SUEZ ENVIRONNEMENT
Magazine
Number 08_December 2011

FOUR-PAGE SUPPLEMENT ON SAFEGE

"SITA IS PLACING AN EMPHASIS ON THE RECOVERY OF WASTE AND AIMS TO BECOME A EUROPEAN LEADER IN THIS SECTOR."

INTERVIEW WITH **CHRISTOPHE CROS**_P31

FRANCE
INNOVATIONS LABORATORY

25.6%

represents the number of **women in management in 2010,** compared with 23.7% in 2008(1).

(1) 2010 figures.

61.2%

the percentage of the workforce having received training(1).

(1) 2010 figures.

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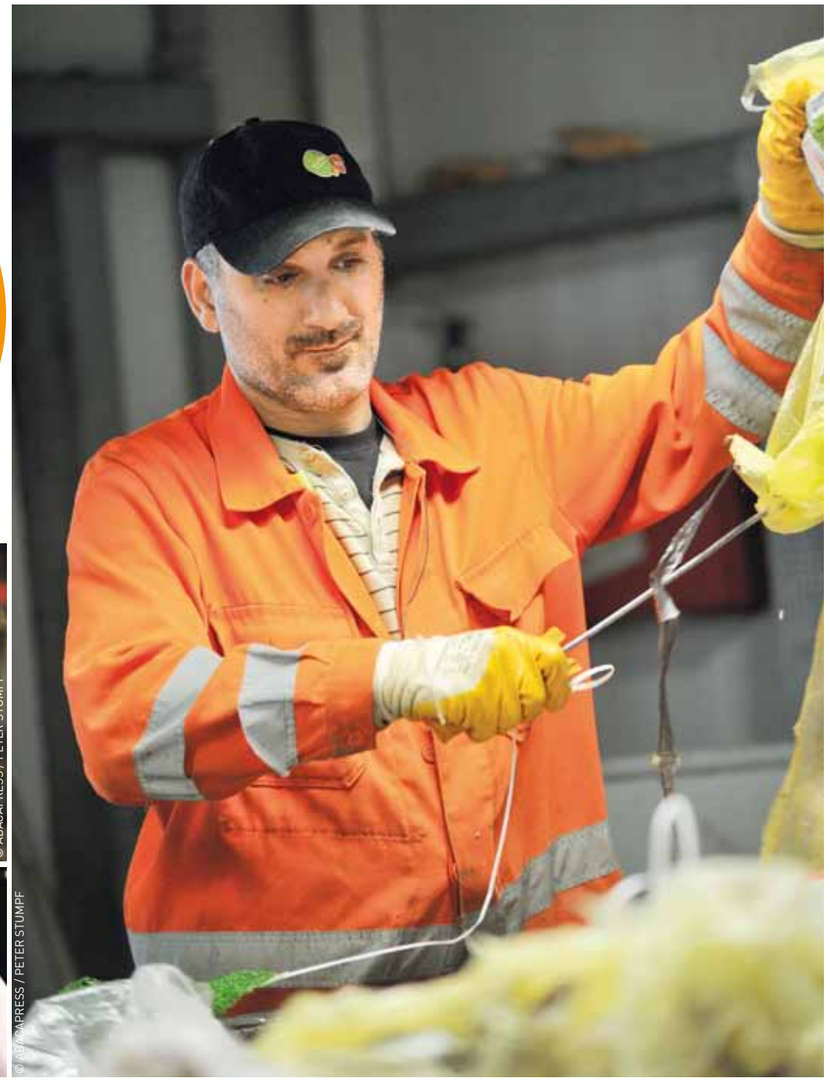

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AROUND THE WORLD

THE 79,554 EMPLOYEES OF SUEZ ENVIRONNEMENT ARE WORKING IN OVER 70 COUNTRIES.

OFTEN INVISIBLE TO THE GENERAL PUBLIC, THEY PROVIDE ESSENTIAL SERVICES TO MILLIONS OF PEOPLE EVERY DAY.

IN THE AREAS OF WATER AND WASTE, THE EXPERIENCE AND KNOW-HOW OF SUEZ ENVIRONNEMENT HAVE MADE IT A WORLD LEADER IN ITS SECTOR. WELCOME TO THIS OVERVIEW, SHOWING THE GROUP IN 79,554 DIFFERENT FACETS!

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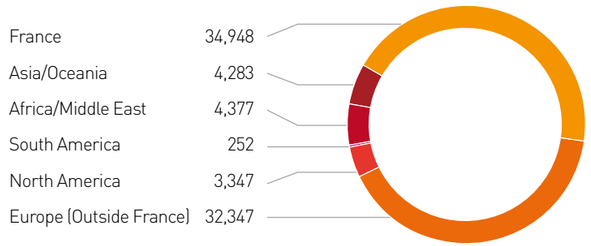
GEOGRAPHIC DISTRIBUTION OF THE WORKFORCE (2010 figures)



79,554 employees work for SUEZ ENVIRONNEMENT worldwide, representing some 90 different nationalities.

At SUEZ ENVIRONNEMENT, the percentage of women in management roles rose from 23.7% in 2008 to **25.6% in 2010.** In France, the objective is to employ **women in 30%** of management positions from now to 2012. At the Group level, the aim is to reach a target of **26% from now to 2012.** During this same timeframe, the number of women on the management committees of the subsidiaries is set to reach **at least 25%.**

12%
the objective for 2012
for employing people over the age of 55 (compared to 10% in 2010)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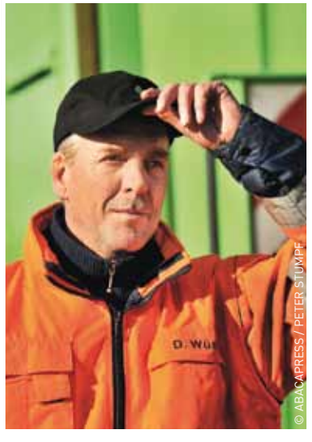
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13.4%
the percentage of managers at SUEZ ENVIRONNEMENT.


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SUEZ ENVIRONNEMENT

consists primarily of its 79,554 employees who act on a local level to serve their customers and become leaders in the area of environmental performance. Improving the management of resources and limiting the environmental impact of economic activities present major challenges for both cities and companies.

Within this context, the tasks performed by the staff have changed. They no longer merely manage environmental services but now work to promote effective and sustainable green solutions, determined jointly with all stakeholders, based on dialogue and innovation, with a local and an international dimension.

The businesses areas in which SUEZ ENVIRONNEMENT works involve a long-term commitment, and for this reason the Group's employees need to acquire extensive and far-reaching experience. Furthermore, the Group does important work by seeking out and supporting the experts who work for SUEZ ENVIRONNEMENT. Training is also provided to support employees (61.2% of the workforce received training in 2010) and encourage the development of all members of staff.

Diversity is another highly prized area within the Group, thereby ensuring it remains in step with the societies where it works, and this also guarantees that a commitment to diversity is a factor underpinning the company's performance.

At the end of 2010, the Group launched the DIVERSITY "Equal opportunities, social change and commitment" program, organized around five areas: employment for the over fifties, careers for women, support for people with disabilities and quality of life in the workplace.

The role of women is becoming stronger throughout SUEZ ENVIRONNEMENT (18.5% of the total workforce and 24.5% of management positions) and the employment of disadvantaged people is now a priority. At SITA France, over 3,000 people have been employed under the scope of the "SITA Rebond" program. The Group is also strengthening its policy in terms of recruiting and supporting employees with disabilities.

Finally, in September 2011, SUEZ ENVIRONNEMENT launched the "Sharing" program, its first employee shareholding plan. This program will allow SUEZ ENVIRONNEMENT's employees to become both the driving force and the beneficiaries of the Group's performance.


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30 **"The era of handling waste by removing it is now over. The 'new school of thought' now encourages recycling in all its forms."**

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Tour CB 21
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DIRECTOR OF PUBLICATION:
Jean-Louis Chaussade.

EDITORIAL DIRECTORS:
Frédérique Raoult, Nathalie Parinaud-Gouédard.

EDITORS-IN-CHIEF:
Gérald Bonnard, Martha Rodriguez.
Telephone: +33 158812326.
Fax: +33 158812506.

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DESIGN: TagaroDDB
55, rue d'Amsterdam, 75008 Paris.
Telephone: 01 53 32 56 29.

WRITERS: Antoine Blachez, Nelly Buffon, Patrick Coupechoux, Yves Deguilhem, Florence Donnarel, Cécile Perrin.

CHIEF EDITORS-IN-CHIEF:
Étienne Dubois, Hélène Odoux.

THE FOLLOWING PEOPLE CONTRIBUTED TO THIS ISSUE:
Sarah Aerts, Hugues d'Antin, Anisse Ben Younes, Marion Bernieri, Laurent Berthier, Thierry Bouzigues, Emilie Cartella, Joey Chio, Anne Couderc, Anthony Durston, Marie Gimbert, Claudia Gross, Élodie Marchand, Paul Cuneo d'Ornano, Anne-Laure Paté, Kateřina Kodadová, Deb Rizzi, Maria Burata Valldeperez, Jérôme Verdier, Christine Waser, Laurent Wormser.

TRANSLATION: RR Donnelley.

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Leslie Trouwborst.

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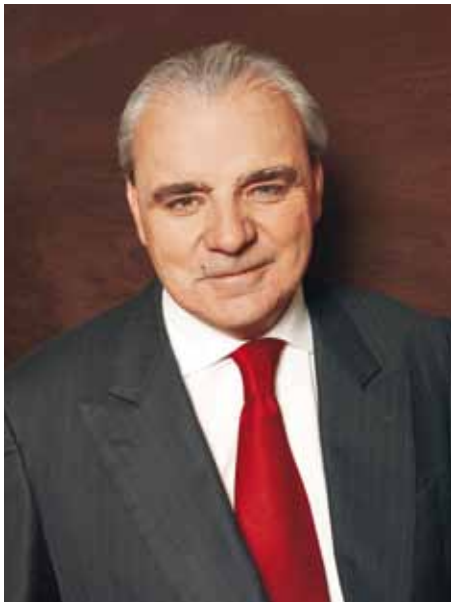
Send your comments to:
editing@suez-env.com



JEAN-LOUIS CHAUSSADE /
CHIEF EXECUTIVE OFFICER
OF SUEZ ENVIRONNEMENT

"CHANGING FROM A FOCUS ON DISPOSAL TO A FOCUS ON RECOVERY IS A PRIORITY FOR MANY MUNICIPALITIES AND INDUSTRIAL CUSTOMERS."

Dear readers,

We have all witnessed the rapid transformation of our economic environment, both on an environmental and a societal level. The scope of these changes must be taken into account by all those involved throughout the world, and I am convinced that companies have a pivotal role to play.

The consumers, citizens and also our customers are waiting for our response: their needs and expectations are evolving, and we need to respond to these changes by actively contributing to improving the environmental performance of our businesses. Innovating to preserve resources, combating climate change, reducing pollution and promoting an increasingly circular economy are core features of our future development. We propose solutions, and not only the means, to support our customers, and it is our expertise in France, the country where our Group was first established and also the place where it is the most firmly entrenched, that we are inviting you to discover in this edition.

We are also focusing on a concrete example of the implementation of the circular economy in our businesses, namely recovering energy from waste, which is also an important issue for encouraging citizens to sort out their waste and is fundamental for the development of our businesses. Due to the implementation of strict community regulations, the percentage of waste sent to landfill within the European Union dropped from 68% to 40% between 1995 and 2008. Between 2008 and 2010, the recovery of energy from the waste treated by SUEZ ENVIRONNEMENT has risen five percent, and is now 36.8%[1].

It was within this perspective that in October 2011 we launched ReEnergy in the Netherlands, an energy-from-waste facility that is one of the most productive in Europe. Not only will this facility be able to recycle the waste of 1.9 million inhabitants, it will also be capable of producing 256,000 MWh of electrical energy, which is equivalent to the electricity used by 70,000 households.

This plant, like all the projects revealed in this magazine, illustrates our ability to support our customers to help them convert their waste into secondary raw materials or into energy, thereby encouraging consumers by showing the concrete results of their efforts.

Enjoy this issue.

(1) Overall waste-to-energy recovery rate for household waste and non-hazardous industrial materials treated by SUEZ ENVIRONNEMENT.

