

**2008 ACTIVITIES AND SUSTAINABLE  
DEVELOPMENT REPORT**



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**DEVELOPMENT** REPORT



**NATURAL RESOURCES ARE NOT INFINITE.  
EVERY DAY, SUEZ ENVIRONNEMENT  
-AND ITS SUBSIDIARIES ARE COMMITTED  
TO MEETING THE CHALLENGE OF**

# **PROTECTING RESOURCES**

**BY BRINGING INNOVATIVE SOLUTIONS  
TO MILLIONS OF PEOPLE AND  
TO THE WORLD OF INDUSTRY.  
SUEZ ENVIRONNEMENT SUPPLIES**

# **DRINKING WATER**

**TO 76 MILLION PEOPLE,  
WASTEWATER SERVICES TO  
44 MILLION AND PROVIDES**

# **WASTE COLLECTION**

**SERVICES FOR 51 MILLION PEOPLE.**

**WITH 65,400  
EMPLOYEES,  
SUEZ ENVIRONNEMENT IS A WORLD  
LEADER, EXCLUSIVELY DEDICATED TO  
THE WATER AND WASTE BUSINESSES  
AND WITH A PRESENCE  
ON FIVE  
CONTINENTS.**

**IN 2008, SUEZ ENVIRONNEMENT,  
35% OWNED BY GDF SUEZ  
GENERATED REVENUES OF  
€12.4 BILLION.**



# A NEW IDENTITY FOR A NEW BRAND

WORKING FOR THE ENVIRONMENT IS A SOURCE OF INSPIRATION, **A STIMULATING COLLECTIVE CHALLENGE, A MEANINGFUL COMMITMENT THAT CREATES VALUE** FOR THE WHOLE PLANET. THIS IS THE STRONG MESSAGE THAT SUEZ ENVIRONNEMENT'S NEW IDENTITY HAS BEEN SENDING OUT SINCE THE SUMMER OF 2008.



*SUEZ ENVIRONNEMENT Brand Architecture*



*Separate trades: water, waste, combined operations. The logo is somewhat different for each SUEZ ENVIRONNEMENT division, recognizing that each has its own identity.*

**W**hen it was listed on the stock exchange on July 22, 2008, SUEZ ENVIRONNEMENT had to assume new responsibilities and was duty bound to build more direct relationships with each and every one of its stakeholders. The creation of a new logo was a unique opportunity to break industrial codes and create a new kind of brand, a positive brand with meaning for everyone.

**// Confidence and a positive identity.** The environmental emergency the planet faces tends to create anxiety and pessimism about climate change or threats to natural resources (see pages 24-29), yet, these issues also represent an invigorating opportunity for society as a whole.

SUEZ ENVIRONNEMENT is convinced that there is a need for action and the only way to make a difference in the face of this emergency is by taking a determined and enthusiastic approach. SUEZ ENVIRONNEMENT's logo and visual universe are resolutely positive, enlivened by bright, energetic colors flowing around circles that bring the planet and dialogue to mind.

## THE SUEZ ENVIRONNEMENT VALUES:

PARTNERSHIP  
PROXIMITY  
DIALOGUE  
EXPERTISE  
INNOVATION

# 150

SITES (70 IN FRANCE/80 ABROAD)  
adopted the new colors in the weeks  
following July 22.

**// An identity which speaks to everyone.** As the visual aspects of SUEZ ENVIRONNEMENT's logo speak to everyone – to sector specialists and mass audiences alike – the logo brings the company closer to the daily users of the water, wastewater and waste services that it delivers directly or indirectly every day throughout the world. Because the importance of environmental issues in daily life can only continue to increase, it is essential for the company to achieve the kind of brand recognition and identity that will allow it to enter into constructive dialogue and show itself to be a fully fledged member of society that plays a full part in debates on environmental issues.

**// A brand with convictions.** The new visual codes affirm a responsible commitment and provide an innovative and subtle way of talking about our industries and expressing their diversity. The new brand aims to defend the beliefs that have shaped the history and the success of SUEZ ENVIRONNEMENT, beliefs that retain all their

meaning in the new environmental context in which, once again, everything has to be invented. SUEZ ENVIRONNEMENT is convinced that partnerships, acting locally and listening are the keys to the success of all operations. It is unthinkable to work without involving the company's most important partners, i.e. regional public authorities or even local companies. For each contract, the approach consisting of partnerships, acting locally and listening carefully is systematically implemented and has acquired a strategic dimension in international development (see pages 8-9). Thus, in China, the company does business mainly through joint ventures set up with local authorities.

SUEZ ENVIRONNEMENT is also convinced that expertise and innovation are essential components of success. Expertise allows us to understand a given situation and to suggest an appropriate solution to deal with it. A worldwide expertise network, headed by the research department, keeps the 400 experts and high-level researchers

working at SUEZ ENVIRONNEMENT permanently in touch. The beliefs and messages which are the characteristics of SUEZ ENVIRONNEMENT's new identity have been supported by the worldwide roll-out of the brand as well as by a television advertising campaign conveying the strength of the company's commitment. This campaign was also a particularly unifying force within the group.

### FOCUS AN INNOVATIVE BRAND PLATFORM

The architecture of the new SUEZ ENVIRONNEMENT brand platform is meant to

be innovative. The logo is designed to adapt to each of the company's subsidiaries and trades. It changes color according to the entity it represents, based on a color coding by industry. For example, United Water appears in a blue circle

inserted in the place of the empty pink circle featured on the company logo. Thus the look of the logo changes with respect to the identity of each of the group's subsidiaries. The brand platform also enables brand partners to

be featured directly on the logo. The very concept of this new identity symbolizes the values of partnership, innovation and listening.

# HIGHLIGHTS

KEY BUILDING AND OPERATING CONTRACTS, ACQUISITIONS,  
THE STOCK MARKET LISTING: ALL **THE MAJOR EVENTS** OF 2008 AND EARLY 2009  
FOR SUEZ ENVIRONNEMENT AND ITS SUBSIDIARIES.

## // JANUARY '08

**Lyon, France.** Contract for designing, building and operating a new sewage treatment plant at La Feysine for a 3-year period (Degrémont and Lyonnaise des Eaux).

**Mumbai, India.** Equipment contract for a drinking water plant for a period of 4 years. In addition, Degrémont will build a sludge treatment plant.

**L'Isle-sur-la-Sorgue, France.** Renewal of the wastewater public service sanitation contract for a period of 15 years (Lyonnaise des Eaux).

**Carpentras, France.** Renewal of the public service wastewater contract for 12 years along with the construction of a new sewage plant (Lyonnaise des Eaux and Degrémont).

**New Delhi, India.** Contract for designing, building and operating a wastewater recycling plant (Degrémont).

**Jersey City, New Jersey, United States.** Renewal of the public-private partnership contract for management of drinking water supplies and for the maintenance and monitoring of two dams, for a period of 10 years (United Water).

**Hong Kong, China.** Inauguration of the biogas recovery unit at the NENT landfill site (Swire SITA).

**France.** Renewal of the contract with Airbus for waste treatment at four sites:

Toulouse, Nantes, St Nazaire and Méaulte (SITA France).

**Spain.** Successful takeover of Agbar. SUEZ ENVIRONNEMENT, La Caixa and Hisusa jointly own 90% of Agbar.

**Bas Languedoc, France.** Fourteen-year contract with the Syndicat Intercommunal d'Alimentation en Eau Potable (a municipal alliance for potable water) to build a production plant to treat raw water from the Bas Rhône, Languedoc (Lyonnaise des Eaux).

