compensation policy completely independently given the diversity of geographic locations, qualifications and skills required in their businesses.

In all of the companies, compensation includes a variable portion to reflect individual and/or group performance.

As regards key managers, the Eranove Group has created a compensation and appointments committee. Besides a fixed competitive compensation helping the retention of the best national talents, a performance-based bonus is accorded based on the achievement of operational objectives.

Performance-based bonus  
based on individual and  
group criteria



The following table shows the amount of average gross annual pay of the Group's companies, by socio-professional category.



euros (€)  
10,051  
Average gross  
annual pay

euros (€)  
27,301  
Average annual pay,  
Managers

euros (€)  
10,368  
Average annual  
pay, Supervisors

euros (€)  
5,933  
Average annual  
pay, Workers

## Sharing performance through ownership

The principal managers of the Eranove Group are shareholders of the Group, owning 6.9% of the equity. The employees of the Eranove Group's major subsidiaries also have an opportunity to own equity through mutual funds. Employee shareholders own a total of 8.9% of the equity.

## Encouraging management-labor dialog

The Eranove Group believes in good labor-management dialog in its companies. Besides complying with the regulations in force in each country where it operates, the Group is careful to respect the principles of freedom of association and collective bargaining recommended by the International Labour Organization, the principles of equal opportunity and gender equality, and is committed to fighting any kind of discrimination.

Each company has its own arrangements and chains of communication that enable detailed, useful dialog with unions, employee representatives and the employees as a whole. The companies hold regular meetings and seek to reach negotiated agreements, anticipating any crisis that might affect the execution of the public services it is there to provide.

At CIE and SODECI, discussions with the employee representatives are formalized through an important means of dialog, the Framework for Ongoing Dialog (French acronym CDP), which reinforces the practices that have been instituted and helps to anticipate any crisis that might paralyze the Group. These two companies also have a conciliation body, an Employment Appeal Board, which gets involved when a dismissed agent wants to contest the manner of or grounds for his

or her dismissal in order to be rehired.

CIPREL instituted a panel of delegates representing the employees, in accordance with the regulations that apply in Côte d'Ivoire. This constitutes the basis for labor-management discussions between senior management and the employees.

At SDE two panels of delegates representing the employees have been instituted, in accordance with the laws and regulations applying in Senegal. Meetings with them take place every month. These meetings constitute the basis for labor-management discussions between senior management and the employees, offering the employee delegates a chance to raise sensitive employment issues and to present grievances and suggestions.



### Summary of collective agreements at SDE

The lists of demands presented for 2015 by the five (5) unions in the company were the object of thorough negotiations between labor and management, resulting in agreements covering :

- Revaluation of bonuses (for cashiers, center supervisors, warehouse workers, scholarships, etc.) ;
- The rating of certain jobs (Accountant, Regional Director, Purchasing Agent) ;
- The revision of certain maximum ratings of jobs (invoicing agent, collection agent, production agent, inventory managers, dispatcher, plumber) ;
- The package for promotions and wages increases ;
- The introduction of certain plumbers into the process of reading customers' meters and setting a maximum reading.

The completion of these agreements was the result of strong labor-management discussions, which are a force for cohesion, change and performance, bringing peace and stability in the Company.

## Combating gender discrimination

Non-discrimination is one of the fundamental principles set forth in the ethical charters of the Group companies.

Company recruitment policies in line with non-discrimination in hiring



As regards the implementation of this principle, the recruitment policies of the Group companies include non-discrimination in hiring.

Supporting equal opportunity, the Eranove Group early on encouraged the recruitment of women.



**WORKFORCE : WOMEN**  
**WORKFORCE : MEN**



Pay scales limit wage discrimination, particularly as to gender



euros (€)  
**10,348**  
Average gross annual pay, Women

euros (€)  
**24,243**  
Average annual pay, Female Managers

euros (€)  
**10,072**  
Average annual pay, Female Supervisors

euros (€)  
**5,942**  
Average annual pay, Female Workers



### Approach to gender at SDE

Since its founding, SDE has taken a distinctive approach to HR in terms of gender, based on the following four (4) basic principles :

- Principle 1 : tailor the way you manage female personnel to observed reality ;
- Principle 2 : guarantee a healthy introduction of equity in gender diversity;
- Principle 3 : identify voluntary actions and policies that make the best use of the talents, skills and health of women ;
- Principle 4 : make a serious effort to manage women's professional careers equitably (i.e. responsibly).

This action plan has increased the representativeness of women within the SDE and in particular within the executive and supervisory colleges.

## Combating other forms of discrimination

Since there is no definition of "occupational handicap" in Côte d'Ivoire or Senegal, at this time it is not possible to track actions as to employees with disabilities.





## B | CAPITALIZING ON AND DEVELOPING SKILLS THROUGH TRAINING

The Eranove Group has committed to a strategy of increasing and developing the skills of its employees to meet its other commitments and realize its growth potential. These actions center on occupational skills and carried out with the objective of properly matching people to their jobs for all key employees. Two projects are under way to develop skills: "the skills program" and the training centers' "achieving excellence" program.



### The Skills Program

In 2012 the Eranove Group started a "skills program" that was carried out in each company.

The objective has been to obtain a perfect match of people skills with their jobs for key positions.

. At the outset, the human resources experts and the experts in each business line write together a list of skills for each job.

Later, the skills of the employees are rated against the skills expected.

This huge project resulted inter alia in a defined set of training needs for each employee.

Obtaining a perfect match of people to their jobs for key positions



### Excellence of the training centers



euros (€)  
5,622,540  
Training expenditures<sup>19</sup>

Hours  
130,239  
Hours of training<sup>20</sup>

The Group devotes significant efforts to training its employees. In each subsidiary, continual employee skill-building focuses on the occupations and specific nature of the sector. There is particular emphasis on technical and commercial aspects related to the core business via modules including plumbing, electromechanical maintenance, customer relationship management and the optimization of the managerial capacity of management teams.

In Côte d'Ivoire, the Group has two training centers: CIE's electrical training center based in Bingerville and SODECLI's water training center based in Yopougon in Abidjan, created to provide CIE and SODECLI employees with continuing education as well as initial training.

18 - All the expenses generated by training courses and awareness programs conducted by the end of the reporting period

19 - The breakdown of training hours only partly reflects the training effort made at each company. At CIE only the training hours provided at CIE's internal training center are recorded; the methodology for tracking training hours at SODECLI reflects training sessions and not total hours, which are thus under-counted; and ERANOVE CI does not track training hours

Additionally, The Group runs the "Eranove Academy" project, whose goal is to develop the excellence of the Group's Electricity and Water Training Centers. The goal is to meet the training needs of all those who work in the electricity and water sectors, primarily the needs of CIE and SODECI but also with regard to the Group's needs for development



### First offering of the electro-technical BTS certificate at CIE Training Center (CME)

September 21, 2015 was the start of the academic year for two classes in the electro-technical BTS program (BTS being a post-secondary certificate in technical education), as part of the "CAMPUS - Center of Excellence" project.

Created in 1970, the Electrical Vocational Center (French acronym CME) of Bingerville has historically been where occupational training in the Côte d'Ivoire electrical sector has taken place.

CME training courses cover all of the competencies required by an electric company, with a special emphasis on the core business: the techniques of production, transmission and distribution of electricity and sales management.

Faced with gaps in the training of young graduates who received their basic training in the occupations of the electrical sector, the Eranove Group made the decision with its CIE subsidiary to offer a first-rate electro-technical BTS certificate with the start of the 2015 academic year. A BTS that should also meet the Group's goals for excellence, and for actuating African skills.

CIE developed the curriculum. The training includes in-depth theoretical courses, with attention to practical work and to operational internships. Academic selectivity in admissions and half-yearly evaluations should maintain student performance at a high level.





## C | PROVIDING SOCIAL BENEFITS TO OUR EMPLOYEES

Taking inspiration from African traditional values of solidarity, the Group from the start has carried out a social policy that binds employees to the Group and to each other. This policy is broken down into several mechanisms or instruments for solidarity, healthcare, retirement and social financing. Employees automatically receive health insurance from the day they are hired. Death and disability benefits are also provided on terms specific to each company.

Our social policy,  
a traditional value  
of African solidarity



### Healthcare

In Côte d'Ivoire, CIE and SODECI have developed innovative social solidarity mechanisms that supplement the regulations that apply in Côte d'Ivoire. Employees enjoy social allowances and social assistance along with other welfare benefits. In terms of social allowances, CIE and SODECI have established a health insurance plan for active employees as well as a healthcare solidarity fund to cope with long-term illnesses such as AIDS, cancer and kidney failure. In particular, the CIE and SODECI company doctors do systematic screening for prostate and breast cancer for all employees over 50 years of age. This program also includes a retirement health insurance and by supplementary pensions.



### Mutual Fund

In terms of social financing, CIE and SODECI established a mutual fund for employees to invest in the equity of their company, supplemental insurance for water and electricity agents, and a solidarity fund that offers non-repayable grants to their employees experiencing an unexpected event.



### Family budgeting

Also at CIE and SODECI, a "managing the family budget" project has been in place since 2012. This program on managing the family budget encourages employees to practice saving and manage household income. Training and awareness sessions took place over time for all employees to familiarize them with the techniques for managing a family budget, setting up a savings plan and protecting the family's standard of living.