TERRENA / LYONNAISE DES EAUX

IMPROVED MANAGEMENT OF THE AGRICULTURAL WATER CYCLE

WITH OVER 350,000 FARMS and an agricultural area covering more than half of the country, France is the third leading agricultural exporter in the world. However, the depletion of raw materials and climate change imply that a paradigm shift is required, which means changing to a more sustainable type of agriculture. French farmers are at the centre of the major environmental and climate challenges facing the country. Lyonnaise des Eaux and Terrena, the leading French agricultural cooperative, have come together to create a company[1] dedicated to the needs and problems farmers encounter in terms of water and the environment.

"The first meetings took place at the end of 2010, around our 'New ideas for water' scheme, encouraging a greater understanding of the great water cycle bringing all stakeholders together", recounted Charles-Henri Poillot, the Head of the Industry Market at Lyonnaise des Eaux. *"In turn, Terrena revealed its 'New Agriculture©' program and its vision of 'Ecologically Intensive Farming'. It was in this context that we developed a common approach, to which each party contributes its own skills."*

Using the know-how of Lyonnaise des Eaux as well as Terrena's knowledge about the land and challenges involved, the company will develop four types of service such as water management for the agro-food industry, local services associated with biodiversity around agriculture and the territories. Terrena is historically based in western France. In 2012, a fifth activity will be added involving the challenges involved in water quality for livestock farming.

"For industrial water, the aim is to master, as far as possible, consumption of the great water cycle. We are carrying out tests such as reusing the treated water from an industrial slaughterhouse near Angers to irrigate a racetrack located nearby", explained Charles-Henri Poillot.

In relation to the recycling of effluents from pig and poultry farming, two farms in Western France are already taking part in the first trials. The aim? To discover the best process (dehydration, semi-liquid composting, etc.) for recycling this organic material.

(1) Based in Ancenis (Loire-Atlantique), it will be owned 51% by Lyonnaise des Eaux and 19% by Terrena. Its name has not yet been determined.

TERRENA
LA NOUVELLE AGRICULTURE

"WITH TERRENA'S TWO MILLION HECTARES OF AGRICULTURAL LAND, THE SUBSIDIARY WILL BE ABLE TO TEST SOLUTIONS FOR LAND AND INDUSTRIAL DEVELOPERS."

To find out more:
→ www.lyonnaise-des-eaux.fr
→ www.terrena.fr

France

— France is the historic base of SUEZ ENVIRONNEMENT, its main area of activity (36.6% of revenues in 2010), and the territory where the Group is most deeply entrenched, employing almost 35,000 employees around the country.
It is also in France that SUEZ ENVIRONNEMENT concentrates a large part of its research activities with several research and expert centres, especially CIRSEE (the international centre for research on water and the environment). Created in 1981, the CIRSEE plays a pivotal role in relation to the Group's other research centres set up in France and abroad.
The innovations developed by SUEZ ENVIRONNEMENT far exceed mere technological developments. They aim to support the customers during all the stages of environmental performance by improving the management of water and waste cycles. In this area, France serves as a veritable laboratory for innovation.

In 2010, SUEZ ENVIRONNEMENT SET ASIDE

73

MILLION EUROS
FOR RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION.

KEY FIGURES
WASTE IN EUROPE

543kg

the amount of waste generated per habitant in France.

Source: Eurostat 2010.

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APPOINTMENT
PHILIPPE MAILLARD
CEO OF LYONNAISE DES EAUX

Philippe Maillard has been working as the new Chief Executive Officer of Lyonnaise des Eaux since October 1, 2011. He will continue to transform the company, placing a much greater focus on its customers. Philippe Maillard is a civil engineer who graduated from the Ecole Polytechnique and the Ecole Nationale des Ponts et Chaussées, and his entire professional life has been spent working for the Group. After working for over ten years with the problems involved in managing and preserving the water resource, in 2002, he was appointed as the Regional Director of Ondeo in Puerto Rico, then the CEO of the subsidiary. In 2004, he was appointed the head of SITA Australia and then in 2007 became the CEO of SITA Ile-de-France. Since 2009, he has been working as the Deputy CEO of SITA France. He succeeds Isabelle Kocher, who is joining GDF SUEZ as Executive Vice-President, Chief Financial Officer.

UP

RECYCLING USED DIAPERS

One million tonnes of diapers are thrown away in France each year. With its subsidiary SITA, SUEZ ENVIRONNEMENT has undertaken a research program aimed at assessing the potential for recycling diapers. This €340,000 program has received 40% funding from ADEME.

© HELSLY CÉDRIC

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ACQUISITION
SAFEGE ACQUIRES 3AME

This operation has consolidated SAFEGE's skills in the area of maritime and port infrastructure, especially in terms of infrastructure project management for marinas and commercial ports.
More generally, this acquisition strengthens SUEZ ENVIRONNEMENT's presence, through its subsidiaries SAFEGE and Lyonnaise des Eaux, in the area of managing port facilities (redevelopment studies, pollution clearance, de-silting, equipment management, and services for residents, etc.).
3AME started operating in 1994 and is based in Montpellier (France), it operates nationally by providing studies and carrying out project management in the area of maritime and port infrastructure for public authorities.

France /

RHÔNE-ALPES
RILLIEUX-LA-PAPE HAS CHOSEN THE COFELY – VALORLY GROUP (SITA)

Last July, the town of Rillieux-la-Pape (Lyons Area) awarded the project to run and modernize its heating network of a venture headed by Cofely and SITA; this project will last for the next eight years.
Under the terms of the contract, the heavy fuel production unit will be replaced by a 6 MW biomass plant. The use of this local and renewable energy will allow energy costs to be reduced by 5% and CO_2 emissions by 80%.
Finally, the new facility will allow users to benefit from heat produced at 90% by renewable energy (wood-energy) and recycling (recovered from the energy produced by incinerating household waste).

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ÎLE-DE-FRANCE
NEW CONTRACT FOR SITA FRANCE - ROS ROCA

In September 2011, SITA France and ROS ROCA, a company specializing in waste management technology and equipment, were awarded a contract to design and construct a pneumatic household waste collection system in Vitry-sur-Seine (Greater Paris). This contract is the first pneumatic waste collection system for SITA and ROS ROCA in France.
Pneumatic collection is based on fully underground transportation of waste via a vacuum suction technique. In Vitry, more than 10 kilometres of underground networks will be built to connect the 390 waste collection terminals to the vacuum plant. This project forms part of a generalized urban development program.

RESEARCH
RHODANOS PROJECT, CONCRETE ADVANCES

Last September, Axelera, the Lyon and Rhône-Alpes Chemicals and Environment competitiveness cluster, and project leader SUEZ ENVIRONNEMENT, presented the results of the Rhodanos program.
Launched in 2006, this project has made real technological advances and allows local authorities to anticipate the future tightening of regulatory requirements relating to controlling pollution associated with industrial, urban and rainwater waste.
With a total budget of €9.3 million, Axelera has been able to mobilize major partners, giving the project an international dimension and visibility. The results of six major projects provide validation of the new products and treatment processes, the real-time management of the condition of bodies of water (testing methods, new sensors, piloting system, software and monitoring), and control of industrial and urban discharges (industrial processes, treatment streams and new software programs). Most of these results are set to become reality on an industrial level.
The actual implementation of the framework directive on water will be a key driving force over the next three years.

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PACA
GROUNDWATER RECHARGE: LYONNAISE DES EAUX PROTECTS RESOURCES

Last September, Lyonnaise des Eaux was awarded a contract to manage the drinking water services of the city of Hyères and Porquerolles Island (Southern France). This contract covers over 60,000 inhabitants and represents total revenues of €70 million over twelve years.
Under the terms of the contract, Lyonnaise des Eaux will install an original system to recharge the ground water with fresh water thereby limiting the infiltration of saltwater.
Lyonnaise des Eaux will also put in place several innovative services such as remote meter reading, which will allow all inhabitants to monitor their water consumption in real time; this system will also detect leaks and introduce seasonal and progressive pricing, due to the enormous differences between the winter and summer population. Finally, and more specifically, remote metering combined with the installation of 150 acoustic sensors on the water network should result in a 90% efficiency rate (compared with an average of 75% in France).


© LYONNAISE DES EAUX / P. MENARD / ÉPEUS

France /

UP

THE 'PHYTO'SCOPE'
As part of its anti-pollution and resource-protection measures, Lyonnaise des Eaux has developed a modelling tool that predicts and quantifies the transfer of phytosanitary products to surface and groundwater: the Phyto'scope.
This innovation was conducted in conjunction with local SME members of the Dream (Sustainability Water Management and its Environment) competiveness cluster, established in the Orléans region.

KEY FIGURES
LYONNAISE DES EAUX:

9,800
employees.

12 million people supplied with drinking water.
Over **9.3 million** people benefitting from sanitation services.

SITA FRANCE :

19,800
employees.

15 million inhabitants served with waste collection services,
51,000 industrial and commercial clients,
18 million tons of waste treated.

ECORES
RESEARCH PROJECT TO REDUCE **THE ENVIRONMENTAL IMPACT OF PIPES**

Conducted by CIRAH, International Research Centre for Applied Hydroinformatics of SAFEGE, the purpose of the ECORES project is to improve the techniques of laying and renewing gas and water pipes, to reduce their environmental impact.
This 24-month project totalling €1.2 million will test and assess innovative techniques at the worksites in partnership with Ondeo Systems, Crigen, CETaqua and NWTC. It is jointly financed by R+i Alliance and GDF SUEZ.


© GRTGAZ / GROSJEAN PIERRE-FRANÇOIS

NEW CONTRACT FOR EAUX DE NORMANDIE, KEY FIGURES:

6 years

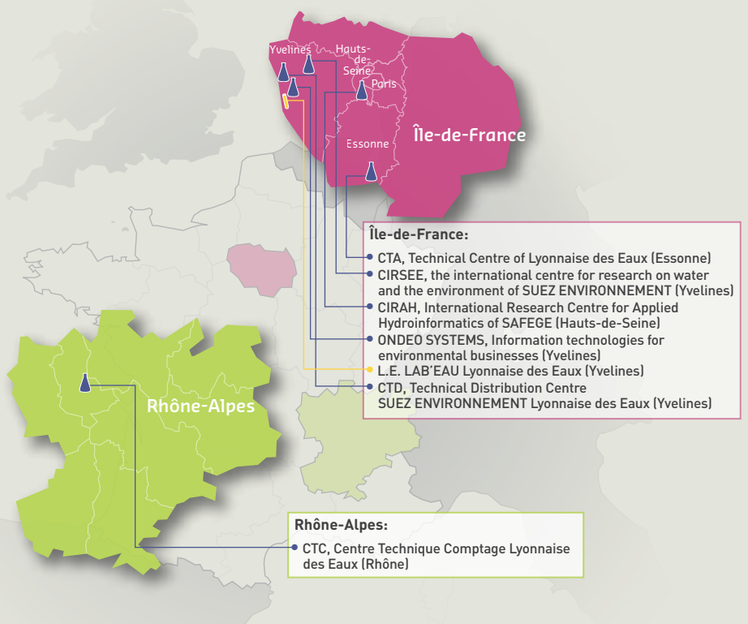
is the length of the water production, distribution and invoicing contract with the local authority of the city of Rouen.

Revenue of **€23 million,**
35,000 subscribers, **400** acoustic sensors for leak detection.

10% to **15%**, represents the change in terms of reducing carbon emissions.

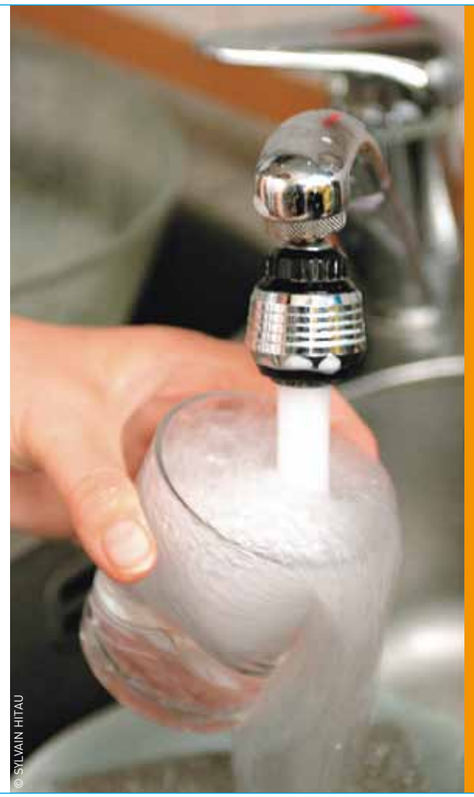
OVER THE ENTIRE TERRITORY
ORGANIZATIONS AT THE FOREFRONT OF INNOVATION

France offers several centres for research and expertise.