## // FEBRUARY '08

**Halifax, Nova Scotia, Canada.** Inauguration of the first wastewater sewage plant of the environmental project which aims to protect the port of Halifax (Degrémont).

**Valenton, France.** Contract for building and carrying out works at the Seine-Amont plant (Degrémont).

## // MARCH '08

**United States.** Acquisition of Utility Service Company (USC), the national leader in the management of water tower maintenance services (United Water).

**Sweden.** SUEZ ENVIRONNEMENT buys back 25% of the share capital of SITA Sverige from E.ON in order to hold 100% of this waste management subsidiary.

## // APRIL '08

**United Kingdom.** Renewal of the contract with Calderdale, a metropolitan district in West Yorkshire, for the collection and treatment of household waste and management of the sites over a period of 7 years (SITA UK).

## // MAY '08

**Jeddah, Saudi Arabia.** Contract for the management of the drinking water and wastewater services of the Kingdom's economic capital for a period of 7 years (SUEZ ENVIRONNEMENT).

**Gary, Indiana, United States.** Renewal of the contract for the management of wastewater services, for 5 years (United Water).

## // JUNE '08

**Alexandria, Egypt.** Contract for modernizing, extending and operating the East Alexandria depollution plant, for 3 years (Degrémont).

## // JULY/AUGUST '08

**Digne-les-Bains, France.** Twenty-five year contract to design, construct and operate a new plant for treating the wastewater of 35,000 residents, to be used as the model on which the HQE (French national standard for Green



Wastewater treatment plant in As-Samra (Amman, Jordan)

buildings) for wastewater treatment plants will be based (Lyonnaise des Eaux, Degrémont).

**France and Belgium.** Stock exchange listing of SUEZ ENVIRONNEMENT, coinciding with the merger between SUEZ and GDF, followed in September by inclusion in the CAC 40, SBF 120 and SBF 250 indices.

**United States.** Acquisition of 130 O&M contracts from AECOM Technology Corporation. United Water becomes the largest operator in the water sector in the Northwest and Midwest of the United States (United Water).

**United States.** Acquisition of Water & Power Technologies (WPT), which is positioned in products and technologies for treating water intended for the industrial sector (Degrémont).

**Gran Canaria, Spain.** New 25-year contract. Renewal of the Benidorm contracts for 20 years, the Muchamiel (Alicante) contract for 8 years, and the Sant Celoni (Barcelona) contract for 25 years (Agbar).

**Amman, Jordan.** Inauguration of the wastewater treatment plant. The contract includes designing, financing, building and operating the plant for a period of 22 years (Infilco Degrémont Inc).

**Al Dur, Bahrain.** Contract for building, owning and operating Al Dur, an electricity production and sea water desalination plant located in the south of the Kingdom of Bahrain (GDF SUEZ Energy International and Degrémont).

**Grasse, France.** Renewal of the public service wastewater contract for a period of 20 years (Lyonnaise des Eaux).

**Montpellier, France.** Inauguration of Amétyst, the largest methanization plant

in France. The organic component of the waste is turned into compost and biogas (Novergie).

#### // SEPTEMBER '08

**France.** Acquisition of Boone Comenor Metalimpex, which is present in 12 countries and specializes in the recuperation and recovery of ferrous and non-ferrous metals (SITA France).

#### // OCTOBER '08

**Guillonville, France.** Inauguration of Fertibeauce, a co-composting unit for plant and organic waste produced by wastewater and the food processing industry (Terralys).

**Nantes, France.** Two contracts: contract for the management of two sewage treatment plants; contract for operating and monitoring the plant, for 10 years (Lyonnaise des Eaux).

**Hounslow, United Kingdom.** Seven year waste collection and treatment contract (SITA UK).

#### // NOVEMBER '08

**Cannes, France.** Twenty-year concession contract for building and operating Aquaviva, the future wastewater treatment plant for the Cannes basin. Aquaviva will be carbon neutral and designed in line with the French HQE (Haute Qualité Environnementale) initiative (Lyonnaise des Eaux).

#### // DECEMBER '08

**Baghdad, Iraq.** Contract for designing, equipping and providing assistance for the building of a drinking water production

plant at Al Rusafa. The plant will enable almost 4 million residents to be supplied with water. Implementation of the contract will be carried out from neighboring countries (Degrémont).

**Dunkirk, France.** Inauguration of the new Coudekerque-Branche sewage plant. The plant treats carbon, nitrogen and phosphorus. Equipped with a UV filtration system, it enables obtaining an effluent of comparable quality to bathing water (Lyonnaise des Eaux).

#### // JANUARY '09

**Nouméa, New Caledonia.** Renewal for 20 years of the contract for the delegation of public water and wastewater services (Lyonnaise des Eaux).

#### // FEBRUARY '09

**Algiers, Algeria.** Contract for rebuilding and doubling the capacity of the Baraki sewage plant (Degrémont).

**Algeria.** Contract for a project transferring water towards the Setif plateau to supply arid areas with water (Safège).

**Chongqing, China.** Concession contract for building and operating a drinking water treatment plant that will supply 1.2 million residents for a period of 30 years (Sino French Water Development and Chongqing Water Group).

# 2008 KEY FIGURES

KEY ECONOMIC INDICATORS FOR SUEZ ENVIRONNEMENT IN 2008 AND ITS PERFORMANCE IN THE TWO SECTORS IN WHICH IT IS ACTIVE (WATER & SANITATION, AND WASTE SERVICES MANAGEMENT).

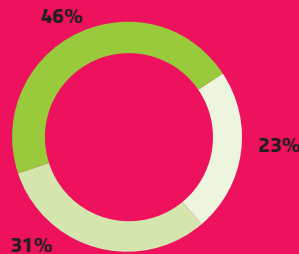
# 12,364

**MILLION EUROS  
IN REVENUES**

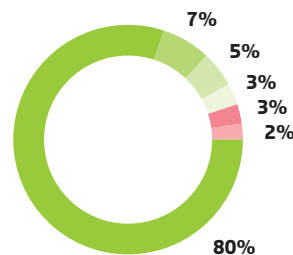
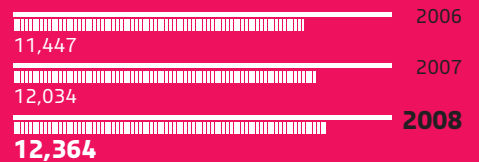
Total growth: **5.4%**

## REVENUES BY ACTIVITY

- WASTE EUROPE
- WATER EUROPE
- INTERNATIONAL



## CONSOLIDATED REVENUES (IN €M)



- EUROPE
- AFRICA & THE MIDDLE EAST
- NORTH AMERICA
- ASIA
- OCEANIA
- SOUTH AMERICA

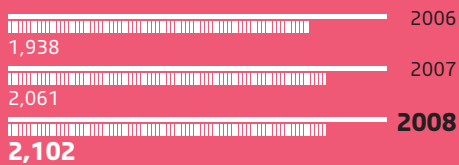
## REVENUES BY GEOGRAPHIC AREA



# 2,102

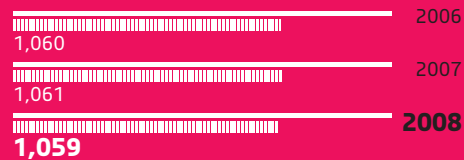
**MILLIONS EUROS  
EBITDA**

Total growth: **4%**



**EBITDA (IN €M)**

**CURRENT OPERATING  
INCOME (IN €M)**



**NET DEBT/EBITDA \***

# 2.8 times

**ROCE**

# 9.8%

\* (Rolling 12-month EBITDA)