### Solidarity

In Senegal SDE is just as involved in social solidarity mechanisms for its employees. To improve the well-being of its employees, SDE, in association with its employees' unions, offers means of social advancement based on solidarity among all employees to generate more resources and broaden their life choices. A mutual support and solidarity fund supports, within predefined rules, any employees who encounter an unexpected event. A credit savings fund (French acronym FEC) allows employees, against contributions deducted from their wages, to receive zero-interest loans equal to the amount they have saved and capped at FCFA

2,000,000. A mutual fund (FCP-SDE) offers employees a savings product and a way to invest in the company's equity. The supplementary retirement fund (FRC) is an employee insurance policy that guarantees employees income or guaranteed principal called "supplemental retirement" because it comes on top of the pension from regulatory retirement. The housing promotion fund (FPH) can help any employee acquire a lot and/or build or renovate his or her dwelling. It also will finance the down payment required by financial institutions or private or public developers under various housing programs. Subscription is voluntary.

To ensure the viability of the SDE's funds, negotiations are held with the recipient funds to allow switching among the company's three social advancement tools-the housing promotion fund (FPH), the mutual investment fund (FCP) and the supplemental retirement fund (FRC). With switching, employees can obtain greater financing of their housing needs by pledging long-term resources available in their FRC and FCP.

# 5 HAVING OUR PROCESSES EVALUATED AND CERTIFIED, FOR CONTINUAL IMPROVEMENT OF QUALITY, HEALTH, SAFETY AND THE ENVIRONMENT

The Eranove Group has set itself the goal of being a benchmark in Africa in terms of operational quality and social responsibility. Each company deploys management systems and tools to meet performance expectations. They are developed gradually in keeping with the size of the companies and their different scopes of business. They are subject to external processes of evaluation and certification to confirm the quality and impact of their implementation and to identify opportunities for continual improvement.



- SODECI** Scope > plants producing drinking water for Abidjan
- CIE** Scope > interconnected production, transmission and delivery of power
- CIPREL** Scope > management of power plant construction projects and the operation and maintenance of such plants
- SDE** All scopes with the exception of the Khor plant (certified as to quality and safety)



**SDE**

EXEMPLARY - ALL SCOPES

**CIE**

CONFIRMED - SCOPE: INTERCONNECTED PRODUCTION, TRANSMISSION AND DELIVERY OF POWER

**CIPREL**

CONFIRMED - SCOPE: MANAGEMENT OF POWER PLANT CONSTRUCTION PROJECTS AND THE OPERATION AND MAINTENANCE OF SUCH PLANTS

## A | HAVING OUR PROCESSES CERTIFIED QUALITY-SAFETY-ENVIRONMENT

The Eranove Group has opted to have an integrated Quality-Safety-Environment management system. This allows the Group's companies to develop comprehensive management, to strengthen the efficiency of their operating processes and so improve their performance.

Each operating company implements the Quality standard ISO 9001 and the Environmental standard ISO 14001 of the International Organization for Standardization, as well as the Safety standard OHSAS 18001 of the British Standard Occupational Health and Safety Assessment Series (OHSAS). The French certification organization AFNOR regularly performs audits, which have resulted in the extension of the certifications.

The Eranove Group takes the certifications very

seriously, considering them indispensable to achieving its economic, societal, social and environmental goals. They represent the best way to limit the risks of its businesses, improve its know-how, and develop and distribute products and services to meet the needs and wants of their recipients.

Meeting QSE objectives is on the scorecard of executives in the operating companies and figure into the calculation of managers' compensation.



### Quality Certification

ISO 9001 version 2008 applies for certification relating to quality. It is based on principles of quality management, specifically strong customer-orientation, motivation and commitment by senior management, a process approach, and continuous improvement. The standard aims at ensuring that customers receive uniformly high quality services and products.

The table below shows the companies certified, with the certification standard used and the scope certified.

Company	Certification & version	Scope certified
CIE	ISO 9001, version 2008	Interconnected production, transmission and delivery of power
CIPREL	ISO 9001, version 2008	management of power plant construction projects and the operation and maintenance of such plants
SDE	ISO 9001, version 2008	All scopes
SODECI	ISO 9001, version 2008	plants producing drinking water for Abidjan; maintenance, engineering and construction work throughout the country





## Safety Certification

OHSAS 18001 is a standard aimed at providing companies with a tool for evaluating and certifying their management system with respect to workplace health and safety. The Group's companies have adopted several means of identifying, analyzing and treating work-related risks inherent in their business.

The table below shows the companies certified, with the certification standard used and the scope certified.

Company	Certification & version	Scope certified
CIE	OHSAS 18001, version 2007	interconnected production, transmission and delivery of power
CIPREL	OHSAS 18001, version 2007	management of power plant construction projects and the operation and maintenance of such plants
SDE	OHSAS 18001, version 2007	All scopes
SODECI	OHSAS 18001, version 2007	plants producing drinking water for Abidjan

The Group's goal is to have all of the scopes of its operating companies certified, and multi-year action plans in this regard are in progress.



## Environmental Certification

With ISO 14001 version 2004, our companies have a permanent set of guidelines for identifying their impacts on the environment, assessing them and specifying actions to reduce environmental impacts. This standard is based on the principle of making continuous improvement in environmental performance by controlling the impacts of a company's operations.

The table below shows the companies certified, with the certification standard used and the scope certified :

Company	Certification & version	Scope certified
CIE	ISO 14001, version 2004	Interconnected production, transmission and delivery of power
CIPREL	ISO 14001, version 2004	management of power plant construction projects and the operation and maintenance of such plants
SDE	ISO 14001, version 2004	All scopes with the exception of the Khor plant (certified as to quality and safety)
SODECI	ISO 14001, version 2004	plants producing drinking water for Abidjan

The Group's goal is to have all of the scopes of its operating companies certified, and multi-year action plans in this regard are in progress. Several actions taken pursuant to this standard are detailed in paragraph 2-C "Developing an environmental management system & improving waste management".

## B | ENSURING THE SAFETY OF OUR EMPLOYEES AND MEETING THE CHALLENGES OF PUBLIC HEALTH

Improving health and safety conditions in the workplace is a major component of the social policy of the Group's companies. The measures taken to protect the safety of employees in the performance of their jobs rely mainly on health and safety procedures under OSHAS 18001, together with actions taken by the Health, Safety and Work Conditions committees (French acronym CHSCT). The coordinator of QSE activities and the members of the CHSCTs, through their oversight, ensure that working conditions and safety measures in place comply with regulations and with the Group's social objectives. The various departments increasingly put their recommendations into action.

Multiple preventive measures are taken at the company level, including :

- ☀ Analysis and assessment of QSE risks ;
- ☀ Implementation of QSE action plans ;
- ☀ Audits and/or regulatory or technical inspection of plants and equipment ;
- ☀ Internal operating plans as required by regulations for classified sites, which are the "water and electricity" production sites and electrical transformation substations ;
- ☀ Mock audits for QSE certification ;
- ☀ Emergency management in response to critical situations identified ;
- ☀ Workplace inspections by the company medical team ;
- ☀ Visits by QSE management to identify rule violations or hazardous situations and provide solutions ;
- ☀ Holding weekly 15-minute safety sessions on site.

The Group employs a great many resources with regard to the health of employees and their families. Each company takes preventive measures backed up by preventive and therapeutic medical appointments, annual check-ups and special check-ups by its staff of occupational health physicians.

Group employees receive training and education about safety and work-related risks, as well as best practices regarding health and safety. Persons who need it receive an individual protective equipment kit, replaced every year. These efforts to educate and train have significantly increased over the last several years. Periodic audits take place to identify the major occupational hazards inherent in various jobs.

In addition to its general safety program aiming at "zero accidents of electrical origin" in 2015 CIE introduced road safety training in a partnership with CFAO Motors to train 802 agents who drive two-wheel motorized vehicles. The goal of this policy, which is not mandated, but provided on the Group's initiative, is to eliminate the number and seriousness of motorcycle and scooter accidents.

CIPREL folds the risk studies done before each project into the investment, in particular those carried out for the CIPREL IV projects. They then update a supporting document called "risk analysis" in light of the new risks and how they are managed. CIPREL also possesses technical means of preventing and combating risk of fire, explosion, electric shock and electrocution.

### Key figures for 2015 Health & Safety

196

Number of work accidents (excluding commuting)<sup>20</sup>

0.23

Accident severity rate<sup>21</sup>

10.48

Accident frequency rate<sup>22</sup>

20 - 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

21 - Paid days of lost time per 1,000 hours worked, i.e. number of days lost for temporary disability per 1,000 hours

22 - Number of accidents with lost time greater than one day, occurring in a given time per million hours of work.



## C | MEETING THE CHALLENGES OF PUBLIC HEALTH & SAFETY

The 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.

**98.6%**  
SODECI microbiological  
compliance rate in Abidjan  
in 2015



The facilities that the Group owns or manages on behalf of the government may present health risks to consumers and local residents. Strict national and international regulations govern these risks, and compliance 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.

The Eranove Group takes care to avoid any incident that might affect the quality of the drinking water or the electric power provided to consumers. The same care applies according to risks in the management of facilities that might lead to industrial accidents at production sites and in the operation of transmission and distribution infrastructures for water and electricity.

In the drinking 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.

Accordingly, the rates of microbiological compliance are tracked at SDE (97.4% in 2014) and SODECI (98.6% in Abidjan and 93.2% in the interior in 2015.).

As an example, through SODECI the Group has begun studies on building an ISO 17025 accredited laboratory for analyzing water quality.