Île-de-France:
- CTA, Technical Centre of Lyonnaise des Eaux (Essonne)
- CIRSEE, the international centre for research on water and the environment of SUEZ ENVIRONNEMENT (Yvelines)
- CIRAH, International Research Centre for Applied Hydroinformatics of SAFEGE (Hauts-de-Seine)
- ONDEO SYSTEMS, Information technologies for environmental businesses (Yvelines)
- L.E. LAB'EAU Lyonnaise des Eaux (Yvelines)
- CTD, Technical Distribution Centre SUEZ ENVIRONNEMENT Lyonnaise des Eaux (Yvelines)

Rhône-Alpes:
- CTC, Centre Technique Comptage Lyonnaise des Eaux (Rhône)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CENTRE
NEW-GENERATION CONTRACT FOR LYONNAISE DES EAUX IN ORLÉANS

Last July, the city of Orléans renewed its contract with Lyonnaise des Eaux for the production and distribution of drinking water. This 12-year contract, which is set to start on January 1, 2012, represents an overall total of €110 million.
As a further development of the participative initiative entitled "New ideas for water" promoted by Lyonnaise des Eaux, new governance rules will be set up. The city of Orléans will assume governance for its public drinking water service, whilst Lyonnaise des Eaux will create a dedicated company, l'Orléanaise des Eaux, to supply the service.
Lyonnaise de Eaux intends to develop innovative technologies and fit the 20,000 water meters with remote meter-reading devices and set up an acoustic leak detection system.
A pricing system for the less well-off has been established, offering a reduced tariff for the first 40 m^3. This system is further completed by a solidarity fund that will provide concrete solutions for people experiencing financial difficulties.

LANGUEDOC-ROUSSILLON
CONTRACTS BETWEEN LYONNAISE DES EAUX **AND THE CITY OF AGDE**

The city of Agde (Southern France) has just renewed with Lyonnaise des Eaux, a subsidiary of SUEZ ENVIRONNEMENT, contracts for water and wastewater treatment covering the next 15 years and totalling €166 million. The contracts were renewed due to the innovations proposed by the Group, such as the acoustic detection of leaks to protect the water resource and membrane ultrafiltration to guarantee the quality of bathing water.


© BERNARD RIVIÈRE


© KEN SEET / CORBIS

PAYS DE LA LOIRE
AN INNOVATIVE CUSTOMER SERVICE **FOR PEOPLE WHO ARE DEAF OR HAVE IMPAIRED HEARING**

Lyonnaise des Eaux has launched an innovative service on its website to put people who are deaf or with impaired hearing in touch with a customer advisor. Using a webcam, a microphone and internet connection, the customer can select either instantaneous speech-transcription or real-time translation by a sign-language interpreter.
The service, which uses the communications platform of Acceo, has been rolled out to the urban area of Cholais, and is due to be further extended in the near future.

KEY FIGURES

36.8%

overall waste-to-energy recovery rate for household and non-hazardous industrial materials treated by SUEZ ENVIRONNEMENT in 2010. In 2008, this rate was 31.6%.

UP

GDF SUEZ SUPPORTS RESEARCH

GDF SUEZ is supporting a gender information research and teaching program carried out by *Sciences Po* and *Observatoire français des conjonctures économiques* (French economic research institute). With this partnership, GDF SUEZ will support academic research by offering grants to young researchers, in order to develop new analysis tools for the Group.


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SUEZ ENVIRONNEMENT has made research one of its key strategic pillars, employing some 400 researchers and carrying out 65 research programs.

France /


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CSR/DIVERSITY

LA MAISON POUR REBONDIR*, A GATEWAY TOWARDS EMPLOYMENT

In December 2011, the first Maison pour Rebondir opened its doors in Bordeaux. A solution devised by SUEZ ENVIRONNEMENT as part of its Social and Environmental Responsibility/Diversity approach, this system aims to help people join the workforce by helping them develop skills or by creating business activities, in partnership with the Idées Group and Adecco Insertion, specialist companies working in this area. Similarly, the subsidiaries, SITA, Lyonnaise des Eaux, Degrémont and SAFEGE are taking actions to integrate such workers within their workforce. Additional Maisons pour Rebondir are set to open in the near future.

* Center to lend a helping hand.

SANITATION

FOCUS ON ANGERS

Lyonnaise des Eaux and Degrémont have been awarded a contract to manage the wastewater treatment plant at Angers (Western France), to handle the wastewater of the inhabitants of Angers and local industries (285,000 inhabitants).
A biofiltration process will break down the pollution using bacteria, reducing threefold the concentrations of phosphorus and fourfold the concentrations of nitrogen emitted into the Maine. The various upgrades to the wastewater treatment station should also result in an equivalent drop in carbon levels by 1,100 tons each year, thereby lowering the environmental footprint of the treatment plant. This six-year contract represents a cumulated total of approximately €20 million.

BIOCELL PROJECT

FUEL CELLS **POWERED BY BIOGAS**

Financed by the European LIFE+ program, the Biocell project is being conducted by CETaqua in partnership with Aguas de Murcia, CIRSEE, the international centre for research on water and the environment of SUEZ ENVIRONNEMENT, and Degrémont. This €2.4 million project aims to produce a pilot plant to study two types of fuel cells: Proton Exchange Membrane Fuel Cell (PEMFC) and Solid Oxide Fuel Cell (SOFC).
The Murcia site (Spain) is the first to use clean biogas, which will allow the technology to be assessed on a technical, financial and environmental level.


© SITA FRANCE / YVES SOULABAILLE

THE KEY FIGURES FOR 'ENERGY' IN 2010 WITHIN THE GROUP,

60%

of the total energy produced by SUEZ ENVIRONNEMENT is renewable and covers the annual requirements of 370,000 inhabitants.

Out of 100%:

65% of the energy produced originates from incineration units.

31% is from storage centres (biogas recovery).

4% originates from methane recovery associated with wastewater treatment processes.

World


© MEYSSONNIER ANTOINE

UNITED KINGDOM

SITA UK HAS CONNECTED THE HOLLOWAY LANE SITE TO THE LOCAL ELECTRICITY NETWORK

The waste treated and recycled near Heathrow Airport (near London) produces electricity equivalent to the household consumption of 540 homes. The results of this investment program of over £500,000 should generate 55 MWh of electricity each week.
A system of 30 wells recovers methane and CO_2 produced by waste, and converts it into electricity which is then sent to the local distribution network.

UP

GDF SUEZ

GDF SUEZ has become the leading group in Europe in terms of the sale of gas storage capacity and holds strong positions in three key markets: France, Germany and the United Kingdom.

POLAND

No. 1 in Europe for the production of electricity from biomass, GDF SUEZ has built a 190 WM plant in Polaniec, Poland, which will start operating at the end of 2012.


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QATAR

EXTENSION OF THE DOHA WEST PLANT FOR DEGRÉMONT

Degrémont, a subsidiary of SUEZ ENVIRONNEMENT, has signed a contract for the extension of the wastewater treatment and recycling plant at Doha West in Qatar, which is already the country's largest operational plant. This project will increase the plant's capacity from 135,000 m^3/day to 175,000 m^3/ day, providing services to a population of 650,000 inhabitants.
This expansion forms part of the 10-year contract, signed in 2005, to design, build and operate the plant with its partner, Marubeni Corporation. This contract represents a total of €35 million.

News /

R+I ALLIANCE
A GOVERNMENT BODY DEDICATED TO **APPLIED RESEARCH**

- 5 years of activity
- 5 partner companies: Lyonnaise des Eaux (France), AGBAR (Spain), Northumbrian Water Limited (United Kingdom), United Water (United States) and SUEZ ENVIRONNEMENT (International)
- 6 research centres accredited by R+i Alliance: CIRSEE (Le Pecq-France), CETaqua (Barcelona-Spain), CIRAH (Nanterre-France), United WERCs (Richmond-USA), ONDEO Systems (Le Pecq-France) and NWTC (Newcastle-United Kingdom)
- €50 million invested since 2005
- Budget: €8.6 million in 2010
- 60 ongoing research projects

KEY FIGURES

41%

represents the overall decrease in the electricity consumed in the Haworth drinking water production plant in the United States.
United Water has equipped this New Jersey site with Degrémont technology within the scope of a $100 million investment program.


© INTERLINKS IMAGE / BERKMANN MARC

UNITED KINGDOM
TURNING USED COOKING OIL INTO **ENERGY**

The inhabitants of South Gloucestershire (southwest England) can now recycle their cooking oil at five collection centres. The partnership between SITA UK and Living Fuels converts the oil collected into biofuel, using a completely natural process; it is then used to supply the national network with green electricity. According to the Consumer Council for Water, the cost of repairing the pipes damaged by cooking oil represent £15 million each year in the UK.

KEY FIGURES
WASTE IN EUROPE

524kg

of municipal waste generated per inhabitant in Europe in 2008, of which almost 40% has been recycled or composted.

35% are dumped **in landfill** , (**97%** in Malta and **1%** in Germany).

32% are **incinerated**.

15% are **composted**.

18% are **recycled** (48% in Germany).

Source: Eurostat 2010.

ITALY
NUOVE ACQUE, AN INNOVATIVE AND COMMITTED PLAYER

Nuove Acque is certified SA800. This recognition comes on top of the "Eco-efficient Company" prize the subsidiary received in 2008, which was awarded after it set up a scheme to optimize the treatment systems and reduce losses across the distribution networks. Nuove Acque has therefore proven the efficacy of its committed approach and its policy of excellence on all fronts. Responsible for the management of the water and sanitation services of 37 communes around the city of Arezzo, the Italian company is now using cutting-edge methods and techniques. In the basin of Arezzo alone, water losses have decreased by more than 1.5 million m^3, which equates to the annual consumption of a city of 30,000 in habitants.

News /


© DUBOIS THIERRY / LOVE THE GAME

BELGIUM
BEST ENVIRONMENTAL PERFORMANCE IN THE WORLD FOR A BELGIAN PLANT

On September 23, 2011, Electrabel, a subsidiary of GDF SUEZ, and Ackermans & van Haaren – together in the joint venture Max Green - opened the fully biomass plant in Rodenhuize, Belgium. A €125 million investment has allowed the most extensive conversion of a coal plant to a 100% biomass plant in the world. Each year, Rodenhuize, with 180 MW of power, will produce green electricity capable to cover the needs of 320,000 families, whilst reducing its CO_2 emissions by 1.2 million tons: a real technical success, to benefit the environment.

GDF SUEZ

GDF SUEZ AND CIC
A HIGHLY **STRATEGIC PARTNERSHIP**

On August 10, 2011, GDF SUEZ and the Chinese fund (China Investment Corporation) signed a memorandum of understanding to favour cooperation in all the business areas and geographical positions of GDF SUEZ. The objective: to speed up the development strategies of each partner via joint investments. For instance, CIC will hold 30% of the Exploration & Production activities of GDF SUEZ following a minority investment of €2.3 billion. In Trinidad & Tobago, CIC has acquired 10% of the Atlantic LNG liquefaction plant for €0.6 billion. More recently, GDF SUEZ signed with China National Offshore Oil Corporation (CNOOC) a cooperation agreement in the liquefied natural gas (LNG) sector.

GROUP
ALL SHAREHOLDERS OF SUEZ ENVIRONNEMENT

Sharing **Sharing Dubbed "Sharing",** this program is the first employee shareholding plan for over 76,000 Group's employees, spread over 19 countries. On September 12, the employees were able to purchase SUEZ ENVIRONNEMENT shares at preferential conditions. The scheme offers employees an opportunity of being more closely associated with the Group's success.
Three years after its initial public offering, this essential stage for the future is testimony to the trust placed in the future development of the Group.