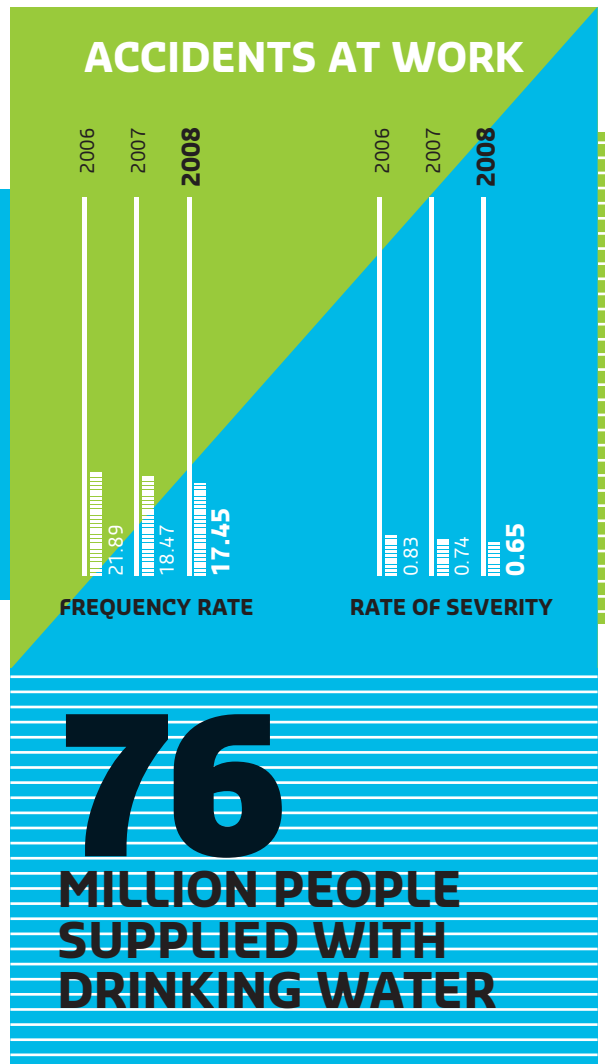
# KEY FIGURES **WATER** AND **WASTE**



- EUROPE: 55,011
- AMERICA: 3,472
- AFRICA & THE MIDDLE EAST: 3,948
- ASIA/OCEANIA: 2,951

TOTAL: 65,382

**EMPLOYEES BY GEOGRAPHICAL AREA**



## WATER & WASTEWATER

**1,746** DRINKING WATER TREATMENT PLANTS  
**1,535** WASTEWATER TREATMENT PLANTS  
**1,620 MM<sup>3</sup>** OF WATER SUPPLIED  
**2,495 MM<sup>3</sup>** OF DRINKING WATER PRODUCED  
**2,025 MM<sup>3</sup>** OF WASTEWATER TREATED  
**AROUND 150,000 KM** OF DRINKING WATER DISTRIBUTION NETWORKS

## WASTE COLLECTION & TREATMENT

**501,092** CUSTOMERS IN SERVICES AND INDUSTRY  
**39.6** MILLION TONS OF WASTE TREATED  
**1,107** WASTE TREATMENT SITES, INCLUDING:

- 278 SORTING CENTERS
- 143 OPEN LANDFILLS (114 FOR NON-HAZARDOUS WASTE, 16 FOR INERT WASTE, 13 FOR HAZARDOUS WASTE)
- 106 COMPOSTING PLATFORMS
- 126 HAZARDOUS WASTE PLATFORMS
- 47 NON-HAZARDOUS WASTE INCINERATION SITES
- 8 HAZARDOUS WASTE INCINERATION SITES
- 9 MEDICAL WASTE TREATMENT SITES
- 305 TRANSFER STATIONS
- 85 RECOVERY FACILITIES FOR WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