**97.4%**

SDE microbiological  
compliance rate  
in 2014



## D | DEVELOPING OUR CORPORATE SOCIAL RESPONSIBILITY PROGRAM AND HAVING IT EVALUATED

Because it is concerned with contributing to sustainable development, the Eranove Group has always measured itself on how it has improved its overall performance : economically, socially and environmentally. The operating companies CIE, SODECI, CIPREL and SDE have thus taken on their own CSR programs.



### Use of international benchmarks

Each operating company produced its own sustainable development report for 2014. CIE, CIPREL and SODECI followed the guidelines of the Global Reporting Initiative 4 to produce their reports.

In keeping with the QSE certification process under way and to support its sustainable development policies, the Eranove Group encourages its operating companies to develop their social responsibility by following ISO 26000 of the International Organization for Standardization (ISO), which sets the guidelines and objectives in this area.

Their performance has been or will be evaluated against the AFAQ 26000 guidelines. The following table shows the companies and the scopes evaluated, as well as the results of the last evaluation :

Company	Evaluation Benchmark	Result of last evaluation	Scope
CIE	AFAQ 26000	Confirmed (2014)	interconnected production
CIPREL	AFAQ 26000	Confirmed (2014)	management of power plant construction projects and the operation and maintenance of such plants
SDE	AFAQ 26000	Exemplary (2015)	All scopes

The Group's goal is to have all of the scopes of its operating companies certified at least "Mature", and multi-year action plans in this regard are in progress.



### The CSR reporting system

To make the reporting of extra-financial performance indicators more uniform and systematic, the Group has begun a project to install a shared information system across all the companies. It will track and consolidate CSR indicators so that all its sustainable development actions are recorded in a CSR management system. Its phase-in calls for a first group of indicators to be put into the system in 2016.





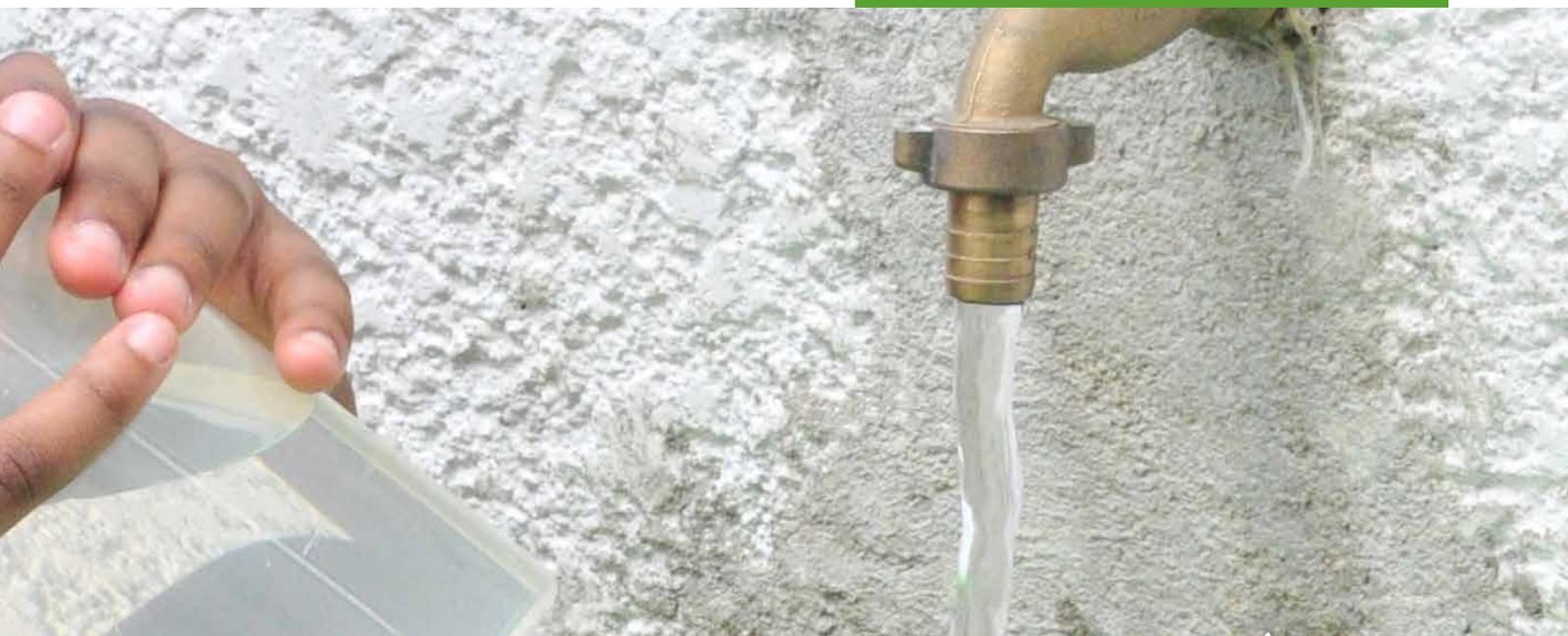
## The Group's governance as to CSR

The Group builds its sustainable development strategy around its management policy and QSE process, and its ISO 26000 CSR program furthers this strategy. Reflecting this history, the organization and implementation of the CSR policy rely largely on the combined skills of the personnel in charge of Human Resources and QSE, with the committed support of the companies' senior management. Faced with the major challenge that compliance represents for the Group, each company has also developed an ethics organization consisting of an ethics committee and a chairman.

In parallel, 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 multiply the initiatives arising from the application of sustainability in the Group. The parent company leads this business-line.

Organizing into circles like this makes it possible to bring Group issues (experience-sharing, corporate culture, continual improvement, cross-business projects) into line with the particular nature and culture of each company.

2015: Eranove Group creates a sustainable development circle from its business lines



6

# CONTRIBUTING TO THE DEVELOPMENT OF OUR LOCAL COMMUNITIES

The Eranove Group has left a strong mark on its regions, consisting of a multitude of production sites, transmission and distribution networks, agencies and offices spread over its territories. It strives to contribute positively to local development through the conduct of its business activities, just as it tries to contribute to the development of the communities that host its operating sites.



Contribution to the development of our host communities

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Network of agencies  
and production plants  
throughout each  
nation

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Policy of buying and  
hiring locally

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## A | INCLUDING LOCAL DEVELOPMENT IN THE CONDUCT OF OUR BUSINESSES

The Eranove Group makes itself a local partner to towns, populations and businesses by weaving itself into the local economy, through the use of local suppliers and through its human resources policy.

Its companies' businesses by their very nature contribute to local development, in the activities made possible by having water and electricity, which help regions attract more business. Its economic impact on communities is also a source of local job creation, by its companies directly or due to their procurements from local businesses.

To fulfill their missions as public utilities, CIE, SODECI and SDE operate throughout their nations, with a workforce divided into regional divisions and agencies located nearby to serve customers better. For example, in 2015, 65 of the 118 people given permanent employment contacts by SODECI filled positions in the regional divisions in the interior of the country.



### Local job creation at CIE and CIPREL

CIPREL identified an opportunity to create temporary manpower among its neighboring residents. Since removing filters from ventilation housings (air being the fuel used in generating power thermally) does not require complex technical expertise, local people were hired through temporary employment agencies and given training in-house.

In the hydroelectric plants of Côte d'Ivoire operated by CIE, groups of women organized into associations help maintain the dikes.

Additionally, the Group makes efforts to lessen the impacts that its activities might have on the local communities. This objective is evident in all the Eranove Group business lines and is found as well in projects under development. The Eranove Group is studying several projects, particularly for producing electricity in Africa, and each one includes a section of environmental and social studies performed by the best professionals in the sector. These studies are especially helpful in measuring the impact of projects on the communities and identifying, prior to construction, the best means of tying local communities into the projects.

The Eranove Group by its very nature contributes to local development, by providing water and electricity, which help regions attract business.



## B | CONTRIBUTING TO THE DEVELOPMENT OF OUR HOST COMMUNITIES

Very early on, the Group integrated its host communities into building a shared vision, actively participating in their economic and social life.

These regional footholds prompted local development efforts in several villages where the Group added to local capacities. An approach gradually became standard practice, applying a portion of the Group's management model to the local communities: training villages in participative management, assisting with social organization, providing tools to identify sources of wealth, promoting a family savings culture and managing village resources sustainably.

Marcel Zadi Kessy, former Chairman of the Board of Directors of CIE and SODECI, developed a "local development and village community management" program in Côte d'Ivoire. This project, carried out in collaboration with the NGO Yveo, consisted of training village communities in participative management, offering tools of modern governance for the social organization of the village, encouraging them to reconsider how their village could be developed, and



identifying opportunities for creating income-generating businesses that favor sustainable management of resources and the environment.

- ☀ CIE commissioned YVEO to conduct the program in four villages lying close to its hydroelectric production sites, Gbily, Taabo, Kossou and Tchetaly, under a three-year agreement (2013-2015) for FCFA 420 million (€640 K);

- ☀ SODECI commissioned an YVEO program with the village of Zimenguhe under a three-year (2013-2015), FCFA 115 million (€175 K) agreement, as it is a village close to its Daloo water treatment facility ;

- ☀ CIPREL supported an YVEO program in Lolobo under a three-year (2013-2015) agreement for FCFA 112 million (€170 K).