© PHILIPPE MENCIA

ALGERIA
SUEZ ENVIRONNEMENT AND THE **MODERNIZATION OF THE WATER AND WASTEWATER SERVICES IN ALGIERS**

The Algerian authorities have renewed the contract to support the modernization of water and sanitation services for Algiers for a five year period. This contract, which entered into force on September 1, 2011, represents cumulated revenues of €105 million. It continues and extends the 2006 contract signed between SUEZ ENVIRONNEMENT, l'Algérienne des Eaux (ADE) and Office National de l'Assainissement (ONA) to manage SEAAL, a company owned by ADE and ONA, which provides water and sanitation management services for the 3.2 million inhabitants of the Greater Algiers area.
In 2006, SEAAL and SUEZ ENVIRONNEMENT joined forces with the aim of providing Algiers with water, sanitation and customer management services of an international standard. Thanks to the combined efforts of the two partners, 100% of the water distributed in Algiers is now drinkable and available 24 hours a day and seven days a week, compared to only 8% in 2006. In addition, 53% of the population of the Wilaya[1] of Algiers is now connected to a sanitation service, compared to 6% in 2006 – and the aim is to attain 70% in 2012.
Another positive figure: 64 of Algiers' 72 beaches were approved for bathing during the summer of 2011, in contrast with 39 in 2006.
In Algiers, SUEZ ENVIRONNEMENT has also deployed its Water International Knowledge Transfer Initiative, WIKTI[2]. In this way, SUEZ ENVIRONNEMENT experts accompanied SEAAL personnel on a daily basis in the field during selected technical assistance missions to improve their managerial practices, project management and introduce modern management tools. Today, 70% of trainers are Algerian.
The new contract signed in September will continue the work and approach adopted over the last five years. The transfer of expertise will continue until SEAAL has acquired sufficient expertise, namely at the end of the contract in 2016.
This also includes progressively extending the modernization of the water and wastewater treatment services to the Wilaya of Tipaza (west of Algiers), with the goal to provide access to drinking water 24 hours a day.

(1) Regional authority of Algiers.
(2) Water International Knowledge Transfer Initiative

GROUP
E-MAG, OUR NEW MAGAZINE ON-LINE

This new type of media allows internet users to immerse themselves in comprehensive and educational files, with key figures, backed up by computer graphics, and highlights the full extent of the daily commitment of SUEZ ENVIRONNEMENT and its employees in facing up to the major challenges of our businesses. This new type of media further completes the portrait of SUEZ ENVIRONNEMENT. It operates as a hub with links to social networks and the numerous other websites of the Group and its entities.

To find out more:
→ www.emag.suez-environnement.com

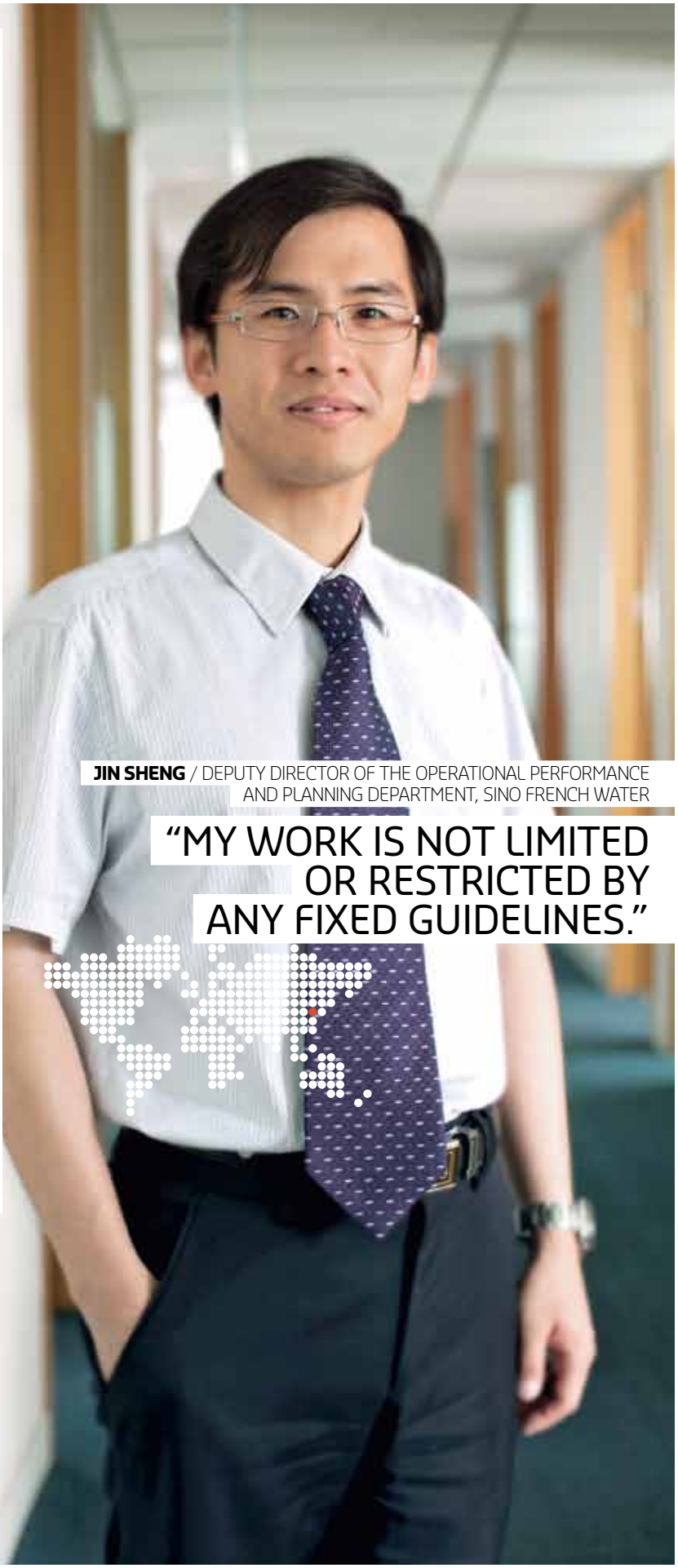
AT THE HELM. Jin Sheng is passionate about two things: the environment and China. His first passion led him to study environmental engineering at Tongji University in Shanghai, followed by the management of water, soil and waste at AgroParisTech, thanks to a grant from SUEZ ENVIRONNEMENT. His other passion for his country, China, meant he turned down a job in France. *"China did not have people with suitable qualifications, even though the water sector was assuming vast importance in the development of the country"*, he recalled. And, therefore, in 2007 Jin Sheng started working at Sino French Water. He is currently responsible for managing investment expenditure, steering the five-year project and assessing the relevance of major projects. *"In practice, I analyse the status of the investment expenditure of the 25 Contractors of Sino French Water in China. I report any discrepancies in relation to forecasts, explain any differences, and summarize the data in monthly spreadsheets. For the major investment projects, I regularly visit the worksites."* This is a profession that requires solid skills, from a technical perspective as well as in terms of communications. *"My work is extremely versatile and is not limited or restricted by any fixed guidelines,"* Jin Sheng, further added. *"However, my field of operations covers areas ranging from technical matters to financial management, and it also extends to providing assistance for technical management issues."*

Jin Sheng's latest challenge is to organize in record time a training course on investment expenditure for all managing directors, financial directors and engineering directors working on the joint ventures of Sino French Water, i.e. a course for 85 people in all. In 2010 his talent was rewarded after he received the first Excellence award for the employees of Sino French Water. He believes he received the award for his methodical work, and his positive and proactive attitude.

Sino French Water

— Sino French Water is the fruit of a partnership between SUEZ ENVIRONNEMENT France and NWS Holdings Limited. Active since 1992 in the water sector in China, the company supplies drinking water services to 18 Chinese cities including Chongqing, Tianjin, Shanghai, Sanya, among others, meaning water is supplied to over 14 million inhabitants and industrial customers. Present in China for around 30 years, SUEZ ENVIRONNEMENT and its subsidiaries offer innovative environmental solutions through solid and long-term partnerships.

新創建 NWS
中法水務 SINO FRENCH WATER



JIN SHENG / DEPUTY DIRECTOR OF THE OPERATIONAL PERFORMANCE AND PLANNING DEPARTMENT, SINO FRENCH WATER

"MY WORK IS NOT LIMITED OR RESTRICTED BY ANY FIXED GUIDELINES."

To find out more:
→ www.sinofrench.com
→ www.suez-environnement.cn

© DR

SITA CZECH REPUBLIC AND SLOVAKIA

SMART TRUCKS

KNOWING THE PRECISE USED CAPACITY OF A TRUCK and being able to instantly locate a customer's load is some of the important information SITA CZ requires for managing the largest trucks in their fleet. To do so, SITA CZ's teams have developed a unique monitoring device capable of locating the trucks and providing information on their load volume.

Initiated in November 2010, the project started operating in January 2011 after installing the new technological solution on the 1,950 units that make up SITA CZ's fleet of trucks.

The device is powered by the GPS system already fitted on all the trucks and was combined with a manual reader. It sends an electromagnetic signal to a RFID(1) tag, fitted on all the trucks. In return, this tag sends back information that the reader then transmits to a server, which centralizes all the data and then analyzes it.

"The goal was to acquire information on how the trucks are used and to have a tool to assist our decision-making process in relation to investments", pointed out Robert Lukl, the technical and operations director at SITA CZ. Therefore, having highly precise information about the use of the trucks has helped us to optimise the purchases planned in 2011, and achieve considerable savings.

In addition, the system allows us to keep customers informed at every stage of their order and provide proof of delivery dates and times, if required.

Another remarkable feature of the project is that it was the SITA CZ teams themselves who actually designed the technical solution. *"There was no technology on the market to perform the tasks required by the specific nature of the project. Therefore, it was the managers of the Operation and Technology department who drafted the specifications, contacted a manufacturer directly and devised the solution"*, revealed Robert Lukl.

All the drivers and operators then received training on this new tailor-made tool. The next stage will involve improving the system with an automatic reader capable of picking up a more powerful signal.

(1) Radio Frequency Identification. This system tracks an object and determines its features remotely.

SITA CZ IN FIGURES

- **38 facilities** in the Czech Republic and 9 in Slovakia
- Over **10,000 customers,** including 410 municipalities and 8,100 industrial customers
- **333,000 tons** of industrial waste collected
- **401,000 tons** of industrial waste treated
- **1,008 employees**

"WE NOW HAVE A DECISION-MAKING TOOL FOR OUR INVESTMENTS."

To find out more:
→ www.sita.cz

© DR

INTELLIGENT NETWORKS

MANAGING WATER IN A DIFFERENT WAY

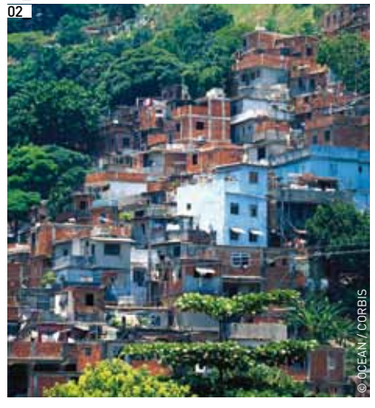
CLARA GAYMARD / PRESIDENT OF GENERAL ELECTRIC FRANCE AND CITY INITIATIVE LEADER FOR GENERAL ELECTRIC INTERNATIONAL

© ANTOINE DOYEN

Water is a precious and particularly vital resource. SUEZ ENVIRONNEMENT and GENERAL ELECTRIC have decided to combine their expertise in order to devise, design and offer innovative and global solutions. The aim is to allow people to improve the way they use and share water, which can sometimes be a scarce resource.
Clara Gaymard, Chairman of GE France and City Initiative Leader for GE International, has been interviewed about this 'natural' partnership between these two leading global groups.

© OCEAN / CORBIS

01_



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02_

01_ and 02_

In Rio de Janeiro, water is particularly sensitive issue, especially in the favelas where water losses can attain rates of 60% to 70%.

Why is this agreement important for SUEZ ENVIRONNEMENT and General Electric?

Clara Gaymard: GE and SUEZ ENVIRONNEMENT have enjoyed a commercial relationship for a number of years. With this agreement, however, we are introducing a new method of working together, and are changing from a traditional commercial relationship to a strategic and cooperative one to help us devise, design and offer global and innovative solutions to our customers in the area of water management.