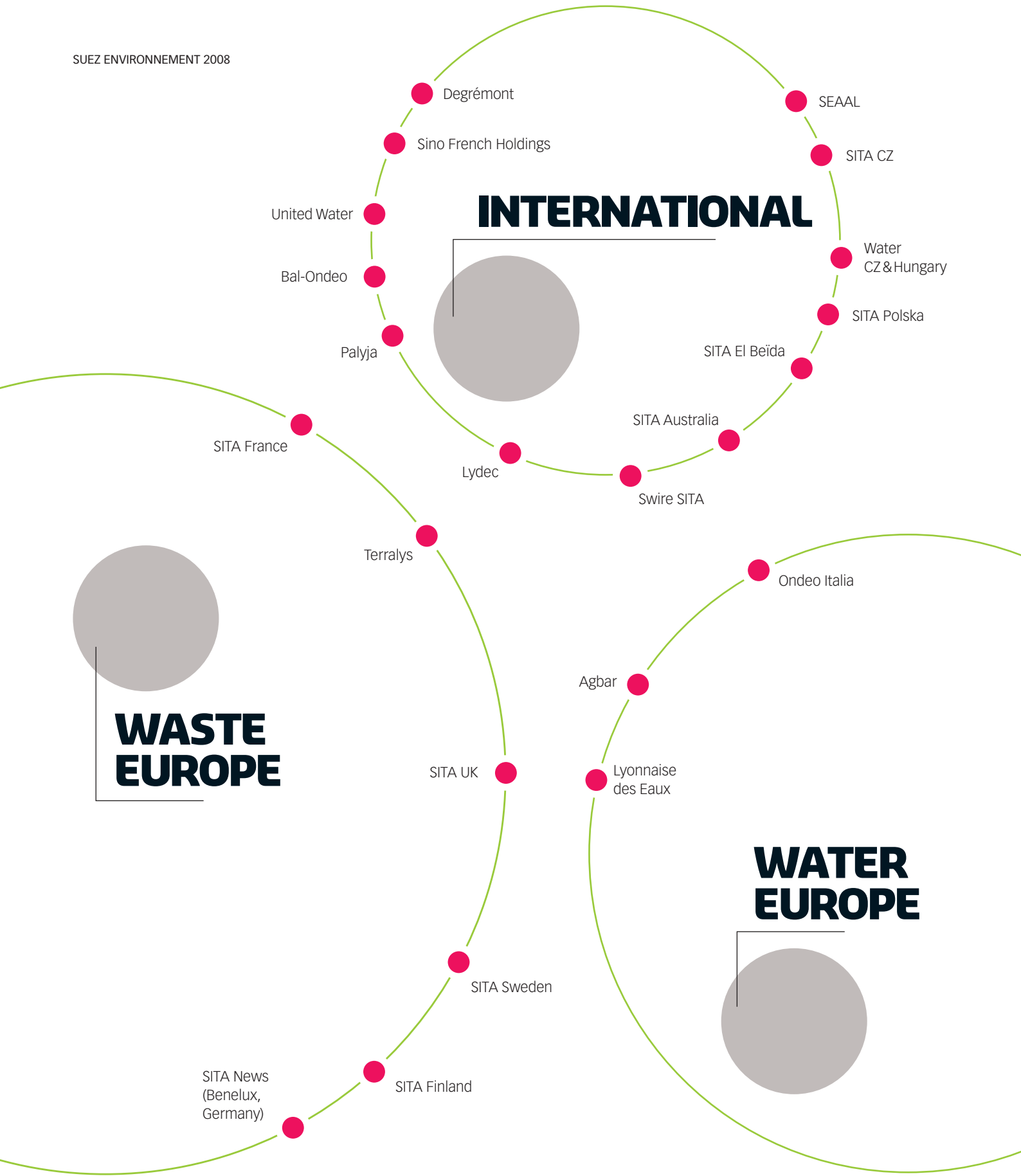
# 51

MILLION PEOPLE BENEFIT FROM SUEZ ENVIRONNEMENT WASTE MANAGEMENT SERVICES

## WASTEWATER TREATMENT SERVICES

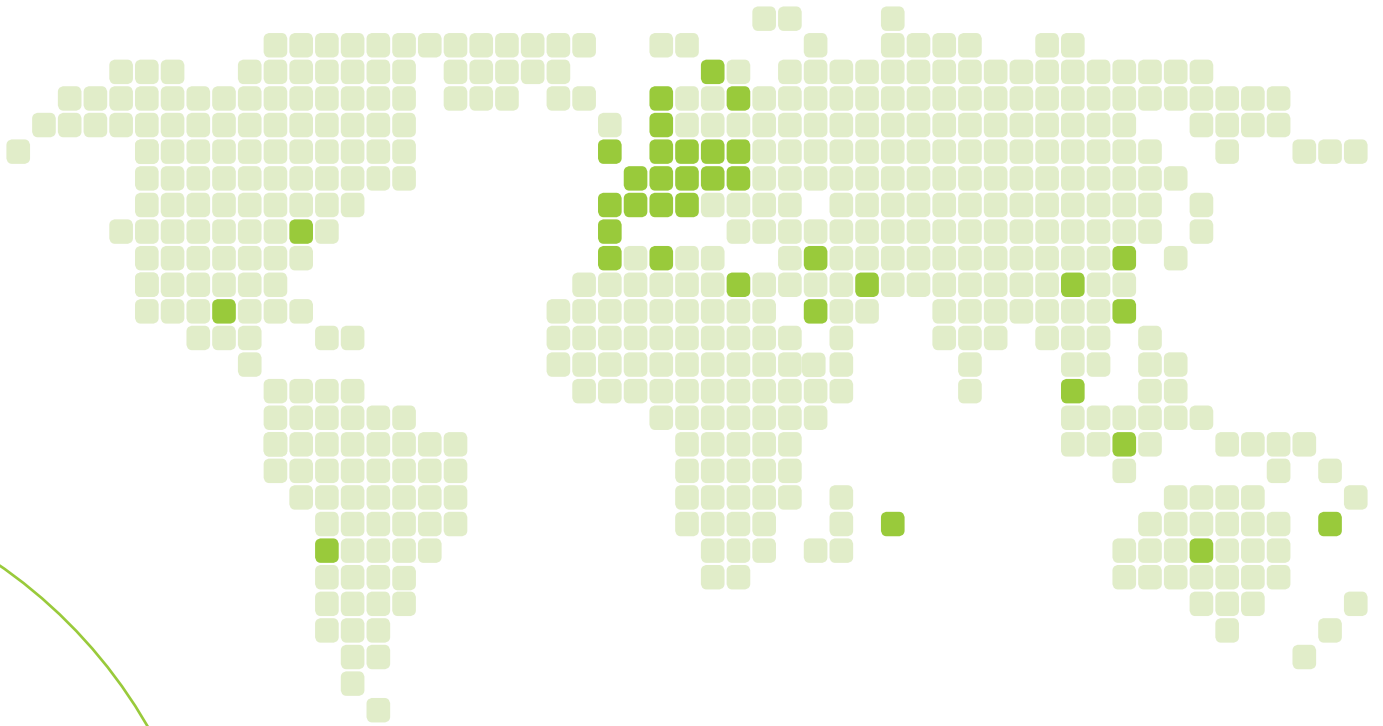
# 44

MILLION PEOPLE BENEFIT FROM SUEZ ENVIRONNEMENT WASTEWATER TREATMENT SERVICES



## COUNTRIES OF OPERATION

ALGERIA/AUSTRALIA/BELGIUM/CHILE/CHINA/CZECH REPUBLIC/EGYPT/FINLAND/FRANCE/GERMANY/GREECE/HUNGARY/INDONESIA/ITALY/JORDAN/LUXEMBOURG/MALAYSIA/MOROCCO/MEXICO/NETHERLANDS/POLAND/QATAR/SAUDI ARABIA/SLOVAKIA/SPAIN/SWEDEN/UNITED ARAB EMIRATES/UNITED KINGDOM/UNITED STATES



Ondeo  
Industrial  
Solutions

Eurawasser

Safege

# SUEZ ENVIRONNEMENT AROUND THE WORLD

**EUROPE IS SUEZ ENVIRONNEMENT'S  
HISTORICAL SOURCE OF DEVELOPMENT AND GENERATES  
80% OF ITS REVENUES. MANY INTERNATIONAL  
CONTRACTS ARE ALSO SIGNED EVERY YEAR.**



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EVERY DAY

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An aerial photograph of five children of diverse backgrounds holding hands in a circle on a lush green lawn. The children are wearing colorful shirts: blue, yellow, green, and red. Their shadows are cast long and dark on the grass, indicating bright sunlight. The overall scene conveys a sense of unity and community.

# UNDERSTANDING A CHANGING WORLD

**GIVEN THE ECONOMIC, ENVIRONMENTAL  
AND SOCIAL CRISES THAT NOW BESET THE PLANET,  
SUEZ ENVIRONNEMENT WISHES TO CONTRIBUTE  
TO HARMONIZING COLLECTIVE WELL-BEING  
AND NATURAL EQUILIBRIUMS.**





**MAKING  
ENERGY AND  
ENVIRONMENT**



# NEW ENGINES FOR GROWTH



The year 2008 saw the merger of GDF and SUEZ into a worldwide leader in the field of energy, along with the initial public offering of SUEZ ENVIRONNEMENT, the global expert in water and waste management.

Despite the fourth quarter recession, our group was successful on several fronts thanks to our long-term strategy, promising lines of business, a strong balance sheet and the determination of all our employees.

Undoubtedly the focus of our concern in 2009 will be the worldwide crisis whose extent and duration no one can predict. This is why our short-term priority has to be maintaining the strength of our balance sheet, particularly through organic growth.

Energy and environment are both vital engines of growth, and combining the two is right in line with the challenges of the new century.

With operations all along the value chain, we have been able to build not only a successful business model but one that can help solve the problems that threaten the planet, such as global warming and overuse of resources.

Meeting these challenges will not only bring growth to SUEZ ENVIRONNEMENT; it will also contribute to a new model of sustainable growth to hand down to future generations. Our corporate mission is as exciting as it is ambitious. And the people of SUEZ ENVIRONNEMENT will be backed up by the people of GDF SUEZ as they take on these many challenges.”

**GÉRARD MESTRALLET,**  
CHAIRMAN OF THE BOARD OF DIRECTORS



Two thousand eight was an eventful year for SUEZ ENVIRONNEMENT. After our successful stock exchange listing on July 22 and our inclusion as of the fall in the CAC 40 index, we are staying right on course despite the economic turmoil. Our 2008 earnings bore out our strategic plan. We had 2008 revenues of €12.4 billion and made strong sales gains in all our business areas, despite the deteriorating conditions of the fourth quarter.