All provide assistance to village communities and local enterprises with actions that fall into three categories: the organization and management of the town, the creation of wealth and management of revenues, and the environmental management and protection of biodiversity. The work done is divided into eight classifications: social engagement and governance, regional development, entrepreneurship training, access to micro-financing, management of individual and community resources, promotion of environmentally friendly values and good citizenship, health and the environment, beautification and maintenance of community infrastructures. Phase one, which consisted of writing a development plan, was accomplished and submitted to the localities.

In Senegal, SDE has invested in supporting religious communities, both Catholic and Muslim, particularly around major religious events. These events attract great crowds, presenting an acute problem in one-time water supply. So human (SDE personnel) and material (water treatment equipment and products) resources are put to work by SDE outside of its remit in order to meet these challenges.

As regards new projects the Group is going to develop, Eranove would like to be able to better measure the societal performance of its activities with local communities by having a monitoring system, one developed and used in close collaboration with an NGO.

## C | EXTENDING OUR CSR APPROACH TO OUR PROVIDERS

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, incentivizing them to observe fundamental ethical principles.

This work has only begun; but already environmental and social criteria form part of requests for bids, such as those for the CIPREL IV combined cycle.

As part of its responsible procurement approach, CIE has begun a program to educate and train its suppliers so that they will take sustainable development issues into account, especially those to do with conservation and the safety of their employees. These first efforts resulted in CIE's drafting a Purchasing and Sustainable Development policy in 2015.

Training in participative village management, tools to identify sources of wealth, promotion of a family savings culture and sustainable management of village resources



# CONCLUSION

## DEVELOPING TRUSTED PARTNERSHIPS TO DEPLOY SUSTAINABLE DEVELOPMENT IN ITS SPHERE OF INFLUENCE

While water and electricity are recognized as fundamental rights, in Africa nearly 620 million people have no access to electricity and 319 million have no access to drinking water.

As a leading industrial enterprise in West Africa in public service management and in the production of electricity and drinking water, the Eranove Group is at work making these essential services accessible to as many people as possible.



## **In the Eranove Group, an integrated approach to sustainable development**

Highly aware of the challenges and the opportunities for sustainable development, the Eranove Group takes a total performance approach that includes technical, economic, social, societal and environmental aspects.

Its Quality, Safety & Environment certifications against ISO benchmarks and the assessments conducted by ISO against the AFAQ 26000 standards are part of this approach and enable the Group's continual improvement.

**2015 was a year when the Eranove Group was eager to present its scorecard and sustainable development goals.** Reaching this stage has allowed us to formalize a group-wide policy by identifying certification performance levels and the future improvements required.

This communications and leveraging approach has also led to two international publications—a teaching case in international marketing and organizational management<sup>23</sup>, and an article in a publication on developing public-private partnerships in the green economy in Africa<sup>24</sup>.

The Eranove Group intends to continue its efforts to improve its performance in terms of social responsibility and capitalize on these actions to make them long-lasting.

## **Enlist stakeholders in accomplishing Agenda 2030**

The Eranove Group is nonetheless aware that within the Group it does not have all the necessary resources to meet the needs and wants of present and future generations. Collaboration from all its stakeholders is indispensable.

Accordingly, the Eranove Group and its operating subsidiaries have entered into trusted partnerships with their stakeholders, each holding additional resources to mobilize to contribute collectively towards the accomplishment of Agenda 2030 in the water, sanitation and electric power sectors on the African continent.

National governments and lenders are able to develop balanced operating frameworks for financing the development of these sectors, guaranteeing affordable access and encouraging private operators.

The latter are able to commit to improving the utilities delivered, getting involved in national discussions about access for the very poor and constantly reducing their costs and technical losses.

Employees, consumers and local communities also play a role in a set of actions whose quality will contribute to the development of sustainable patterns of production and consumption.

**In particular, ongoing cooperation between the private sector companies and the concession granting authorities will be the keystone in accomplishing the objectives of Agenda 2030.**

For that to happen, appropriate legislative frameworks and institutional arrangements that allow the emergence of public-private partnerships will be prerequisites. These will clearly define the missions and the responsibilities of the different players.

Beyond meeting their performance objectives, the companies of the Eranove Group work alongside the government to improve service to the population, take part in the national discussions about access for the very poor to essential services, anticipate future challenges by proposing capital improvement plans and assisting in the completion of large-scale projects.

This trusted partnership runs in both directions, as it also means the government will honor its commitments. This ability to work together, whether on day-to-day matters or strategic options, is the sine qua non for jointly attaining the Agenda 2030 objectives.

23 - *International marketing: markets, cultures and organizations, 3rd edition 2015, by Nathalie Prime and Jean-Claude Usunier, p. 427: Business case : Eranove : Water, electricity and green economy in Sub-Saharan Africa*

24 - *Sustainable development and the emergence of Africa, 1st edition 2015, by Remy Allah-Kouadio, Minister of the Environment, Urban Health and Sustainable Development of Côte d'Ivoire; Bobacar Cissé, Deputy Special Representative of the Secretary General of the UN and Coordinator of UNS agencies in Côte d'Ivoire; Luc-Joël Grégoire, Country Director of the United Nations Program for Development in Côte d'Ivoire, p. 113: Public-private partnerships for a green economy: the case of Eranove in West Africa,*



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# APPENDICES

## **APPENDIX I**

GRENELLE II CROSS-REFERENCE TABLE

## **APPENDIX II**

NOTE ON METHODOLOGY

## **APPENDIX III**

HUMAN RESOURCES PERFORMANCE INDICATORS

## **APPENDIX IV**

ENVIRONMENTAL PERFORMANCE INDICATORS

## **APPENDIX V**

REPORT OF THE INDEPENDENT THIRD-PARTY ORGANIZATION

# APPENDIX I

## GRENELLE II CROSS-REFERENCE TABLE

GRENELLE II INFORMATION	LOCATION IN THE REPORT
<b>SOCIAL DATA</b>	
<b>•EMPLOYMENT</b>	
Total workforce and breakdown of employees by gender, age and geographical region	4.A
New hires and dismissals	4.A
Compensation and changes over time	4.A
<b>•WORK SCHEDULES</b>	
Working hours	4.A
Absenteeism	4.A
<b>•EMPLOYER-EMPLOYEE RELATIONS</b>	
Arrangements for employer-employee discussions, including procedures for providing information and consultation and negotiation with the personnel	4.A
Summary of collective agreements	4.A
<b>•HEALTH &amp; SAFETY</b>	
Workplace health & safety conditions	5.B
Summary of agreements signed with unions or employee representatives as to workplace health and safety	5.B
Workplace accidents, including their frequency and severity, as well as occupational illnesses	5.B
<b>•TRAINING</b>	
Policies implemented in terms of training	4.A
Total number of hours training	4.A

## APPENDIX I

### GRENELLE II CROSS-REFERENCE TABLE

GRENELLE II INFORMATION	LOCATION IN THE REPORT
<b>•NO DISCRIMINATION</b>	
Measures to promote gender equality	4.A
Measures to promote the employment and inclusion of disabled workers	4.A
Anti-discrimination policy	4.A
<b>•PROMOTION AND OBSERVANCE OF THE CORE CONVENTIONS OF THE ILO CONCERNING:</b>	
Freedom of association and the right to collective bargaining	4.A
Elimination of discrimination in respect of employment and occupation	4.A
Elimination of forced or compulsory labor	4.A
Effective elimination of child labor	4.A
<b>ENVIRONMENTAL DATA</b>	
<b>•GENERAL ENVIRONMENTAL POLICY</b>	
How the Company is organized to deal with environmental issues and, if applicable, the steps it takes for environmental evaluation and certification.	5.D
Measures to train and inform the employees concerning environmental protection	5.D
Ways and means of preventing environmental hazards and pollution	2.C
The amount of accounting provisions and coverage for environmental risks, provided that this information shall not be such that it might cause the Company serious prejudice in an ongoing lawsuit	2.C
<b>•POLLUTION AND WASTE MANAGEMENT</b>	
Measures for preventing, reducing or repairing discharges into the air, water or soil with a serious impact on the environment	1.D 2.C

## APPENDIX I

### GRENELLE II CROSS-REFERENCE TABLE

GRENELLE II INFORMATION	LOCATION IN THE REPORT
Waste prevention, recycling and elimination measures	2.C
Mitigating noise pollution and any other form of pollution specific to an activity	2.C
<b>•SUSTAINABLE USE OF RESOURCES</b>	
Water usage and supply in keeping with local constraints	2.A 2.B
Consumption of raw materials and measures taken to use them more efficiently	2.A 2.B 2.D
Energy consumption, measures taken to improve energy efficiency and use of renewable energy	1.A 2.A 2.B 2.D
Land usage	2.A
<b>•CLIMATE CHANGE</b>	
Emission of greenhouse gases	2.D
Adaptation to the consequences of climate change	2.D
<b>•PROTECTION OF BIODIVERSITY</b>	
Measures taken to preserve or enhance biodiversity	2-A

## ACTIONS TAKEN IN SUPPORT OF SUSTAINABLE DEVELOPMENT

### •LOCAL ECONOMIC AND EMPLOYMENT IMPACT OF THE BUSINESS

Impact on employment and regional development	6.A
On the neighboring or nearby community	1.B 6.A 6.B

## APPENDIX I

### GRENELLE II CROSS-REFERENCE TABLE

GRENELLE II INFORMATION	LOCATION IN THE REPORT
<p><b>•RELATIONSHIPS WITH PERSONS OR ORGANIZATIONS WHO HAVE AN INTEREST IN THE COMPANY'S ACTIVITIES, PARTICULARLY INCLUDING ASSOCIATIONS FOR SOCIAL INCLUSION, EDUCATIONAL ESTABLISHMENTS, ASSOCIATIONS FOR ENVIRONMENTAL PROTECTION, CONSUMER ASSOCIATIONS AND NEIGHBORING POPULATIONS</b></p>	
Manner in which the Company interacts with these persons or organizations	1.C
Partnering or sponsoring undertaken	6.B
<p><b>•SUBCONTRACTING AND SUPPLIERS</b></p>	
Inclusion in purchasing policy of employment-related or environmental issues	6.C
Importance of subcontracting and inclusion in supplier and subcontractor relations of their employment-related and environmental responsibility	6.C
<p><b>•FAIR BUSINESS PRACTICES</b></p>	
Initiatives to prevent corruption	3.B
Measures taken for the sake of consumers' health and safety	5.C
<p><b>•OTHER ACTIONS TAKEN ON BEHALF OF HUMAN RIGHTS</b></p>	
Other actions taken on behalf of human rights	3.B

# APPENDIX II

## NOTE ON METHODOLOGY

### BACKGROUND

French Law 2010-788 promulgated 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.