This agreement also demonstrates that we share a common vision on the key issue of what water represents and that we offer complementary skills.

Can you tell us about your complementary skills in this area?

SUEZ ENVIRONNEMENT is a player recognized by local authorities for its skills in managing the entire water cycle and for its knowledge of all the issues involved in this complex and fragile ecosystem. The public sector services contracts that link the group to local authorities bear witness to its expertise and the trust they place in it. GE will supply its know-how of smart networks and the technological tools to SUEZ ENVIRONNEMENT, to help design innovative solutions for both people and the environment.

How did this agreement become possible?

GE and SUEZ ENVIRONNEMENT share a common understanding of worldwide growth, meaning we share an extremely similar vision. SUEZ ENVIRONNEMENT and GE are both working to satisfy the vital needs of the planet. In this respect, I am talking about energy, mobility, health and, obviously, water, which is the business line both groups have in common.

Our business activities are not merely limited to designing and selling products: however, we also establish global solutions to improve the daily quality of life and strengthen the performance of companies. This ideal 'breeding' ground has allowed us to set up this project and use our respective know-how for the service of the water resource.

What form does this partnership take?

We are working in different areas in an extremely pragmatic way. We do not aim to apply a systemic approach and adopt identical responses everywhere, but to act according to local problems. In Rio de Janeiro (Brazil), where the issue of water is a sensitive subject, especially in the favelas, where water losses can attain rates of 60% to 70%, we are working on solutions to optimize water networks and managing crisis situations, notably in the context of the 2016 Summer Olympics.
In China, the issue of water is a particularly pressing one for companies whose requirements are constantly increasing. We are devising industrial solutions for such cases to guarantee supplies and help companies better control their consumption, their discharges and their impact on the environment.

In France, our research will be more focused on transporting and distributing water in a more efficient manner, and on water quality. Whatever the problems involved, the main issue concerns managing water issues in an intelligent way.

→

BRIEF OUTLINE OF GE

Created in 1892, GE is a group that specializes in innovation in the energy, health, transport and infrastructure sectors; it offers a whole range of products and services such as the production of energy and aircraft engines, water treatment, and medical imaging. It is active in over 100 countries with revenues of $150 billion in 2010.
GE employs 300,000 staff, including 10,000 researchers and 90,000 employees in the energy sector.

"THIS AGREEMENT CONVEYS OUR DESIRE TO RESPOND TO THE INCREASING NEEDS OF CITIES FOR WATER. IT PERFECTLY CONVEYS THE MAIN AIM OF BOTH OUR GROUPS: TO SATISFY THE VITAL NEEDS OF THE PLANET."

03_

03_
Approximately 60% of Chinese cities are experiencing water supply problems.

What do you mean by an 'intelligent way'?

Contrary to electricity, it is possible to store water; however, it remains an extremely complicated resource to manage. With our GE Intelligent Platforms division, we are introducing software to improve the way we manage and use the infrastructures involved in the water cycle. In the same way as we have adopted systems for other types of energy and natural resources.

Such software allows us to remotely manage flows and machines. Software programs can also be used to increase understanding and the decision-making process involved in this type of infrastructure. This is especially true for drinking water and wastewater treatment plants where predictive models have been designed to reduce energy consumption, to produce better quality water and ensure transportation from point to point, without any losses, and respond more efficiently to fluctuations in demand. The remote water-meter reading therefore only represents the tip of the iceberg.

To find out more:
→ www.ge.com/fr/
→ www.ondeosystems.com

In your opinion, what are the current reasons for such advances?

These amazing changes have been achieved thanks to the arrival of information technology in our business lines. This phenomenon is called 'machine-to-machine' or the 'Internet of objects'. Increasingly, machines communicate together in real time. This allows us to manage as minutely as possible the production, treatment and distribution of water.

Our engineers design and operate computer platforms and highly sophisticated models, which opens the way for intelligent water management systems. Namely, managing resources in a more forward-thinking, proactive and respectful manner. This is the start of a veritable revolution, which we will pursue relentlessly with great humility.

AN INTERNATIONAL COOPERATION AGREEMENT

On May 26, 2011, SUEZ ENVIRONNEMENT and General Electric signed a worldwide technological and commercial cooperation agreement. The aim of this agreement is to provide a response to the increasing needs of extremely large cities by developing innovative solutions to optimize the management of networks and drinking water and wastewater treatment plants.
This two-year renewable agreement brings together a world leader in the management of the entire water cycle and a world leader for water and energy technologies, and smart networks.
Jean-Louis Chaussade, CEO of SUEZ ENVIRONNEMENT believes that *"with this agreement, the Group will offer cities distinctive solutions to allow them to face up to increased urbanization and the pressure on water resources"*.
In terms of R&D and innovations, this agreement will produce innovative solutions to optimize the remote real-time management of flows thanks to the introduction of new-generation sensors, which will reduce energy consumption in the drinking water infrastructure and wastewater treatment, and regulate peaks in consumption and detect leaks and pollution. Initially, the research will mainly be concentrated in China and France.
The results of this research will complement the range of services already proposed by SUEZ ENVIRONNEMENT in the field of industrial computing, through its subsidiary Ondeo Systems, a pioneer in Smart Water. With a global response capacity, Ondeo Systems offers a full range of information technologies dedicated to the monitoring of environmental activities and organized around industrial information systems, smart metering and asset management: 700 monitoring software systems are installed and maintained in 14 countries and more than 600 000 meters with permanent automated meter reading are in the largest metropolitan areas.

"THE RECYCLING OF DIAPERS AIMS TO ACHIEVE A TRIPLE RECOVERY OBJECTIVE."

HAPPY NAPPY

RECYCLING DIAPERS: A CHEEKY IDEA!

THE MOST INNOVATIVE IDEAS often result from problems encountered on a daily basis. After his third child was born in 2010, Laurent Galtier, Development Director at SITA France, wondered why no specific recycling solution existed for disposable diapers. This question was the basis for creating a new recycling stream using technology that is unique in the world, and owned by a Canadian company. SITA then signed a confidentiality and exclusivity agreement for France.

In practice, the theory of recycling diapers is based on a threefold recycling process: producing energy due to the biogas produced by the organic waste, manufacturing recycled material by recycling the plastic element, then producing compost from the remaining organic waste.

Fertility levels in France are some of the highest in Europe. With 2.1 children per woman and over 800,000 births each year, approximately one million tonnes of diapers are thrown away each year. To evaluate the industrial feasibility of the process, SITA has constructed a pilot project using the skills of various partners: the CIRSEE[1], the ENSAT[2], the INRA Narbonne[3] and the APESA[4], and finally received financing from the Ademe[5].

First of all, the CIRSEE set up a pilot laboratory. In practice, the technology used for the threefold recycling of diapers needed to be integrated into an existing wastewater treatment plant. The diaper recovery principle is based on co-digestion, whereby organic waste from used diapers is mixed and fermented with sludge from wastewater released by the Lyonnaise des Eaux treatment plants. This co-digestion will then provide the biogas.

Initially, the research program involved testing a pilot program that separates and isolates the various components in the diapers. Secondly, the potential for recovering energy and materials from the components needed to be assessed. It was the INRA in Narbonne that tested the co-digestion and the methanization of the sludge from wastewater plants and the organic materials from the diapers. In turn, the ENSAT looked into recycling the organic materials in the form of compost. At present, the ENSAT is working on statutory compliance issues in relation to the compost. The lifecycle of the line is also being analysed to calculate its environmental footprint. Watch this space!

(1) SUEZ ENVIRONNEMENT's international centre for research on water and the environment.
(2) École nationale supérieure agronomique de Toulouse.
(3) Institut national de la recherche agronomique (National Institute of Agronomic Research).
(4) Association pour l'environnement et la sécurité d'Aquitaine (Aquitaine Association for the Environment and Security)
(5) Agence de l'environnement et de la maîtrise de l'énergie (French Environment and Energy Management Agency)

To find out more:
→ www.sita.fr

MAKING WASTE A RESOURCE

The amount of waste produced is constantly rising throughout the world.
However, a growing percentage of waste is now recycled and transformed into secondary resources.

CONSTRUCTING A RECYCLING-FOCUSED SOCIETY: INCREASING THE AMOUNTS RECOVERED AND MANAGING THE DISPOSAL PROCESS

WASTE MANAGEMENT POLICIES DEPEND ON SPECIFIC LOCAL FEATURES AND THE POLITICAL CHOICES OF THE GIVEN COUNTRY. HOWEVER, DESPITE A DIVERSITY OF METHODS RECOVERY, IN ALL FORMS, IS EVER INCREASING. EXPLANATIONS.

WHAT IS WASTE?

According to the European Union, waste is "*any substance or object which the holder discards or intends or is required to discard*[1]". For a long time, waste was considered as a harmful element to be discarded and placed out of reach,in a landfill, in the outskirts of cities.

A growth in the production of waste combined with an increase in environmental awareness has forced the European Commission to determine the objective of disconnecting economic growth from the production of waste. One of the methods for attaining this "recycling society" objective is to follow a lifecycle approach to allow a high return on resources. The recovery of energy from waste is part of such an approach. Considerable progress has already been achieved in most European countries: in 2008, 40% of the household waste ended up in landfill sites in the European Union, compared with 68% in 1995. Although this percentage is set to reduce even further over coming years, landfill sites will still continue to be necessary, merely to accommodate the ultimate non-recyclable waste.

LOCAL CONTEXTS AND SPECIFIC FEATURES

Although developed countries are already recovering energy from waste on an industrial basis, most emerging countries are also starting to implement specific policies and strategies to manage their waste, whose volume is increasing in line with urbanization and economic development. The quantities produced are also linked to the type of industries involved. Therefore, computer waste is set to increase from 200% to 400% from now to 2020 in South Africa and China, and by 500% in India[2]!

In terms of treating municipal waste, there are several major trends according to the specific features of each of the countries.

Australia, for instance, has favoured landfills for many years due to the size of the country and low population density. However, the country is now well aware of the environmental challenges involved and is currently placing a greater emphasis on waste recovery (notably for composting).

524 kg
per inhabitant
This is the amount of household waste produced in Europe in 2008.
In 2020, it should rise to **558 kg**.
Source: EEA (2011).

30%
This is the increase in the productivity of resources between 1992 and 2007. Over this same period, productivity at work and energy productivity increased by 85%.
Source: EEA (2010), Scope EU-12.

01_

© INTERNET IMAGE / ALEIMDORFER-GILLES

01_Computer waste is set to increase from 200% to 400% from now to 2020 in South Africa and China, and by 500% in India.

02_In Europe, the reduction in the amounts sent to landfill should contribute to increasing the amounts incinerated, which could involve 39% of waste from municipalities in 2020.
Source: EEA (2011).

02_

© SUEZ ENVIRONNEMENT

RECYCLING IN ALL ITS FORMS

On the other hand, in densely populated countries, incineration is more favoured, for example in Japan (74%), in Denmark (48%) and in the Netherlands (39%). Although the United Kingdom, which had previously preferred landfill sites, is now reviewing its strategy to comply with the European objectives *(see the box on SITA UK)*. Germany is placing an emphasis on recycling (48%) and on the recovery of energy (34%). Eventually, in France, there is a fairly balanced distribution between recycling and agronomic recovery (36%), energy recovery (32%), and storage (31%)[3].

In 2005, China, another country where SITA operates, became the world's leading producer of waste in front of the United States. This increase is due to strong economic growth and demographic pressure.

In developed countries, the era of simply treating waste by eliminating it has now completely passed. The 'new school of thought' now encourages recycling in all its forms: organic, materials or energy *(see box: "Focus on recovery")*.

The European Union hopes that waste management will become the cornerstone of a circular environment in which waste is recycled and reintegrated into the economic production cycle. Leading industrialists in various sectors are now pioneers in terms of sustainable →

03_
In Australia, the 'Product Stewardship Act' entered into force on August 8, 2011. This framework legislation, which aims to improve the lifecycle of products, should strengthen the recycling and recovery of energy from waste.