By staking our future on the long run, on significant operating cash flows and on an ambitious sustainability policy, we have shored up our fundamentals and given ourselves the means to confront the current crisis ... and to take our place among those organizations who are successfully creating the business models of tomorrow.

As of now, SUEZ ENVIRONNEMENT enjoys new prominence and position as a socially responsible company.

It is responsible in the first place by adapting our lines of business to the major ecological crisis in which we all live. This takes the form of specific proposals to help our clients balance living standards with ecological standards. In this respect the economic crisis should do nothing to slow us down. Quite the

opposite: now is the time to seize the opportunity presented by economic setbacks to change behavior, especially the squandering of natural resources. Our goal is to speed up society's transition to a model of growth inspired by natural cycles, based on an economy less extravagant with natural resources and on a just distribution of wealth.

Our lines of business provide innovative solutions to critical environmental issues. This is what lies behind our new Edelway offer, which enables our businesses to reduce greenhouse gas emissions, protect biodiversity and preserve natural resources. Innovation has been critical here in moving from a volume-based model to a value-based one.

We are also responsible to our various communities. The demands for transparency and participation that have developed in the past few years prompt us to be in constant dialogue with our stakeholders. For many years, SUEZ ENVIRONNEMENT has fostered a process of extensive consultation in

# MAKING THE PLANET

our corporate and local management, so that within the company itself our thinking might be more in tune with society at large. This process today enables us to provide a variety of solutions and services, to handle a greater number of local situations.

Responsible, finally, to our 65,400 employees who work hard every day to meet our challenges and provide innovative solutions to industry and to millions of people. It is our duty to give them all the same opportunities in terms of recruitment, employment and professional development; to strive for diversity; to give priority to local people, and to do all this in a secure and motivating environment.

We have all that it takes to successfully meet tomorrow's challenges and fulfill our promise to work harder than ever for mankind and the environment."

**JEAN-LOUIS CHAUSSADE,**  
CHIEF EXECUTIVE OFFICER

**SUSTAINABLE  
IS THE BEST JOB  
ON EARTH**



# TOWARDS A SUSTAINABLE CIVILIZATION

## A MULTI-FACETED ENVIRONMENTAL CRISIS

**GLOBAL WARMING, RESOURCE DEPLETION, POPULATION PRESSURE....  
SUEZ ENVIRONNEMENT IS AWARE OF THESE CRITICAL ISSUES.**

**G**lobal warming has sped up global environmental awareness. Although those who are already the most vulnerable will suffer most, for the first time the entire world population feels itself affected by a single, identical environmental problem. The consequences of global warming have given rise to many debates between "pessimistic" and "optimistic" viewpoints. Yet, no one can deny humanity's responsibility for this phenomenon any longer; the need for immediate action has taken over from mere talk. However, the threats hanging over the environment

are not limited to just global warming. Biodiversity has been hit hard by human activity. Never have animal and plant species disappeared at such a rapid rate. According to the International Union for Conservation of Nature (IUCN), which studies the evolution of over 41,000 plant and animal species in detail (among 3.9 million known species), 16,000 of these, i.e. 39%, are threatened with extinction. Another sizeable threat is widespread pressure on all natural resources, whether these are commodities, agricultural soil and land or forests. Similar to crude oil prices, commodity prices

boomed in 2007, pulled upwards by increasing demand from developing countries. This phenomenon continued with soft commodities, especially in the first half of 2008. The current fall in prices, in line with the global recession, will not be able to disguise the finite nature of some of these resources in the long run.

# 11

OUT OF THE LAST 12 YEARS  
have been among  
the warmest since 1860  
(Source: IPCC).

## WATER, AN UNEVENLY DISTRIBUTED RESOURCE

Although the earth is not short of fresh water, the distribution of water is uneven and water is not always available where it is needed. Ten countries (Russia, Canada, China, the United States, Brazil, India, Indonesia, Colombia, Venezuela and Bangladesh) share 60% of natural fresh water resources between them. The countries most lacking fresh water are, in particular, Kuwait, the United Arab Emirates, Saudi Arabia, Jordan, Libya, Israel, Yemen, Oman, Tunisia and Algeria. The lack of sustainable resource management, coupled with climate change, could make these disparities worse.

## ENERGY RESOURCES UNDER SEVERE THREAT

According to the International Energy Agency, oil, gas and coal currently account for 81% of the world's energy production (35% for oil, 21% for gas and 25% for coal).

Nuclear energy accounts for 6.5% and renewable energy for 12.5%, of which biomass is 10%, hydroelectric power is 2% and less than 0.5% is solar or wind power. Proven oil reserves amount

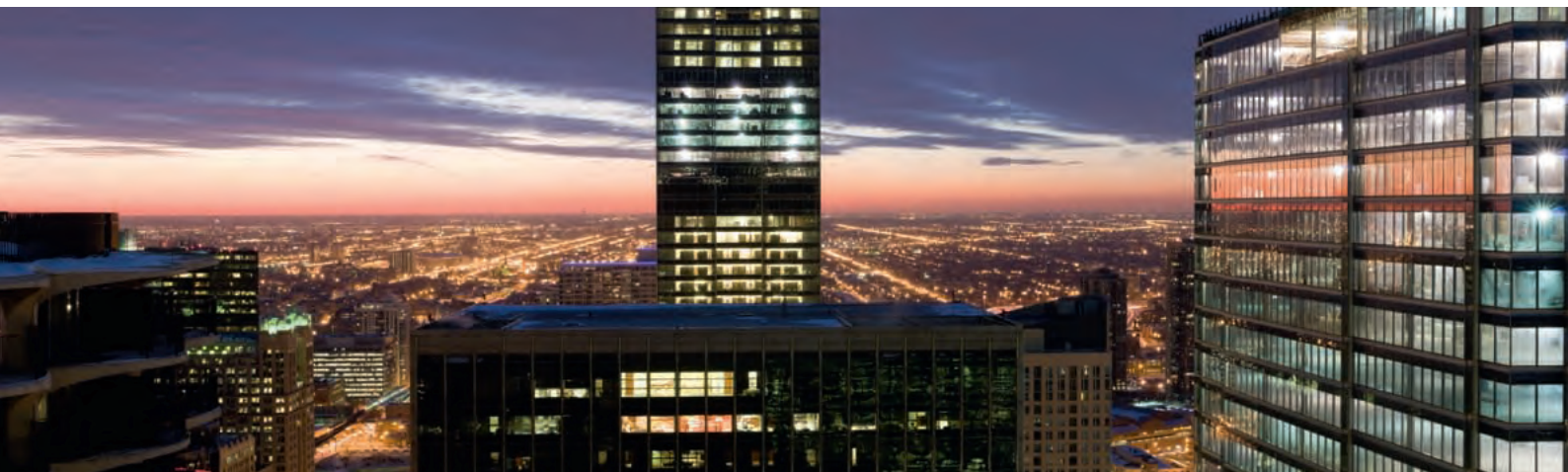
to 40 years consumption at current rates, natural gas reserves, to 60 years and coal reserves, to 200 years.