The indicators used by Eranove 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 environmental impact, this report presents the strategy, commitments, accomplishments and plans of the Eranove Group in terms of corporate social responsibility (CSR) for FY2015.

Moreover, Eranove 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 extra-financial report by the Eranove Group is the first exercise of its kind for Eranove and represents the results of the best efforts made 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.

### METHODOLOGICAL ISSUES IN THE REPORTING SYSTEM PROCEDURE AND TOOLS OF THE REPORTING SYSTEM

Given the increasing importance of CSR in the Eranove Group, in order to broaden reporting to all CSR topics and improve the monitoring of the CSR of the companies, in November 2014 the senior management of Eranove Group began a project called the "CSR management system" project (French acronym SMES) for extra-financial reporting.

Accordingly, an information system for gathering and consolidating CSR data will be installed, in the form of a software application that has been selected and assigned to a department for deployment. A first set of indicators will be put into the application in 2016 and should thus be usable in the next CSR annual reporting period.

For this first CSR report for FY2015, the extra-financial reporting was therefore done outside of this tool. The Group created an ad hoc Excel file titled "Table of indicators", circulated it so that each Eranove subsidiary could fill it in, and then consolidated it. This file will serve as the methodological basis for the initial scope of consolidation in the CSR application.

This document also constitutes the reference manual used by the Group in that it specifically shows, for each indicator, a unique identifying number, a name, a method or formula for calculation, the reporting period, the reported units, the scope covered, observations and yearly columns for reporting the data.

## APPENDIX II

### NOTE ON METHODOLOGY

#### 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.

Then the list was added to 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 CSR INDICATORS

A first series of indicator definitions was proposed by the holding company 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 holding company 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.

#### ORGANIZATION OF THE REPORTING SYSTEM

This first CSR reporting was done using the existing organization, and therefore brought together the expertise of the QSE, CSR, HR and management control staff of the subsidiaries and the holding company. Specifically :

- The project was implemented by the Business-line Sustainable Development Group, which includes the sustainable development or CSR officer of each company in the Group and is led by an Eranove executive designated as the project leader ;
- A liaison from senior management of each company (Deputy General Manager for administration and finance or the Corporate Secretary) was brought into the process to see that good progress was made and that a possibly wider network of contributors was used ;
- Beyond the Sustainable Development Group, the network of contributors was broadened, when needed, to the control staff for methodological support and collection of the financial data reported and to the HR department for the collection of employment and social data ;
- The values of the indicators were filled in by contributors from the different operating activities on the "Table of indicators" spreadsheet and then analyzed, checked and consolidated by the project leader and the Eranove HR assistant (see Auditing of Data).

#### AUDITING OF DATA

It should be noted that the pre-existing HR reporting system and the system used for QSE certifications and CSR assessments facilitated the collection and the reliability of the information.

The major subsidiaries undertake consistency audits of their entity's data through communications among the various departments that track the indicators.

The executive acting as project leader and the Eranove HR assistant conduct second-level audits to ensure the consistency of the data and the proper application of the Group's definitions across all entities. These audits consisted of checking for consistency over time of the yearly indicators, analyzing in greater depth the information reported through communications (telephone and email) with the contributors, checking consistency between companies based on company size and speaking with several people about the same indicator.

#### SCOPE

In terms of employment-related and societal disclosures, the information published in this report refers to all of the active companies in the Eranove Group, namely CIE, SODECI, CIPREL, SDE, ERANOVE CI, ERANOVE SA, AWALE and GS2E. Entities with no employees are not included: SIDIP, Eranove Academy and Kenié.

Work done under management or services contracts is not included in the reporting system.

## APPENDIX II

### NOTE ON METHODOLOGY

As regards environmental information, the reporting scope includes only companies having significant operating activity in 2015 and whose business is relevant in terms of environmental impact-i.e. CIE, SODECLI, CIPREL and SDE. The legal entities ERANOVE CI, ERANOVE SA, GS2E, AWALE, SIDIP, Eranove Academy and Kenié are therefore not included in the scope.

For all information, year-on-year comparisons are based on like-for-like scope.

The scope may be restricted in certain cases, and if so that is indicated.

### DISCLAIMER AND LIMITATIONS ON THE METHODOLOGY

- In the absence of a legal definition of workplace handicap in Côte d'Ivoire and Senegal, the tracking of this indicator in the Group's subsidiaries is incomplete and only partially reflects handicaps as understood in French labor law. The decision was therefore made not to put this information into the CSR reporting system.
- The training reported only partially represents the Group's training efforts. Some of the Group's companies, such as CIE, do not thoroughly track the training provided, particularly in outside training organizations. Moreover, the reporting of in-house training at SODECLI reflects the number of sessions and not the total number of students.
- 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 December 31 times the monthly hours for a 40-hour work week times 12 months.
- Absenteeism is calculated on absences for workplace accidents, unpaid time off, unauthorized absences, sick days and lay-offs
- The calculation of workplace accidents at CIE includes interns
- Information concerning the summary of agreements signed with unions or employee representatives as to workplace health and safety and work-related illness is not currently available. A reporting process is now being put in place so that this information can be transmitted to the Group.
- In converting energy into GWh the following conversion factors were used :
  - Natural gas: 1 m<sup>3</sup> = 36.43 MJ = 10.12 kWh
  - DDO, HVO, Fuel oil/diesel, Gasoline: 1 liter = 36 MJ = 10 kWh
- The calculation of greenhouse gas emission was done on the ADEME carbon basis (ADEME = French Agency for Environment and Energy Management) (<http://www.bilans-ges.ademe.fr/>):
  - for electricity consumption of headquarters, offices and plants-
    - Côte d'Ivoire electricity EF = 0.445 kgCO<sub>2</sub>e/kWh
    - Senegal electricity EF = 0.637 kgCO<sub>2</sub>e/kWh ;
  - for fuels :
    - Gasoline EF = 0.314 kg CO<sub>2</sub>e/kWh LHV
    - Road diesel EF = 0.323 kgCO<sub>2</sub>e/kWh LHV ;
  - For DDO and HVO
    - Heavy fuel EF = 0.325 kgCO<sub>2</sub>e/kWh LHV or 91kg CO<sub>2</sub>e/GJ ;
  - For natural gas :
    - Natural gas EF = 0.244 kg CO<sub>2</sub>e/kWh LHV or 67.7 kgCO<sub>2</sub>
  - For fuel oil/diesel used in electrical generators
    - Diesel EF = 0.323 kgCO<sub>2</sub>e/kWh LHV

## APPENDIX III

### PERFORMANCE INDICATORS, HUMAN RESOURCES

INDICATOR NAME	INDICATOR DEFINITION	UNIT	2015
<b>COMPANY WORKFORCE</b>	<b>THE WORKFORCE IS DEFINED AS THE SUM OF UNLIMITED-TERM CONTRACTS AND FIXED-TERM CONTRACTS. IT DOES NOT INCLUDE INTERNS, APPRENTICES, VOLUNTEERS, CONSULTANTS, TEMPORARIES, DAY-WORKERS OR SUBCONTRAC.</b>		
Total company workforce	Total number of employees of the company under an unlimited-term contract and those under a fixed-term contract.		8,351
Total workforce Managers	Total number of managers of the company under an unlimited-term contract and those under a fixed-term contract.	# People	831
Total workforce Supervisors	Total number of managers of the company under an unlimited-term contract and those under a fixed-term contract.	# People	3,750
Total workforce operatives	Total number of operatives of the company under an unlimited-term contract and those under a fixed-term contract.	# People	3,770
Of which female workforce	Total number of female employees of the company under an unlimited-term contract and those under a fixed-term contract.		2,023
Total workforce female managers	Total number of female managers of the company under an unlimited-term contract and those under a fixed-term contract.	# People	230
Total workforce female supervisors	Total number of female supervisors of the company under an unlimited-term contract and those under a fixed-term contract.	# People	1,139
Total workforce female operatives	Total number of female operatives of the company under an unlimited-term contract and those under a fixed-term contract.	# People	654
Workforce breakdown by age	Total number of employees of the company breakdown by age at the reporting date.		8,351
Under 25 years	Total number of employees aged over or equal to 18 years old and strictly under 26 years old at the end of the reporting period.  NB: Until the 26th birthday, the employee is always 25 years old.	# People	212
From 25 to 35 years	Total number of employees aged over or equal to 26 years old and strictly under 36 years old at the end of the reporting period.  NB: Until the 36th birthday, the employee is always 35 years old.	# People	3,220