© ABACAPRESS / KRISTIAN SCHMIDT

A MARKET REPRESENTING €300 BILLION

It is still difficult to evaluate the worldwide waste market, as in many countries it remains an activity limited to the unofficial economy. It is thought, however, that it could represent some €300 billion when all sectors are taken into consideration, from collection to recycling[1]. This estimate takes most of the OECD countries into account, as well as emerging countries such as China and Brazil.

(1) Source: "Du rare à l'infini - Panorama mondial des déchets 2009" [From waste to resource: an abstract of world waste survey 2009] Catherine Gaillochet and Philippe Chalmin

04_


04_
The production of recycled PET resin ("r-PET") for food use is being developed: in 2009, France Plastiques Recyclage (created by SITA France and Paprec Group) received the approval of the French Agency for Health and Safety for its r-PET decontamination process.

91%

represents the percentage of waste stored by SUEZ ENVIRONNEMENT in plants equipped with biogas capture and storage systems in 2010.
In 2008, this rate was **85%.**

36.8%

is the overall waste-to-energy recovery rate for household and non-hazardous industrial materials treated by SUEZ ENVIRONNEMENT in 2010.
In 2008, this rate was **31.6%.**

© MH PRODUCTIONS / PHILIPPE MENOIA

05_

05_ and 06_
In 2010, SUEZ ENVIRONNEMENT placed 13.6 million tonnes of secondary raw materials and compost on the market, which were extracted from 37 million tonnes of waste processed by the Group.

→ development and are therefore dragging their competitors into a virtuous circle. As a result of this generalized recycling and recovery trend throughout the world, SITA is developing its expertise in all areas in order to offer solutions for all recycling issues.

SOLUTIONS FOR ALL

Regarding the recovery of materials, SITA offers an expert centre providing a complete offer of services, from the recovery of recyclable materials and end-of-life products to the production of high-quality recycled raw materials.

SITA Recyclage has also developed a specific unit to handle WEEE (Waste Electrical and Electronic Equipment). In the area of organic recovery, SITA designs and operates composting units to recover the fermentable portion of household and industrial waste. In practice, such waste is directly spread over fields or converted into compost.

In turn, SUEZ ENVIRONNEMENT has undertaken to increase its energy efficiency by 5% in 2012, compared to 2008.

06_

In 2010, SUEZ ENVIRONNEMENT operated 118 composting platforms, 48 energy-from-waste facilities, 601 sorting stations and 138 storage centres. Worldwide, 50 million people are benefiting from the Group's waste collection services. With its considerable experience in all aspects of waste recycling and recovery, SUEZ ENVIRONNEMENT now intends to meet its customers' expectations in terms of the circular economy and help them become leaders in the field of environmental performance.

(1) Article 3 of the Framework Directive 2008/98.
(2) According to the UNEP (United Nations Environment Program).
(3) Out of 37.9 million tonnes of waste collected by public service in 2009 (Source: French Ministry for Sustainable Development).

FOCUS ON RECOVERY

Recovery consists of reusing, recycling or performing other actions to obtain reusable materials or energy from waste.
There are three types of recovery:

- **Organic recovery** which can take the form of composting (transformation of fermentable materials by micro-organisms, in the presence of oxygen and water) or methanization (fermentation process, to release biogas which can then be recovered)
- **Material recovery** which is characterized by reusing, re-employing, and regenerating materials (paper, plastic, metal, etc.)
- **Energy recovery** which consists in the recovery of energy following the combustion of waste in a energy-from-waste facility.

CHRISTOPHE CROS /
EXECUTIVE VICE-PRESIDENT OF SUEZ ENVIRONNEMENT

FOCUSING ON RECOVERY

SUEZ ENVIRONNEMENT IS FOCUSING ON WASTE RECOVERY, ENSURING PRODUCTS ARE GIVEN A SECOND LIFE AND GENERATING NEW VALUE.
CHRISTOPHE CROS, EXECUTIVE VICE-PRESIDENT IN CHARGE OF WASTE EUROPE ACTIVITIES AND CEO OF SITA FRANCE, SHEDS LIGHT ON THE FUTURE PLANS OF THE GROUP IN THIS AREA.

© DR

"THE COUNTRIES OF THE EUROPEAN UNION ARE ALL TRYING TO MOVE IN THE SAME DIRECTION BY PLACING AN EMPHASIS ON WASTE RECOVERY."

The waste sector is experiencing rapid growth. How is SITA managing the waste treatment value chain to offer new energy recovery services?

Christophe Cros: At the beginning of the 20th century, health issues were the reason why cities started managing their waste. Above all, the primary concern was to dispose of the waste. In the 70s, environmental issues started to be taken into account. The aim was to dispose of waste at the lowest possible cost, whilst still respecting the environment. Most commonly, waste was disposed in landfill sites.

Then, in the 80s and 90s, incineration became the most practical method, as it produced energy and required a smaller area of land than landfills. At present, the waste business focuses more on recovery and less on disposal. This trend results from the cumulative pressure of an ever increasing scarcity of raw materials, global warming and tighter regulations, in keeping with a greater environmental awareness of the general public.

Moreover, citizens are increasingly aware of the issues involved in preventing waste and in its recycling. Raw waste is now considered as wastage and a source of pollution. Over the years, SITA has adapted its activities to such trends.

Our customers would like to be offered solutions for the reuse of secondary raw materials and the production of renewable energy. Our relationship with Renault, one of SITA France's customers, illustrates this trend as we have set up a joint venture in charge of dismantling end-of-life vehicles.

Each country processes its waste in a different manner. How does SITA adapt to these varying conditions?

Ch. C.: Indeed, there are significant disparities between the different countries, especially in Europe. In France, there is a balance between the different processing methods; however, Germany and the Netherlands favour recycling and incineration. The United Kingdom has long favoured landfill sites. Although, increasingly strict regulations have forced the country to turn to a greater extent to recycling and energy recovery. In turn, Poland is considering developing incineration.

Despite these differences, countries in the European Union are all attempting to move in the same direction by favouring waste recovery. They are currently working on the development of a structured industrial recovery stream. This could therefore result in the compulsory integration of secondary raw materials into manufactured products. Faced with this situation, in each country where we operate, SITA intends to become actively involved in the entire value chain, from collection to recovery.

Is this the scheduled end of landfill sites and incineration?

Ch. C.: Incineration will still continue to be used; however, it will be increasingly associated with the production of energy. And landfills will not disappear overnight. In the United Kingdom, almost 50% of municipal waste is still sent to landfills. In Germany, municipal waste is also sent to landfills, but only after the sorting of its organic fraction. Eventually, the sole non-recoverable residual waste will be sent to landfills.

SITA is focusing on waste recovery by adapting to the new demands of its customers. What are your priorities?

Ch. C.: SITA has resolutely adopted the "new school" of waste management, which implements three recovery cycles: the production of recycled materials, returning organic materials to the soil, and the recovery of energy from waste. We are now offering comprehensive solutions for our customers, which take into account the entire waste treatment value chain, as well as all types of waste. Certain companies now only want one part of their waste to be sent to a landfill site.

Last time SITA France renewed its contract with Michelin, our target was set to achieve a 100% recycling or energy recovery rate at all sites in France. We achieved this percentage at the end of 2010, and were congratulated by the manufacturer who has now categorized us as a "supplier of excellence".

It is our responsibility to ensure we evolve commercially, and listen more carefully to our customers. For example,

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01_

© OLIVIER THIERRY / LYONNAISE DES EAUX FRANCE

02_

01_ A European directive in 2000 relating to the disposal of end-of-life vehicles (ELV) provides for a minimum reuse and recycling rate of 85% for all ELVs. SITA France and its partners, Indra SAS and Renault, can dismantle 25 vehicles per day at each unit.

02_ With 118 composting platforms throughout the world, SUEZ ENVIRONNEMENT is a major player in the composting sector.

SITA France is working in partnership with Danone, who has become one of our trendsetters by asking its suppliers to only supply recycled PET sourced from our sites.

Could you tell us how the recovery of materials, biological components and energy from waste offers an opportunity for your customers?

Ch. C.: Our customers are motivated by a range of different issues. Primarily, manufacturers are increasingly aware of environmental issues, especially those who sell their products directly to consumers. For companies, taking the preservation of the environment to heart also constitutes a method of bringing members of staff together and encouraging them.

Certain companies have also understood that recycling their waste means they are less exposed to the global variations in the price of the raw materials they use. This particularly concerns metals such as copper. →

SUPPORTED BY A WORLDWIDE NETWORK

The waste business is highly dependent on lifestyle... and local regulations. SITA has set up a technological network to exchange good practices, group procurement, etc. There is a network for each of the business lines: collection, storage, incineration, energy recovery, etc. And each of the entities offers a representative in each of the networks. For example, the Wood network brings together Wood experts working in the different SITA entities (France, UK, NEWS, etc.) to allow each party to share any operational, commercial or strategic problems encountered when working with wood.

Thanks to this network, SITA has been able to negotiate on a European level and therefore obtain volumes and prices that no entity on its own would have been able to achieve.

Worldwide, the production of plastics reached 230 million tonnes in 2009. The share of the European Union in this volume was 25% (compared to 15% in China). In the European Union, the rate of plastic recycling was 21.3% in 2008[1].

These figures, combined with the fact that certain consumer products contain over 20 different types of plastic, which all involve a specific process, emphasize the challenge this type of recycling represents.

(1) Source: European Commission - 2011).


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→ By recovering their waste, these companies can now reduce their costs or, in any event, prevent any future increases. Our aim is to help customers become leaders in their sector by allowing them to attain extremely ambitious environmental objectives. SITA France has recently started working on a project for the Mars Group, whose plant is located one kilometre from one of our incinerators. This production centre will soon start using in its process the heat produced by this incinerator.

How has SITA France formalized this evolution?

Ch. C.: After working for over 92 years in the waste sector, SITA France was obliged to evolve and change from an elimination approach to one based on recycling. The new slogan SITA France started using in July 2011 perfectly summarizes our new vision. "De la suite dans vos déchets" [A future for your waste] emphasizes our capacity for ongoing innovation in the area of waste management. We have also optimized our corporate vision entitled "Together 2015" to support our aim of becoming a leading company for waste recovery solutions.

For 2015, SITA France has fixed the target of recovering two tonnes of waste for each tonne eliminated. To reach these objectives, our strategy is based on three main areas: customers, operational excellence and management.

In practice, we must prioritize an offer supplying global waste recovery solutions for our customers, especially our corporate customers. Furthermore, we need to target operational excellence in all other business lines and divisions which affects trucks drivers just as much as managers.

One of the driving forces behind our performance is obviously innovation. For example, SITA France has recently launched an electric collection truck for domestic waste *(see page 43)*.

"WE ARE PLACING AN EMPHASIS ON THE RECOVERY OF WASTE AND AIM TO BECOME A LEADER IN WASTE RECOVERY SOLUTIONS."

Does this strategy involve the development of new skills within the company?

Ch. C.: Obviously, to attain our objectives, we also need to develop new skills, more specialized in various areas such as the thermal sector or in the operation of energy production units. This also applies to the areas of sorting and recycling. We are integrating new profiles capable of providing support for the construction, dimensioning and maintenance of new sorting centres.

We are also in the process of setting up a training program, to strengthen the skills of employees. In fact, our business lines are constantly evolving. We would also like to develop our managerial practices. Within this context we have set up, in conjunction with the Management School of Lyon, UniverSita, which offers management training to our managers to provide them with the ability to react to the development of new markets.


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"SITA UK'S STRATEGIC PLAN IS TO SEND ONLY 17% OF ITS WASTE VOLUMES TO LANDFILL SITES IN 2020, COMPARED TO 71% IN 2010!"

A PROVEN EXAMPLE

THE VARIOUS ENTITIES OF SITA SUPPORT THE EVOLVING PRACTICES AND LOCAL REGULATIONS WITH THE AIM OF BECOMING ONE OF THE MAJOR PLAYERS IN THE WASTE CYCLE. **PROOF IS PROVIDED BY SITA UK AND SITA NORTHERN EUROPE WASTE SERVICES (NEWS).**


© PAUL BOX

JOHN SCANLON / CHIEF OPERATING OFFICER AT SITA UK

SITA UK

AN EXTENSIVE STRATEGIC PLAN

"In 1996, a landfill tax was introduced in the United Kingdom. At that time, the tax amounted to £1 per tonne; however, the rate is now £56 per tonne, and it is set to rise to £80 in 2014!