## UNPRECEDENTED DEMOGRAPHIC AND URBAN PRESSURE

In 2007, the world's population was estimated at 6.6 billion people. The United Nations has drawn up three separate population forecasts, depending on the assumptions made about birth rates. The median forecast, which is the one used most often, anticipates a population of 9.2 billion human beings in

2050, i.e. an increase of 40%. Generally speaking, between 2005 and 2050, the population is expected to increase by 72 million people per year, which amounts to an increase of 200,000 people per day, most of whom will live in cities. Moreover, in 2008, for the first time, over half of humanity (3.3 billion people) lived in cities, i.e.

almost 19 times more people than in 1900. Between now and 2050, the urban population will almost double, rising from 3.3 to 6.4 billion people. Between 50% and 70% of the world's population will live in cities, with peaks of over 80% in certain countries.







# FACTORING IN ENVIRONMENTAL COSTS

IN ORDER TO **STOP WASTING NATURAL RESOURCES** AND CURB GLOBAL WARMING, THE WORLD NEEDS TO INCLUDE ENVIRONMENTAL COSTS IN ITS ACCOUNTING SYSTEM.

**T**he global economic system has been living on credit for too long. By underestimating the cost to the environment, we have witnessed the systematic waste of natural resources on a global scale. Humankind has benefited abundantly from the real help provided by nature, whether in the form of finite resources like minerals and oil, or renewable resources like water and air. In many cases, the question of reasonable use of natural resources has been resolved through private ownership: if one owns an asset, one uses it sparingly in order to make it last as long as possible. But this solution is showing its limits today as it cannot be applied to every externality, as has been proved by greenhouse gas emissions which

are twice as high as the planet's capacity to absorb them, the worrying state of fishing resources (cod fishing has gone from 300,000 tons per year in the 1980s to 50,000 tons in 2000, according to the UN) and the mass extinction of animal and plant species (according to the French National Center for Scientific Research, one plant in eight is threatened with extinction). Today, it is essential to factor the cost to the environment into the world's accounting system, so that the market can work out its trade-offs on a fairer basis. The internalization of environmental externalities is made possible by imposing taxes or quotas or a combination of both solutions. Examples of successful integration exist. Since 1990, the United

States has successfully implemented a quota system for sulfur dioxide emissions. Targets were met and even exceeded from 1995 onwards. 8.7 million one-ton permits were distributed and only 5.3 million tons of SO<sub>2</sub> were emitted. The Kyoto Protocol also introduced a quota system for greenhouse gases. Nowadays, one of the major challenges resides in improving and generalizing the integration of the "carbon" externality into the global economic system. Just like carbon, many environmental externalities must be taken into account so that public and private decision-makers can act on the basis of a responsible assessment of situations.

# 80

BILLION US DOLLARS

is the forecast annual amount of the carbon tax to be introduced in the United States in 2012 (source: White House draft budget, "A New Era of Responsibility").

## WHAT PRICE FOR CARBON?

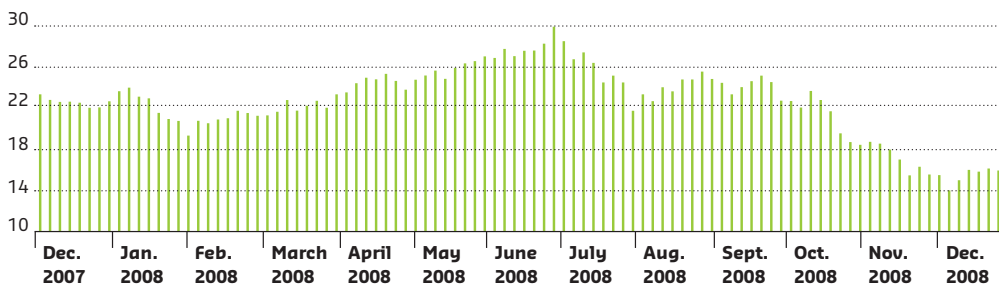
Whether they be taxes or quotas, the current carbon internalization mechanisms in place entail different carbon prices. Is there a "right price" for carbon, a price which would enable a collective battle against global warming while remaining balanced? The Organization for Economic Co-operation and Development (OECD) put the necessary price of a ton of CO<sub>2</sub> at €100 (according to "The OECD Environmental Outlook to 2030"), but some university research estimates that it should be €800. As things stand, the current prices of a ton of CO<sub>2</sub> are insufficient (see chart). However, a higher price would have serious

consequences for many sectors of industry. According to an impact study carried out by the French Environment and Energy Management Agency (ADEME), a carbon tax of €27 in France would have serious consequences for five industrial sectors, including the fertilizer and steel production sectors. Any trade-off that will set the minimum and maximum thresholds for the price of carbon will thus have to be made after carefully weighing the pros and cons.

## DEVELOPING THE MARKET FOR RECYCLED MATERIALS

Recycled materials are interesting for a number of reasons. The first of these is economic: they offer long-term security for a mainly local supply. The second reason is environmental, as recycled materials have a broadly positive footprint. Energy savings of 95% are made possible by using recycled aluminum instead of raw aluminum. Moreover, on a global basis, the European Union estimates that recycled glass, metals, plastics and paper already enable the equivalent of 200 million tons of CO<sub>2</sub> emissions per year to be avoided (Presidency note 6918/09). The third reason

is the positive social impact: the recycled materials market represents a huge range of jobs which are local and cannot be relocated. Currently, the waste and recycling sector employs between 1.2 and 1.5 million people in Europe. Promoting the development of the recycled materials market contributes to the preservation of local jobs and the achievement of the European Union's environmental objectives.



Future price of carbon on the European market, in euros per ton of CO<sub>2</sub>. The price of carbon is still largely underestimated; paying its real cost represents a sizeable challenge for the economy of today.

# THE QUESTION OF THE ENVIRONMENT IN A TIME OF CRISIS

THE CURRENT ECONOMIC AND SOCIAL CRISIS ALSO REPRESENTS AN **OPPORTUNITY TO ALTER THE GROWTH MODEL** IN ORDER TO GIVE OURSELVES THE COLLECTIVE MEANS TO SOLVE THE ENVIRONMENTAL CRISIS.

**T**he magnitude of the economic crisis we are going through is significant: it affects all the economies on the planet, even the most dynamic ones. In the fourth quarter of 2008, the Gross Domestic Product (GDP) fell by 1.6% in the United States (source: Bureau of Economic Analysis) and by 2.1% in Germany (source: German Bureau of Statistics). The social consequences of the crisis are already apparent. At the same time, the planet is facing an unprecedented ecological crisis, on all fronts (see page 24). Though very problematic in the short term, the economic and social crisis should nonetheless be viewed in the medium term as an invigorating opportunity to change production and consumption methods and to move from

quantitative to qualitative growth. This is an opportunity for change in order to solve the other silent crisis the planet is going through. Qualitative growth is growth which banks on development in the long term in all areas and which enables bringing to everyone the kind of well-being which does not harm the balance of nature. "Green" growth banks on the development of ambitious environmental solutions, and will enable the needs of the 9.2 billion human beings (UN 2050 forecasts) of the future to be met while limiting the impact of global warming, avoiding the mass extinction of living species and the widespread exhaustion of commodities. Among the many focus areas for change debated by economic players, broad trends are emerging:

- Internalizing environmental costs in the fairest way possible;
  - Setting up an economic system which uses natural resources more sparingly;
  - Changing the system of governance and achieving a more constructive cooperation between all of the stakeholders;
  - Arriving at a better distribution of wealth.
- The economic recovery plans decided upon by national governments in response to the crisis all include the concept of a "green revival" and are banking on massive investments in environmental protection in order to reinvigorate the economy.