## APPENDIX III

### PERFORMANCE INDICATORS, HUMAN RESOURCES

From 36 to 45 years	Total number of employees aged over or equal to 36 years old and strictly under 46 years old at the end of the reporting period.  NB: Until the 46th birthday, the employee is always 45 years old.	# People	2,520
From 46 to 55 years	Total number of employees aged over or equal to 46 years old and strictly under 56 years old at the end of the reporting period.	# People	1,836
56 years and older	Total number of employees aged over or equal to 56 years old at the end of the reporting period.	# People	563
Total workforce breakdown by type of contract	Total number of employees under fixed-term contract and under unlimited-term contract.		8,351
Total workforce fixed-term contract	Total number of employees under a Fixed-Term Contract at the reporting end date	# People	662
Total workforce unlimited-term contract	Total number of employees under an unlimited-term Contract at the reporting end date	# People	7,689
<b>TRAINING</b>	<b>TRAINING IS DEFINED AS THE ACTION TO GIVE TO SOMEONE, TO A GROUP, THE KNOWLEDGE NECESSARY TO THE EXERCISE OF AN ACTIVITY ACCORDING TO A WELL FORMALIZED PROCESS (SPECIFICATIONS, TRAINING PLAN...), ON THE ONE HAND, AND TO MAKE SOMEONE, A SENSITIVE GROUP, RECEPTIVE TO SOMETHING FOR WHICH HE DID NOT SHOW INTEREST, ON THE OTHER HAND.</b>		
Training expenditures	All of the expenses generated by training and awareness programs conducted at the end of the reporting period. These expenses relate only the direct costs of training and awareness-raising hours carried out in the Group's training centers or in external training centers and cabinets either at home or abroad.	euros (€)	5,622,540
Training hours <sup>25</sup>	Total sum of hours spent by all workforce of employees under unlimited-term contract and fixed-term contract during training and awareness classes received in the reporting period.	# Hours	130,239
<b>COMPENSATION</b>	<b>SUM OF GROSS COMPENSATION PAID TO ALL EMPLOYEES OF THE COMPANY, EXCLUDING IN-KIND BENEFITS AND EMPLOYER CONTRIBUTIONS.</b>		
Total company payroll	Sum of gross compensation paid to all employees of the company, excluding in-kind benefits and employer contributions.	euros (€)	84,156,449

25 - The breakdown of training hours only partly reflects the training effort made at each company. At CIE only the training hours provided at CIE's internal training center (CME) are recorded; the methodology for tracking training hours at SODECLI reflects training sessions and not total hours, which are thus undercounted; and ERANOVE CI does not track training hours

## APPENDIX III

### PERFORMANCE INDICATORS, HUMAN RESOURCES

Average gross annual pay	Average of all employees in the company's workforce before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	10,051
Average annual pay, Managers	Average of all earnings of the workforce Managers of the company before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	27,301
Average annual pay, Supervisors	Average of all earnings of the workforce Supervisors of the company before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	10,368
Average annual pay, Operatives	Average of all earnings of the workforce Operatives of the company before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	5,933
Average annual gross pay, Women	Average of all earnings of the workforce women of the company before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	10,348
Average annual pay, Female Manager	Average of all earnings of the workforce female managers of the company deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	24,243
Average annual pay, Female Supervisors	Average of all earnings of the workforce female supervisors of the company before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	10,072
Average annual pay, Female Operatives	Average of all earnings of the workforce female operatives of the company before deductions of mandatory contributions. In-kind benefits are included in this average.	euros (€)	5,942
<b>WORKPLACE ACCIDENTS</b>	<b>AN UNINTENDED EVENT ARISING FROM EMPLOYEES INVOLVING DAMAGES ARISING OUT OF OR IN CONNECTION WITH ITS WORK, WHATEVER CAUSED.</b>		
Number of workplace accidents involving and no lost time excluding trips	<p>Workplace accidents involving and no work stoppage, excluding accidents during trips between home and the workplace and between the workplace and the location of meal breaks.</p> <p>NB: A commuting accident is an accident that occurs</p> <ul style="list-style-type: none"> <li>- between the home and the workplace,</li> <li>- between the workplace and the place where the employee goes to take his or her meal.</li> </ul>	number	196

## APPENDIX III

### PERFORMANCE INDICATORS, HUMAN RESOURCES

Number of workplace accidents involving lost time excluding trips	Workplace accidents involving paid work stoppage on medical prescription, 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	182
Number of fatal workplace accidents	Workplace accidents involving the immediate or delayed death of the employee.	number	2
Number of lost days	Sum of lost days obtained on medical prescription allowing employees to interrupt their job with payment of a daily compensation to make up for wages.	days	3,973
Severity rate	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.	rate	0.23
Frequency	Frequency is the number of accidents with lost time greater than one day, occurring in a given time per million hours of work.	rate	10.48
<b>WORKED HOURS</b>	<b>TIME ALLOCATED BY THE EMPLOYEE TO THE EMPLOYER IN THE EXERCISE OF HIS ACTIVITY. WORKING TIME IS REGULATED BY LAW AND / OR COLLECTIVE AGREEMENTS. NB: THE LEGAL ANNUAL WORKING TIME IS NOT NECESSARILY EQUAL TO THE ACTUAL DURATION OF WORK (OVERTIME, UNUSED LEAVE, ILLNESS, ADDITIONAL LEAVE ETC.)</b>		
Total theoretical worked hours breakdown by category	Work time regulated by law and/or collective agreements.	Hours	17,364,548
Worked hours, Managers	Time to be worked by managers per regulations.	Hours	1,725,068
Worked hours, Supervisors	Time to be worked by supervisors per regulations.	Hours	7,799,850
Worked hours, Operatives	Time worked by workers per regulations	Hours	7,839,630
Overtime worked hours breakdown by category	Hours worked beyond the legal amount of work hours and reported to the company.		615,226
Overtime, Supervisors	Hours worked by Supervisors beyond the legal amount	Hours	324,753
Overtime, Operatives	Hours worked by workers beyond the legal amount.	Hours	322,435

## APPENDIX III

### PERFORMANCE INDICATORS, HUMAN RESOURCES

<b>RATE OF ABSENTEEISM</b>	<b>ABSENTEEISM IS THE DURATION OF LEGAL OR NON-STATUTORY ABSENCES OF THE EMPLOYEE AT HIS / HER PLACE OF WORK OVER A GIVEN PERIOD. LEGAL ABSENCES (FTAS): STATUTORY LEAVE, MATERNITY LEAVE, UNPAID LEAVE, LAY-OFF, STATUTORY LEAVE OF ABSENCE, SICK LEAVE, WORK ACCIDENT AND COMMUTING.</b>		
Lost work time due to illness	Length of time of interruptions of employees' work recommended by a doctor (company or otherwise) during the reporting period.	Hours	125,889
Absences for workplace and commuting accidents	Length of absences of employees for workplace accidents and commuting accidents.	Hours	32,785
Unauthorized absences	Length of unlawful and unexcused absences by employees.	Hours	41,756
Absenteeism rate <sup>26</sup>	The quotient of the number of reported hours of absence over the number of theoretical work hours.	%	1.17%
<b>HIRES</b>			
Total hires	All individuals hired during the period.	Number	745
<b>DISMISSALS</b>			
Total dismissals	Number of employees whose employment contract was terminated at the employer's instigation and on legitimate grounds.	Number	28

26 - The reported absenteeism rate, does not reflect absences for maternity leave, legal holidays, unpaid time off and layoffs

## APPENDIX IV

# ENVIRONMENTAL PERFORMANCE INDICATORS

INDICATOR NAME	INDICATOR DEFINITION	UNIT	2015
<b>WATER CONSUMPTION</b>	<b>QUANTITY OF DRINKING WATER CONSUMED</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.	m3	415,757
Water consumption by power plants	The quantity of water used by thermal power plants.	m3	13,265
Water consumption by water production plants	The quantity of water used in water production plants for operating needs (washing of decanters, filters, etc.) .	m3	8,400,000
<b>PRODUCTION AND DISTRIBUTION OF WATER</b>	<b>DRINKING WATER PRODUCED AND DISTRIBUTED TO CUSTOMERS</b>		
Treated water produced	Quantity of water treated to be bacteriologically and chemically clean enough to drink.	m3	399,000,000
Volume sold	Quantity of water as read on meters and invoiced to customers.	m3	309,000,000
<b>ENERGY CONSUMPTION</b>	<b>QUANTITY OF ENERGY USED</b>		
Total equivalent consumption of energy (GWh)	Total quantity of electrical energy used	GWh	9,643
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
Electric power consumption by water production plants	Total quantity, taken from meters, of electrical energy used by all water production facilities.	GWh	337
Consumption of natural gas by electrical production turbines	Total quantity of natural gas used by gas turbines, mechanically measured.	m3	730,385,809
Consumption of HVO by electrical production turbines	Total quantity of heavy oil used by gas turbines, mechanically measured.	m3	161,201