Clearly, this rise, combined with a desire by companies to increase their environmental performance, has had a considerable impact on waste management practices. The cost of alternative solutions such as recycling and energy recovery is now extremely competitive compared to landfill. In 2010, we recycled and recovered over 1.6 million tonnes of waste.

We also invested £65 million in R&D and facilities and our aim is to develop new processing facilities.

SITA UK is building an energy-from-waste facility in the north of England, which will be able to handle 250,000 tonnes of waste each year. This plant will start operating in April 2014. We have also had considerable success with gaining planning permissions in 2011. Since July the company has received permissions for new recycling and recovery facilities across the country, which will mean we can process a further 1.5 million tonnes of waste.

In terms of innovation, SITA UK is a pioneer in producing fuel from residual waste. SUEZ ENVIRONNEMENT, through its Blue Orange investment fund and its subsidiary SITA UK, has announced its intention to develop, in partnership with Cynar Plc, 10 facilities capable of producing diesel from used plastic materials. The first of these facilities is due to be built in 2012.

These are a number of projects set up to support SITA UK's strategic program, which aims to send only 17% of the waste it handles to landfill sites in 2020, compared to 71% in 2010!"

© DR

FREEK VAN EIJK / STRATEGY AND DEVELOPMENT DIRECTOR AT SITA NEWS (NORTHERN EUROPE WASTE SERVICES)

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SITA NEWS

BREATHING NEW LIFE INTO WASTE

"The Benelux and Germany are the most efficient European countries in terms of waste management, Freek Van Eijk notes. Municipal waste sent to landfill sites falls well below 5%. With almost 60% of all waste being recycled or recovered in the form of energy (approximately 35%).

Waste is no longer considered as a constraint but now forms part of the circular economy, a fact that is also conveyed through the various regulations. Flanders has enforced legislation relating to the recycling of materials rather than adopting a waste plan. And Germany has created a raw materials agency. In such an environment, the trend is notably to increase the responsibility of the manufacturer but also to develop partnerships between waste managers, the industry and universities.

SITA NEWS, one of the main players in the market, has a solid customer base comprising 190,000 customers, 17 million inhabitants, and managing 5 million tonnes of waste. In our fractioned distillation plant located in Almelo, near the German/Dutch border, we have been recycling solvents for a number of years, which are recovered and reused in the production process.

In September 2011, we opened a plastic-packaging sorting line in Rotterdam. This line accounts for 25% of all plastic packaging sorted out in the Netherlands. In 2010 and 2011, SITA NEWS was also involved in managing the waste produced as a result of constructing the new head offices of TNT "The Green Offices" in Hoofddorp. We followed the highest American sustainability standard (BREEAM) and 98% of the building waste was either reused or recycled.

SITA NEWS has also recently launched the *cup2paper* concept, a 100% recyclable coffee cup which can be disposed of with paper waste. To help our corporate customers gain a better understanding of the impact of their activities we have also developed a decision-making tool. It allows us to calculate the potential reduction in CO_2 emissions, when waste is sorted out at source rather than being simply collected and incinerated.

For SITA NEWS, the management of waste represents far more than the protection of the environment. We breathe new life into waste; we save the primary resources and reduce costs for our customers."

"OUR MARKET IS 17 MILLION INHABITANTS, 190,000 COMPANIES AND 5 MILLION TONNES OF WASTE MANAGED EACH YEAR."

SITA NEWS operates in Belgium, the Netherlands and Germany.

ReENERGY

ENERGY FOR SALE!

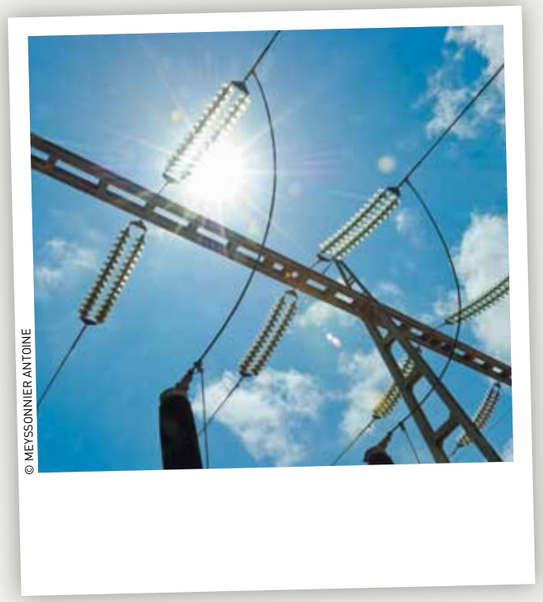
ReEnergy, a waste-to-energy plant set up in Roosendaal (the Netherlands), started operating on October 12, 2011, and is one of the most efficient plants of this type in Europe: with a treatment capacity of 291,000 tonnes a year, the plant will process the waste produced by over 1.9 million inhabitants a year and generate 256,000 MWh of electricity, which is equivalent to the electricity consumed by 70,000 households. ReEnergy also supplies heat to greenhouses located near the plant, thereby saving some 3.5 million cubic meters of natural gas. The remaining heat will also be used to heat an eco-district in Roosendaal. The plant was inaugurated in the presence of the President of the European Council, Herman Van Rompuy, the CEO of GDF SUEZ, Gérard Mestrallet, and SUEZ ENVIRONNEMENT Executive Vice President, Christophe Cros, as well as the CEO of SITA NEWS, Adriaan Visser. This facility represents an investment of approximately €200 million.

INITIATIVES

UNITED KINGDOM: RECOVERING ENERGY FROM RESIDUAL WASTE

In April 2011, SITA UK signed a PFI[1] amounting to €825 million over 25 years with the South Tyne and Wear Waste Partnership, an association representing the local authorities in the areas of Gateshead, South Tyneside and Sunderland. This contract concerns the management of 190,000 tonnes of residual household waste each year. It includes the design, construction, financing and operation of an energy-from-waste facility in Teesside (north east England).
This plant, which is due to start operating in 2014, will offer a capacity of up to 256,000 tonnes each year, and will produce electricity able to supply power to the equivalent of 30,000 homes. The contract will include the development of three waste-transfer stations and an information centre for visitors. Overall, over 90% of the waste managed by SITA UK under the scope of this contract will be diverted from landfill sites.

(1) Private Finance Initiative.



© MEYSSONNIER ANTOINE

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THE NETHERLANDS: THE ART OF SORTING PLASTIC MATERIAL

The new plastic sorting centre of SITA NEWS started operating on September 5, 2011. Located in Rotterdam, this ultramodern plant will sort out approximately 25% of all the country's plastic packaging! The sorting system is equipped with the latest techniques, including infrared technology, which separates out various types of plastic. This system provides a perfect response to the strict criteria imposed by Nedvang (ERP[1] operator for packaging in the Netherlands) in terms of the rates of refusal, the purity of secondary raw materials, etc. The latter has entrusted a five-year plastic sorting contract to SITA NEWS.

(1) Extended responsibility of producer.

SYNERGY SKILLS. At the age of only 32, Erin Tinker has been able to employ all her skills in her profession. After studying to become a lawyer and working in a legal practice, she has maintained a keen interest in negotiation. Following experience working as a manager for a major business bank, she has preserved an interest in investment. Moreover, her passion for dressage means she has tremendous concentration and control of her subject.

These are all skills she now uses in her job as Development Director at SITA Australia. When asked why she wanted to work in this specialized industrial sector, she answers without hesitation that treating waste has become a global issue. And becoming involved in setting up technological and innovative solutions is therefore a particularly enriching challenge.

"I started working at SITA Australia in 2009 to oversee the acquisition and integration of WSN Environmental Solutions, a public company specializing in the processing of waste. I was responsible for analyzing the situation of the company and its valuation. Then, following its acquisition, I oversaw the integration of WSN as a subsidiary of the Group." Its integration further enhanced SITA Australia's portfolio in the area of waste management, whose service offer covers the entire waste value chain: from the collection and recycling of resources to their recovery. Erin Tinker was promoted to her current position following the successful acquisition of WSN.

Now heading an 18-person team, Erin is responsible for developing investments, nationally and regionally, by favouring strategic acquisitions and calls for tenders for infrastructure projects.

A member of the executive committee of SITA Australia, Erin Tinker also supervises the financial and commercial teams of the New South Wales region (southeast area of Australia). Despite her multifaceted and wide ranging job, she also finds time for her passion for horses. *"I ride each week. And at that time I am completely focused on what the horse is doing and forget about everything else."*

Close-up on the acquisition of the waste activities of WSN Environmental Solutions

– Thanks to the additional activities acquired via WSN Environmental Solutions, SITA Australia is now playing a leading role in the development of recovery and recycling solutions by re-directing waste that was initially intended for landfill sites. This operation allows SITA to strengthen its activities with local authorities and manufacturers, thanks to the acquisition of waste-to-energy plants. Moreover, the property assets of WSN will allow SITA to invest in new recycling facilities. SITA Australia is a joint venture between SUEZ ENVIRONNEMENT (60%) and Sembcorp Industries (40%). SITA Australia manages the waste of 43,000 commercial and industrial clients and 3 million inhabitants in Australia's 15 major towns and cities.

ERIN TINKER /
DEVELOPMENT DIRECTOR AT SITA AUSTRALIA

"I WANTED TO WORK IN THIS SECTOR AS WASTE MANAGEMENT HAS BECOME A GLOBAL CHALLENGE"

To find out more:
→ www.sita.com.au

KEY FIGURES

- → **Vehicles with zero CO_2 emissions**.
- → **The emission of 130 tonnes of CO_2 are prevented** per truck each year.
- → **90% reduction of the ecological footprint** compared to diesel-fuelled refuse collection vehicles.
- → **Able to collect for 8 hours** and cover an itinerary of 50 km, with 16 tonnes collected over two rounds.
- → **Vehicle speed limited to** 50 km/hour in an urban environment.

SITA FRANCE

LESS NOISE, ZERO CO_2, THE FULLY ELECTRIC WASTE COLLECTION TRUCK IS ON ITS WAY...

THE QUALITY OF LIFE OF THE 85,000 PEOPLE LIVING IN COURBEVOIE (GREATER PARIS AREA) HAS CHANGED. Since May 12, 2011, the first fully electric domestic waste collection truck assures the collection of waste in this town to the west of Paris. A pioneer in the use of a fully electric collection truck for domestic waste, Courbevoie wanted to reduce the impacts on the environment caused by its daily collections, whilst improving the quality of life of local residents and freeing up public areas at times of peak traffic.

Due to the constraints involved in organizing collections in urban environments, SITA Île-de-France has rapidly become an ideal contact to respond to this type of issue. *"No manufacturer had ever designed such a vehicle, probably as it required a number of different types of expertise such as knowledge of collection systems, chassis, "compacting" equipment and electrical batteries,* recounted Cyril Fraissinet, the Industrial Director of SITA France. *Investment was required in a new generation of household waste collection trucks, and therefore a partnership was set up with PVI, a leader in electrical traction for vehicles, and SEMAT, a company specializing in collection and cleaning equipment, as well as with Li-Ion, a recognized battery manufacturer."*

After eighteen months of design, SITA's new fully electric truck is now ready. In addition to the zero direct emissions of CO_2, the vehicle has extremely low noise levels, and therefore improves the quality of life of the inhabitants.

On a safety level, drivers have a panoramic view and garbage collectors remain in permanent radio contact with each other and the driver. The lifting of bins is computer controlled, which allows the traceability and optimization of the collection circuits.

Therefore, in Île-de-France, over 25 fully electric new-generation trucks will replace by 2012 older collection methods. *"Although collections cost a little more than with more traditional systems, this has not dissuaded certain larger cities in Europe from wanting to adopt a responsible approach, etc."* stated Cyril Fraissinet. Indeed, the city of Neuilly-Sur-Seine (Greater Paris) awarded to SITA Île-de-France, and its electric collection trucks, a collection contract for its household waste.

To find out more:
→ www.sita.fr

"THANKS TO THIS TRUCK, THE ECOLOGICAL FOOTPRINT HAS DECREASED BY 90% COMPARED TO DIESEL VEHICLES..."