# 1.1 %

OF GLOBAL GDP should be invested each year to cut greenhouse gas emissions in half between now and 2050 (source: International Energy Agency).

## ECOLOGY AT THE SERVICE OF ECONOMIC RECOVERY

On March 1, 2009, the UN urged the G-20 nations to build an ecological component into their plans for reviving the economy. The organization's recommendation was to dedicate 1% of global GDP to the "greening" of the economy. Barack

Obama pre-empted the UN recommendation by unveiling the environmental aspects of the US revival plan in his speech of February 24, 2009. This "Ecological New Deal" rests upon massive investments in clean energy research. Its objective is to combine

green energy with energy independence, by doubling the production of renewable energy in the next three years. The US President also announced the creation of a greenhouse gas emissions market, whose revenues will be used to help low-income households. The

measures suggested will be integrated into the "revival plan" as a focus area for practical development, thus proving that these concerns can have an economic lever effect and become a fundamentally strategic interest in the global revival.

## 30% LESS CO2 = 684,000 JOBS FOR FRANCE

This equation is the result of a recent study carried out by the International Development Research Center (Cired) on behalf of the French branch of the WWF. The study focused on analyzing the economic impact of a massive plan to reduce greenhouse gas emissions in France.

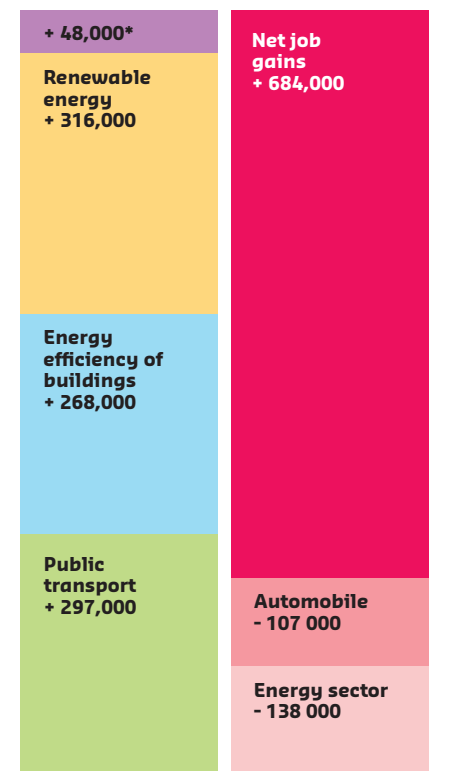
A scenario in which our CO2 emissions were reduced by 30% would create 684,000 more jobs than the scenario which would see French emissions continuing to increase, so that, by 2020, they would be 25% higher than their 1990 level. This assessment, a first for France, takes into account the impact on direct and indirect employment (see chart). In order to reach the target of a 30% reduction, the study makes use of a few broad assumptions:

an increase in the share of renewable energy from 11% to 23% of final energy consumption in 2020 and an improvement in the energy efficiency of GDP of around 25%, two assumptions close to those selected by the Energy-Climate Package.

Net balance of jobs created by a 30% decrease in CO2 emissions in 2020 compared with a scenario where emissions increase by 26%.

\* Savings on the energy bill

## Jobs created



Jobs cut







# **BEING** A **RESPONSIBLE** PLAYER

THE WATER AND WASTE BUSINESSES INVOLVE  
CONSTANT MONITORING. BEING A RESPONSIBLE  
COMPANY MEANS BEING AN ECONOMIC,  
ENVIRONMENTAL AND SOCIAL ROLE MODEL—  
EVERY DAY.

# A DYNAMIC SYSTEM OF GOVERNANCE

## THE BOARD OF DIRECTORS

THE BOARD OF DIRECTORS OF SUEZ ENVIRONNEMENT AND ITS FOUR COMMITTEES BRING TOGETHER **EXPERTS AND PROFESSIONALS WHO ARE EXPERIENCED AND REPRESENT DIFFERENT FIELDS.**

**T**he Board of Directors has opted to split the roles of Chairman of the Board and Chief Executive Officer. Mr. Gérard Mestrallet is Chairman of the Board and Mr. Jean-Louis Chaussade exercises the mandate of Company Chief Executive Officer. The Board of Directors consists of the following 18 members:

**Gérard Mestrallet**, Chairman of the Board of Directors, Chairman and Chief Executive Officer of GDF SUEZ;

**Jean-Louis Chaussade**, Chief Executive Officer of SUEZ ENVIRONNEMENT;

**Jean-François Cirelli**, Vice-Chairman and Deputy Chief Executive Officer, GDF SUEZ;

**Gérald Arbola**, Deputy Chief Executive Officer, Areva;

**Nicolas Bazire**, Chief Executive Officer, Arnault Group;

**Dirk Beeuwsaert**, Executive Vice-President of GDF SUEZ, in charge of the Energy Europe & International Division;

**Gilles Benoist**, Chief Executive Officer of CNP Assurance;

**Valérie Bernis**, Director, Communications and Investor Relations, GDF SUEZ;

**Harold Boël**, Acting Chairman of Sofina SA and Henex SA;

**Alain Chaigneau**, Director of Strategy and Sustainability, GDF SUEZ;

**Amaury de Sèze**, Chairman of the



.....  
**FROM LEFT TO RIGHT: GÉRARD MESTRALLET - JEAN-LOUIS CHAUSSADE - JEAN-FRANÇOIS CIRELLI - GÉRALD ARBOLA - NICOLAS BAZIRE - DIRK BEEUWSAERT - GILLES BENOIST - VALÉRIE BERNIS - HAROLD BOËL - ALAIN CHAIGNEAU - AMAURY DE SÈZE - LORENZ D'ESTE - GÉRARD LAMARCHE - GUILLAUME PEPY - OLIVIER PIROTTE - ANGEL SIMON GRIMALDOS - EZRA SULEIMAN - JÉRÔME TOLOT.**

Supervisory Board, Carrefour, and Vice-Chairman of Power Corporation of Canada;  
**Lorenz d'Este**, Managing partner, E. Gutzwiller & Cie;  
**Gérard Lamarche**, Deputy Chief Financial Officer, GDF SUEZ;  
**Guillaume Pepy**, Chairman and Chief Executive Officer, SNCF;  
**Olivier Pirotte**, Director, Investments, Bruxelles Lambert Group;  
**Angel Simon Grimaldos**, Chief Executive Officer, Agbar Group  
 Chairman of CETaqua (Spain);  
**Ezra Suleiman**, Professor of Political Science at Princeton University (USA)  
 Member of the Board of Directors, AXA;

**Jérôme Tolot**, Director, Energy Services Division, GDF SUEZ.

The Board of Directors also includes four committees whose function is to advise it on specific questions:

- **The strategy committee** gives its opinion and submits recommendations to the Board of Directors concerning:
  - On the one hand, the strategic objectives planned by the Board of Directors or the Chief Executive Officer, on the other hand,
  - Any substantial project for internal and external growth, divestment, strategic agreements, alliances, or partnerships submitted to the Board of Directors.
- **The audit and financial statements**

**committee** assists the Board of Directors in ensuring the accuracy and fairness of SUEZ ENVIRONNEMENT and its subsidiaries' corporate and consolidated financial statements.