## APPENDIX IV

### ENVIRONMENTAL PERFORMANCE INDICATORS

Consumption of DDO by electrical production turbines	Total quantity of distillate diesel oil used by gas turbines, mechanically measured.	m3	1,798
Consumption of Fuel Oil/ Diesel Oil	Total quantity of fuel oil used by electrical generators for operations.	m3	18,158
Vehicle fuel consumption	Total quantity of vehicle fuel used by electrical generators for operations.	L	4,773,400
<b>PRODUCTION AND DISTRIBUTION OF ELECTRICITY</b>			
Interconnected capacity in use	Total capacity of interconnected production equipment in operation, both thermal and hydroelectric, on an actual capacity basis. This is the sum total of power obtainable from the generators in service at a given moment of operation. It factors in power limitations on certain generators for various reasons (age, insufficient input energy, directives, etc.).	MW	1,247
Including interconnected installed 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
Including interconnected installed HYDROELECTRIC capacity	Total capacity of interconnected hydroelectric production equipment in operation, on an actual capacity basis. Interconnected electrical production Total net delivered production of electricity of all installed interconnected production equipment.	MW	604
Interconnected electrical production	Total net electricity delivered from the entire interconnected generation fleet	GWh	4,138
Including total production from THERMAL power plants	Total net delivered production of electricity of installed interconnected thermal production equipment.	GWh	2,785
Including total production from HYDROELECTRIC power plants	Total net delivered production of electricity of installed interconnected hydroelectric production equipment.	GWh	1,352
Total electrical efficiency	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.	%	79%

## APPENDIX IV

### ENVIRONMENTAL PERFORMANCE INDICATORS

CONSUMPTION OF RAW MATERIALS	QUANTITY OF RAW MATERIALS AND INPUTS USED FOR OPERATION AND MAINTENANCE.		
Oils	Quantity of oils used in operating the plants.	L	119,835
Chlorine gas	Quantity of chlorine gas used in operations.	T	712
Lime	Quantity of lime used in operations.	T	13,162
Calcium hypochlorite	Quantity of Calcium hypochlorite used in operations.	T	2,860
Aluminum sulfate	Quantity of aluminum sulfate (Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ) used in operations.	T	17,741
SF <sub>6</sub>	Quantity of SF <sub>6</sub> gas used in operating and maintaining the plants.	kg	481
<b>ATMOSPHERIC POLLUTANTS CO<sub>2</sub>, NOX, SOX</b>	<b>A SOLID, LIQUID OR GASEOUS PARTICLE WHICH, IN THE ATMOSPHERE AT HIGHER OR LOWER CONCENTRATIONS, MAY CAUSE BY ITS ABSORPTION OR INHALATION MORE OR LESS SEVERE DISTURBANCES IN LIVING BEINGS. NOX: OXIDES OF NITROGEN / CO<sub>2</sub>: CARBON DIOXIDE / SOX: OXIDES OF SULFUR.</b>		
Total greenhouse gas emissions	The amount of greenhouse gases generated by the operation of the works and released to the atmosphere.	kg CO <sub>2</sub> e	179,810,589
Quantity of greenhouse gas emissions into the atmosphere besides those related to the production of electricity	The quantity of greenhouse gases emitted into the atmosphere other than those associated with the production of electricity.	kg CO <sub>2</sub> e	1,543,477
Quantity of greenhouse gas emissions into the atmosphere related solely to the interconnected production of electricity, excluding generators	The quantity of greenhouse gases emitted into the atmosphere linked solely to the production of electricity interconnected outside generators.	kg CO <sub>2</sub> e	178,267,112
<b>QUANTITY OF PCBS (LITERS)</b>			
Electricity sector measurement, PCBs present in the concessioned scope	Quantity of polychlorinated biphenyls (PCB) of the chlorinated organic chemical products used in certain electrical equipment such as transformers for their great thermal stability and their electrical characteristics.	L	10,968

**APPENDIX IV**  
**ENVIRONMENTAL PERFORMANCE INDICATORS**

CUSTOMERS	TOTAL NUMBER OF CUSTOMERS		
Electricity customers	Total number of electric power customers	nb	1,432,000
Water customers	Total number of drinking water customers	nb	1,519,236
Sanitation customers	Total number of individuals or legal entities, whether or not connected to the waste water network, which have requested service from the organization charged with sanitation.	nb	403,605
Social outreach connections to the electric grid	Connections made to the electric power grid at reduced or sliding-scale prices for low-income people.	nb	4,764
Social outreach connections to drinking water	Connections made to the water grid at reduced or sliding-scale prices for low-income people.	nb	45,623

# APPENDIX V

## TABLE OF CONCORDANCE GRI 4

### GENERAL STANDARD DISCLOSURES

STRATEGY AND ANALYSIS		LOCATION
G4-1	Statement from the most senior decision-maker of the organization	Editorial
G4-2	Narrative sections on key impacts, risks, and opportunities	Editorial /1/2/3/4/5/6
ORGANIZATIONAL PROFILE		
G4-3	Name of the organization	1
G4-4	Primary brands, products, and services	1
G4-5	Location of the organization's headquarters	1
G4-6	Countries where the organization operates	1
G4-7	Nature of ownership and legal form	1
G4-8	Markets served	1
G4-9	Scale of the organization	4.A
G4-10	Total number of employees by employment contract and gender	4.A
G4-11	Percentage of total employees covered by collective bargaining agreements	4.A
G4-13	Significant changes during the reporting period	4.A
G4-14	Addressing the precautionary approach or principle	2/ 3.2
G4-15	External charters, principles or initiatives endorsed by the organization	3.B
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		
G4-18	Process for defining the report content and the aspect boundaries	Appendix 2/Appendix 3
G4-19	Material Aspects identified	1/ 2 / 3/ 4/5/6/Appendix 3
G4-20	The Aspect Boundary within the organization	1/ 2 / 3/ 4/5/Appendix 3
G4-21	The Aspect Boundary outside the organization	6
STAKEHOLDER ENGAGEMENT		
G4-24	List of stakeholder groups engaged by the organization	Edito
G4-25	Basis for identification and selection of stakeholders	Edito
G4-26	Approaches to stakeholder engagement and frequency of engagement	4.A /6.A
G4-27	Response to key topics and concerns raised through stakeholder engagement	Edito
REPORT PROFILE		
G4-28	Reporting period	Edito/Appendix 3
G4-29	Date of most recent previous report	N/A
G4-30	Reporting cycle	N/C
G4-31	Contact point for questions regarding the report	Publication bear
G4-33	External assurance	Appendix 4

## GOVERNANCE

### GOVERNANCE STRUCTURE AND COMPOSITION

G4-34	Governance structure of the organization	3.B / 3.C
G4-35	Process for delegating authority	3.A
G4-36	Executive-level position or positions with responsibility for economic, environmental and social topics and post holders report directly to the highest governance body appointed	3.C/5.B
G4-38	Composition of the highest governance body and its committees	3.B / 3.C
G4-42	The highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts	3.C

### HIGHEST GOVERNANCE BODY'S ROLE IN RISK MANAGEMENT

G4-45	a. Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities.	3.C
G4-46	a. Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	3.C
G4-47	a. Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	3.C

### HIGHEST GOVERNANCE BODY'S ROLE IN SUSTAINABILITY REPORTING

G4-48	The highest committee or position that formally reviews and approves the organization's sustainability report	3.C
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### REMUNERATION AND INCENTIVES

G4-52	The process for determining remuneration	3.C/4.A
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### ETHICS AND INTEGRITY

G4-56	Description of organization's values, principles, standards and norms of behavior	3.B
G4-57	Mechanisms for seeking advice on ethical and lawful behavior	3.B

### SPECIFIC STANDARD DISCLOSURES

#### Generic disclosures on management approach

G4-DMA	Material Aspect and the impacts that make this Aspect material	Editorial
G4-DMA	Report how the organization manages the material Aspect or its impacts	Editorial

#### CATEGORY: ECONOMIC

##### Aspect: Economic Performance

G4-EC1	Direct economic value generated and distributed	1.A / 1.B / 1.C / 1.D / 6.A / 6.B
G4-EC2	Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue or expenditure	2.D
G4-EC3	Coverage of the organization's defined benefit plan obligations	4.C

##### Aspect: Market Presence

G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage	4.A
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**Aspect: Indirect Economic Impacts**

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G4-EC7	Development and impact of infrastructure investments and services supported	1.A /1.B/ 1.C /1.D
G4-EC8	Significant indirect economic impacts, including the extent of impacts	1.A /1.B/ 1.C /1.D

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**CATEGORY: ENVIRONMENTAL**

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**Aspect: Materials**

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G4-EN1	Materials used by weight or volume	2.A/2.B/2.C
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**Aspect: Energy**

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G4-EN6	Reduction of energy consumption	2.A/2.B/2.C
G4-EN7	Reductions in energy requirements of products and services	2.A/2.B/2.C

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**Aspect: Water**

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G4-EN8	Total water withdrawal by source	2.A/2.B/2.C - Appendix 3
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**Aspect : Biodiversity**

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**Aspect: Emissions**

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G4-EN19	Reduction of greenhouse GAS (GHG) emissions	2.D
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**Aspect: Efuents and Waste**

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G4-EN22	Total water discharge by quality and destination	2.C/ 2.D
G4-EN23	Total weight of waste by type and disposal method	2.C/ 2.D

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**CATEGORY: SOCIAL**

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**SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK**

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**Aspect: Employment**

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G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	4.A
G4-LA2	Benefits provided to full-time employees by significant locations of operation	4.C