CUSTOMERS AS A GUIDING PRINCIPLE. It was already apparent when studying for a doctorate in chemistry at the University of Chapel Hill in North Carolina (United States), where she was sponsored by manufacturers, that Elise E.[1] Maury had customer relations written into her DNA. And it is this element that probably incited her to accept the newly created position of Key Accounts Director at Ondeo IS, where she has joined the Management Committee. *"Over the years, the organizational structure of our major manufacturing customers has become increasingly complex and international,"* explained Elise. *"You need to understand and anticipate their needs, but also identify the key contacts and the people who will facilitate the decision making, etc."*. The clear objective is to increase the market share in Europe and internationally by finding new customers and establishing relationships at the highest level.

Irrespective of the people she meets, Elise's multicultural profile – a Danish mother and a French/Irish/Scottish father – acts as a positive aspect in her favour and facilitates contacts. As seen in a recent meeting organized in the southwest of France where she initiated contact with clients by talking in Flemish to a Dutch-speaking person, who was duly impressed by such skills. *"I lived abroad during my studies and at the start of my professional life,"* Elise stated. *"And I sometimes manage teams that include people from Finland, Belgium, Italy, the Netherlands and France!"*

Elise was appointed to this role as a result of an impressive CV, both in terms of education achievement (an engineer with a doctorate in chemistry), an eclectic range of experience (researcher at Nalco, head of R&D at L'Oréal, innovation marketer at SUEZ ENVIRONNEMENT, Marketing and Communications Director at Ondeo IS), as well as numerous publications, patents and other achievements to her name (including three Innovation Initiative Awards from GDF SUEZ and SUEZ ENVIRONNEMENT).

Confident in the future, Elise intends to move upwards within the Group. Her plans include assuming responsibility for a profit centre, which would allow her to achieve her financial objectives and provide support for teams once again. As at the end of the day, Elise holds personal relationships close to her heart!

(1) Following an Anglo-Saxon tradition, Elise has included the initial of the maternal grandmother's first name, Ellen, in her name.

Ondeo IS

– Created in 2002, Ondeo Industrial Solutions mainly operates in Europe as a provider of process and management improvements across the entire industrial water cycle. Operating in France, Italy, the United Kingdom, Spain and the Benelux, Ondeo IS employs 650 people in Europe. With the development of the industrial market, this SUEZ ENVIRONNEMENT subsidiary focuses on the most promising sectors such as the petrol, petrochemical and energy industries, and maintains an international profile through its partnership with Degrémont.

To find out more:
→ www.ondeo-is.com

ELISE E. MAURY / KEY ACCOUNTS DIRECTOR, ONDEO IS

"I MAKE SENSE OF THE ORGANIZATIONAL STRUCTURE OF OUR CUSTOMERS, IN ORDER TO PROVIDE THEM WITH A BETTER SERVICE."

On the Web

WWW.ECOEMBALLAGES.FR/
This website offers practical information on recycling.
It supplies details about what happens to your old bottles or tin cans when they are thrown away.

HTTP://CLIMCITY.CAP-SCIENCES.NET
What is the effect of global warming on our planet? How can you reduce greenhouse gases and act effectively to preserve the climate? These are some of the questions asked by Clim'city, an online game of strategy that is both playful and educational. The aim is to adopt concrete actions in a virtual city to reduce greenhouse gases, energy consumption and increase the percentage of renewable energy we consume. A fun and educational game!

HTTP://WWW.SUEZ-ENVIRONNEMENT.FR/LENVERSDUDECOR/
SUEZ ENVIRONNEMENT launched a new advertising campaign whose intention will be, until the end of the year, to broaden knowledge of the Group. To further explore the various issues, SUEZ ENVIRONNEMENT has decided to present four visual ads on a dedicated site. They include recovering waste, drinking tap water, etc. Using a straightforward and educational tone, the aim is to communicate to the general public how the Group contributes to setting up a circular economy.

Find us on:
→ **eMag:** www.emag.suez-environnement.com/
→ **Blog:** www.waterblog.suez-environnement.com
→ **YouTube:** www.youtube.com/user/SUEZenvironnement
→ **Twitter:** http://twitter.com/#!/suezenv

Trends…

ICEBERG 2012:
TO INCREASE THE AWARENESS OF GLOBAL WARMING
In May 2012, the sailor Didier Bovard will sail from the Port of Nanortalik, at the southern tip of Greenland, for a 6,000 km trip, after crossing the Atlantic, the Caribbean Sea and the Gulf of Mexico twice. He aims to be self-sufficient: producing his electricity by the means of sun panels and desalinating seawater. The purpose of this adventure is to increase the awareness of the population of rich countries about the consequences of global warming. He is set to return to Deauville between September 3 and 12…just in time for the American Film Festival!
→ http://www.iceberg2012.net/

RELEASE OF
THE WASTELAND DVD
Following its cinema release in March 2011, *Wasteland* is now available on DVD.
For three years, *Wasteland* followed the Brazilian artist Vik Muniz in a suburb of Rio de Janeiro. In the largest landfill in the world, Vik Muniz offers an unusual artistic project: photographing the "catadores" (the recyclable waste pickers) against a backdrop of objects and materials recovered from waste bins.
→ www.wastelandmovie.com

Events

MOBILE CENTRE POMPIDOU
The mobile Centre Pompidou display will start its travels on October 15, 2011, with an initial three-month stay in Chaumont (Haute-Marne). GDF SUEZ and SUEZ ENVIRONNEMENT are the partners of this first travelling museum, whose aim is to share modern art with people who are not able to easily access such works.

ENER EVENT
November 22, 2011
→ November 26, 2011
International Casablanca Fair,
Morocco.
Morocco is increasingly investing in renewable energies. This 1st International Renewable Energy and Energy Efficiency Trade Fair will bring together around one hundred decision makers from several African countries.
→ www.ener-event.com/

→ **ARMAND ARNAL** / A MICHELIN-STARRED CHEF

A TASTE FOR LOCAL PRODUCE

© C. MOIRENC

© C. MOIRENC

31-year-old Armand Arnal has been the chef at La Chassagnette Restaurant since the start of 2006. Located near Arles, in the Carmargue region, the restaurant received a Michelin star in 2009. Armand Arnal describes his cooking style as a cuisine based on sharing, and on feelings with a highly seasonal component. Originally from Montpellier, he spent seven years working alongside Alain Ducasse and was involved in the success of his restaurant in New York. He also designs 'Garum', an annual fanzine dedicated to his cooking, constituting both a notebook and a list of recipes.

What does

Locavore means? It means eating or working with products sourced locally, I am a 'locavore'[1]. Around the Chassagnette Restaurant near Arles (Bouches-du-Rhône) where I work as a chef we have drawn an imaginary line of around one hundred kilometres. Ninety-five percent of our food, mainly organic, is sourced from within this area. This allows us to guarantee we use seasonal, tasty and high-quality products, as we personally know the producers. This also ensures an optimal preservation of the environment.

The restaurant's garden lies in the centre of this area, with a one and a half hectare vegetable plot, offering 180 varieties including herbs and spices. The garden is 100% organic and has been certified by Ecocert. We grow seeds we have gleaned from all over the world. In this way, I recently brought *Shiso Perilla*, an herb similar to parsley, back from Japan. These foreign imports and other findings all contribute to the wide range of produce grown. The restaurant's philosophy was to create a garden to be used in our cuisine.

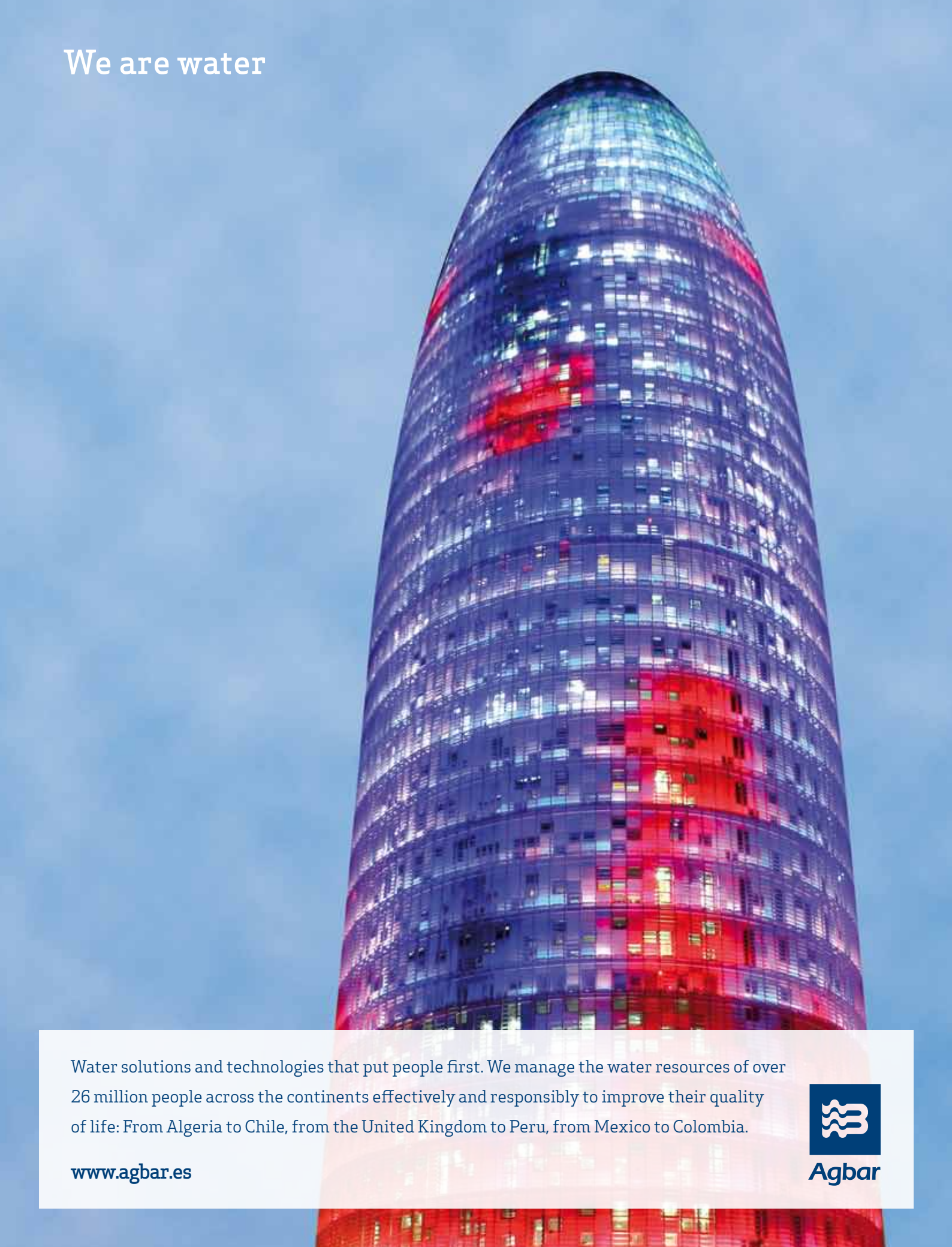
When I arrived here, I had misgivings about the ability to cook mainly with the garden's produce. In fact, it's really very easy: we cook according to the seasons and the produce grown in the vegetable garden. Therefore, in summer, 80% of our cuisine is based on garden produce!

And, obviously, we also manage our waste. We recover wood which we then use as shavings that we spread over the soil as fertilizer and to humidify. In the kitchen, we compost all the vegetable peelings. Our concern for the environment also affects maintenance and the equipment we use. We use non-toxic and natural products to clean the kitchens. The taps are fitted with flow limiters and we use 5-watt LED[2] bulbs for lighting. Finally, we offer filtered water to diners instead of mineral water.

To ensure these steps are continuously maintained, I am drafting a charter for my team using the services of a certification organization. I am convinced that you need to take the time to adapt yourself to the rhythms of nature. You need to think about the environment and local cuisine as something that makes sense. It is an opportunity and not a constraint.

(1) Locavore is a term invented in 2005 by the American chef Jessica Prentice at the time of the World Environment Day.
(2) Low energy-consuming Light-Emitting Diodes.

To find out more:
→ www.chassagnette.fr


We are water
Water solutions and technologies that put people first. We manage the water resources of over 26 million people across the continents effectively and responsibly to improve their quality of life: From Algeria to Chile, from the United Kingdom to Peru, from Mexico to Colombia.
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