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**Aspect: Labor/Management Relations**

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G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	4.A
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**Aspect: Occupational Health and Safety**

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G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees	5.B
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	5.B
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	5.B

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**Aspect: Training and Education**

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G4-LA9	Average hours of training per employee during the reporting period	4.A
G4-LA10	Programs for skills management and learning of employees	4.B

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**Aspect: Diversity and Equal Opportunity**

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G4-LA12	Breakdown of employees per employee category according to gender, age group	4.A
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**Aspect: Equal Remuneration for Women and Men**

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G4-LA13	Ratio of basic salary and remuneration of women to men by employee category	4.A
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**SUB-CATEGORY: HUMAN RIGHTS**

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**Aspect: Non-discrimination**

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G4-HR3	Total number of incidents of discrimination and corrective actions taken	4.A
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**Aspect: Supplier Human Rights Assessment**

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G4-HR10	Percentage of new suppliers that were screened using human rights criteria	6.C
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G4-HR11	Negative human rights impacts in the supply chain and actions taken	6.C
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**SUB-CATEGORY: SOCIETY**

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**Aspect: Local Communities**

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G4-SO1	Percentage of operations with implemented local community engagement, impact assessments	6.1
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**Aspect: Anti-corruption**

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G4-SO3	Communication and training on anti-corruption policies and procedures	3.B
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**SUB-CATEGORY: PRODUCT RESPONSIBILITY**

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**Aspect: Customer Health and Safety**

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G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	5.C
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**Aspect: Product and Service Labeling**

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G4-PR3	Product and service information required by the organization's procedures	5.C
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## APPENDIX V

# REPORT OF THE INDEPENDENT THIRD-PARTY ORGANIZATION

MAZARS SAS

ERANOVE

**Report of the independent third-party  
organization, on the consolidated  
employment, environmental and social  
information included in the management  
report**

Fiscal year ended December 31,  
2015

## **APPENDIX V**

### **REPORT OF THE INDEPENDENT THIRD-PARTY ORGANIZATION**

#### **MAZARS SAS**

61, RUE HENRI REGNAULT – 92075 PARIS – LA DÉFENSE CEDEX  
TEL: +33 (0)1 49 97 60 00 – FAX: +33 (0)1 49 97 60 01

#### **FRENCH SIMPLIFIED JOINT-STOCK COMPANY**

WITH SHARE CAPITAL OF €37,000 – NANTERRE TRADE AND COMPANIES REGISTER NO. 377 505 565  
REGISTERED OFFICE: 61, RUE HENRI REGNAULT – 92400 COURBEVOIE

## **ERANOVE**

ERANOVE, a corporation with share capital  
of €9,165,990

Registered office: 4 rue Saint-Florentin,  
75001 Paris Paris Trade and Companies  
Register No. 450 425 277

**Report of the independent third-party  
organization, on the consolidated  
employment, environmental and social  
information included in the management  
report**

Fiscal year ended December 31,  
2015

ERANOVE  
Fiscal year ended  
December 31, 2015

### **Report of the independent third-party organization, on the consolidated employment, environmental and social information included in the management report**

To the Shareholders,

In our capacity as an independent, third-party organization, member of the Mazars network, statutory auditor of the company ERANOVE, accredited by COFRAC under number 3-10581, we present our report on the consolidated corporate, environmental and social information relating to the year ended December 31, 2015, presented in the management report (hereinafter the "CSR information"), in accordance with the provisions of Article L. 225-102-1 of the French Commercial Code.

#### **Corporate Responsibility**

It is the duty of the Board of Directors to prepare a management report including the CSR information mentioned in Article R. 225-105-1 of the French Commercial Code and to do so in accordance with the guidelines used by the Company (hereinafter the "Guidelines"), a summary of which is included in the management report and is available on request at the Company's registered office.

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

Our independence is defined by the regulations, the code of ethics of the profession as well as the provisions laid down in Article L. 822-11 of the French Commercial Code. In addition to this, we have implemented a system of quality control which includes policies and documented procedures to ensure compliance with the rules of ethics, professional standards and applicable legal and regulatory texts.

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1 *the scope of which is available at [www.cofrac.fr](http://www.cofrac.fr)*

ERANOVE  
Fiscal year ended  
December 31, 2015

## **Corporate Responsibility**

Based on our findings, it is our duty to:

- certify that the CSR information required is present in the management report or, if omitted, that an explanation is provided pursuant to paragraph three of Article R. 225-105 of the French Commercial Code ("**Statement of completeness of CSR Information**");
- express a conclusion of moderate assurance that the CSR information taken as a whole is presented honestly and fairly in all material respects in accordance with the Guidelines (opinion, stating reasons, as to the honesty and fairness of the CSR information).

Our work was carried out by a team of four persons over six weeks between January 22, 2016 and March 4, 2016.

We conducted the work described hereinafter in accordance with the standards of professional practice applicable in France and with the decree of May 13, 2013 determining the ways in which the independent third-party organization is to conduct the assignment and, with respect to the opinion stating reasons as to honesty and fairness, with international standard ISAE 3000.2

### **1 - Statement of completeness of CSR Information**

Based on interviews with the managers of the departments concerned, we have familiarized ourselves with the statement of goals in regard to sustainable development, in light of the employee-related and environmental

consequences of the company's business activities and its social commitments and the actions or programs, if any, that result from that statement.

We compared the CSR information presented in the management report with the list set out in Article R. 225-105-1 of the French Commercial Code.

When certain consolidated information was lacking, we made certain that explanations were provided in accordance with Article R. 225-105 par. 3 of the French Commercial Code.

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

## APPENDIX V

### REPORT OF THE INDEPENDENT THIRD-PARTY ORGANIZATION

ERANOVE  
Fiscal year ended  
December 31, 2015

We verified that the CSR information covered the scope of consolidation, i.e. the parent company and its subsidiaries within the meaning of Article L. 233-1 and the companies that it controls within the meaning of Article L. 233-3 of the French Commercial Code, within the limits stated in the methodological note in the paragraphs of the management report titled respectively "Scope" and "Methodological explanations and limitations".

On the basis of this work and taking into account the limits mentioned above, we certify that the required CSR information is included in the management report.

#### **II - Substantiated opinion on the veracity of the CSR information**

##### **Nature and extent of our work**

We conducted some 15 interviews with the persons responsible for preparing the CSR information in the departments in charge of the process of gathering the information and, when necessary, those responsible for the internal control and risk management procedures, so as to:

- assess the appropriateness of the Guidelines in terms of their relevance, thoroughness, reliability, neutrality and comprehensibility, taking into consideration best practices in the sector;
- and verify the operation of a process for gathering, compiling, processing and tracking information that would provide thorough and internally consistent CSR information, and become acquainted with the internal control and risk management procedures used to prepare the CSR information.

We matched the nature and extent of our tests and audits to the nature and importance of the CSR information with respect to the characteristics of the company, the employee-related and environmental issues of its activities, its goals in terms of sustainable development and sectoral best practices

## APPENDIX V

### REPORT OF THE INDEPENDENT THIRD-PARTY ORGANIZATION

ERANOVE  
Fiscal year ended  
December 31, 2015

With regard to the CSR information that we deemed the most important<sup>3</sup>:

- for the consolidating entity, we consulted documentary sources and conducted interviews to corroborate the qualitative information (as to organization, policies, actions), employed analytical procedures on the quantitative information, and checked, through sampling, the calculations and the consolidation of the data, checking them for consistency and agreement with the other information given in the management report;

- for the representative sample we chose<sup>4</sup> based on their activity, contribution to the consolidated indicators, their physical location and a risk analysis, we conducted interviews to verify that the procedures were correctly applied and to identify any omissions, and we carried out detailed tests on the samples consisting of checking the calculations made and comparing the data in the supporting documents.

The sample so selected represented 70% of the workforce and between 39% and 100% of the quantitative environmental information.

As to the other consolidated CSR information, we judged its consistency in light of our knowledge of the Company.

Finally, we judged the validity of any explanations given as to the total or partial absence of certain information.

It is our belief that the sampling methods and sample sizes we used in exercising our professional judgment allow us to draw a conclusion of moderate assurance. A higher level of assurance would have necessitated more extensive investigation. Due to the use of sampling techniques as well as to the limitations inherent in the operation of any information and internal control system, the risk of not detecting a material irregularity in the CSR information cannot be totally ruled out.

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<sup>3</sup> Total workforce and breakdown of employees by gender, age and geographic area; total hours of training; workplace accidents, including frequency and seriousness, as well as work-related illnesses; measures to prevent, reduce or repair emissions into the air, water and ground that seriously affect the environment; organization of the company to handle environmental issues and, where appropriate, procedures for environmental assessment and certification; water consumption and procurement in light of local constraints; energy consumption, measures taken to improve energy efficiency and the use of renewable energy; greenhouse gas emissions.

<sup>4</sup> Senegalese Water Company (SDE), the Ivorian Electricity Company (CIE) and the Ivorian Electricity production (CIPREL).

## APPENDIX V

### REPORT OF THE INDEPENDENT THIRD-PARTY ORGANIZATION

ERANOVE  
Fiscal year ended  
December 31, 2015

#### Conclusion

On the basis of our work, we did not find any material irregularity that might indicate that the CSR information taken as a whole is not honestly and fairly presented in accordance with the Guidelines.

*Executed in Paris, La Défense, September 8, 2016*

The independent third-party organization



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