- **The ethics and sustainable development committee** ensures compliance with the individual and collective values on which the Group bases its action. It manages the Group's sustainable development policy.
- **The appointments and compensation committee.** The main role of this committee is to review the Board members' remuneration, governance and profit-sharing plans.

## FOCUS DIRECTORS' BACKGROUND

- **LORENZ D'ESTE**, was born in 1955 and is a Belgian national. After studying at the University of Saint-Gall, Mr. d'Este obtained a Master's degree in economic and political science from the University of Innsbruck, Austria. Mr. d'Este joined the Swiss bank

E. Gutzwiller & Cie in 1983. First an authorized agent, then a Director, he has been Managing Partner of E. Gutzwiller & Cie, Banquiers since 1990. He has also served as advisor to the Executive Management of BNP Paribas since 1999, and Director of Union Chimique Belge (UCB) since 2001.

- **GUILLAUME PEPY** was born in 1958 and is a French national. He studied at the Ecole Nationale d'Administration and is

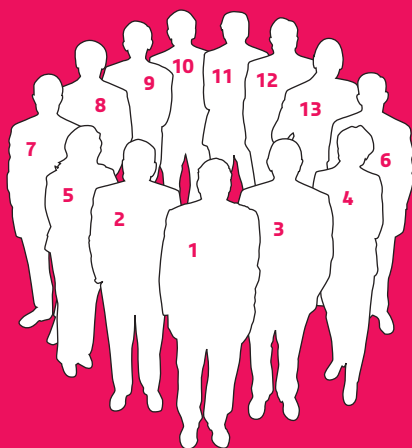
a Legal Advisor at the Conseil d'Etat (France's highest administrative court). Mr. Pepy has held a number of positions, within government ministries as well as the SNCF. Since February 26, 2008, Mr. Pepy has also served as Chairman and Chief Executive Officer of SNCF.

- **EZRA SULEIMAN** was born in 1941 and is a US national. He holds degrees from Harvard and Columbia Universities. In 1973, he

began his career as a professor at the University of California in Los Angeles. Mr. Suleiman is a Professor of Political Science at Princeton University (IBM Chair). He is a member of the Audit Committee of AXA Financial Inc, a member of the Audit Committee of AXA Group and a member of the Selection, Ethics, Governance and Human Resources Committees of AXA Group.

# MANAGEMENT

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**The Management Committee** is the deliberative and decision-making body of SUEZ ENVIRONNEMENT. It meets every two weeks to review the Group's key decisions and direction. It is composed of seven members:

**JEAN-LOUIS CHAUSSADE (1)** Chief Executive Officer, **CHRISTOPHE CROS (2)** Executive Vice-President in charge of Waste Europe activities, **BERNARD GUIRKINGER (3)** Executive Vice-President in charge of Water Europe activities, **DENYS NEYMON (7)** Executive Vice-President in charge of Human Resources, **JEAN-MARC BOURSIER (6)** Executive Vice-President, Chief Financial Officer, **MARIE-ANGE DEBON (4)** Executive Vice-President, General Secretary, **FRÉDÉRIQUE RAOULT (5)** Executive Vice-President in charge of Communications.

**The Executive Committee** of SUEZ ENVIRONNEMENT meets six or seven times each year under the chairmanship of Jean-Louis Chaussade. It implements and reviews the Group's policy. It is composed of members of the Management Committee, managers of the main Business Units and the heads of the different corporate departments of SUEZ ENVIRONNEMENT:

**BERTRAND CAMUS (10)** United Water, **CHARLES CHAUMIN (9)** Asia, **THIERRY MALLET (8)** Degrémont, **DOMINIQUE MANGIN D'OUINCE (11)** Central Europe, Mediterranean and Middle East, **DAVID PALMER JONES (13)** SITA UK, **ADRIAAN VISSER (12)** SITA News (Netherlands, Belgium, Germany), **PER-ANDERS HJORT** Waste international, **DIANE D'ARRAS** Technology and Research, **JACQUES BLEIN** Investments, projects and risks, **MICHEL BOTREL** Internal audit, **JEAN-MARIE GAUVAIN** Legal, **ERIC GHEBALI** International development, **ISABELLE KOCHER** Lyonnaise des Eaux, **TONY HARDING** Water international, **DOMINIQUE PIN** Institutional relations, strategy and sustainable development, **HENRY SAINT BRIS** Marketing.









# A STRATEGY FOR THE LONG TERM

SUEZ ENVIRONNEMENT'S AMBITION IS **TO STRENGTHEN ITS POSITION AS A BENCHMARK PLAYER** IN THE AREAS OF ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT. ITS INDUSTRIAL PLAN REFLECTS THIS DESIRE FOR DEVELOPMENT IN ALL ITS BUSINESSES BY GIVING PRIORITY TO **DURABLE AND PROFITABLE GROWTH.**

**S**UEZ ENVIRONNEMENT's strategy is based on three fundamental principles: sustainable development, the pursuit of global development which is based on strong local ties, and a balanced industrial model coupled with the improvement of operating performance.

**// Sustainable reconciliation of economic and environmental performance.** The development in the demand for the supply and distribution of drinking water, wastewater services and waste management and recovery is linked to a structurally increasing trend, demographic expansion, urbanization and regulatory requirements.

The increase in the price of raw materials has also had an impact on demand in the waste sector. SUEZ ENVIRONNEMENT's

businesses are able to contribute directly to the improvement of their customers' environmental performance, whether they are local authorities, industrial customers or individuals.

SUEZ ENVIRONNEMENT intends:

- To support its customers in promoting a rational use of resources and in assisting them in limiting their environmental impact and identifying alternative resources;
- To offer optimized solutions in the field of energy consumption and, where applicable, solutions which combine the protection of the environment with the production of renewable energy;
- To continue its involvement in introducing better environmental management governance in emerging countries in order to promote the emergence of conditions

favorable to the development of activities in those countries.

The company identifies and uses the energy and material generation potential of value chains in support of that approach. It puts research and technological know-how at the center of that ambition.

SUEZ ENVIRONNEMENT continues to develop high-performance technical solutions with leading experts in order to:

- Adapt to climate change, preserve natural resources, and protect the environment and quality of life;
- Improve the quality of drinking water and services delivered to consumers;
- Extend its technological leadership to new areas, particularly those related to waste treatment and recovery.



**EZRA SULEIMAN,**  
Chairman of the Audit and  
Finance Committee

## “THE VERY STRUCTURE OF SUEZ ENVIRONNEMENT IS ONE OF ITS STRENGTHS”

### How did your committee work on internal control in this first year of stock exchange listing?

The issue of internal control and audit has been one of the main priorities for the Audit Committee. It has ensured that SUEZ ENVIRONNEMENT’s internal control program conforms to the reference framework of the AMF, the French securities regulator, and to the requirements of a listed company,

particularly in terms of corporate governance and external communication. The Committee validated the mapping of internal processes and reviewed the main business units’ 2008 balance sheets as well as the main concerns/reports of the internal and external auditors regarding these balance sheets. Internal control and audit plans for 2009 were also validated one by one. These action plans’ progress is now subject to regular monitoring by the Audit Committee.

### What are SUEZ ENVIRONNEMENT’s strengths in this crisis?

Its very structure is a strength – its balanced portfolio ensures its stability. The Company has also been able to react quickly to the situation by adapting its priorities. The savings plan launched in 2008 has been strengthened – investments have been temporarily reduced and the selection criteria increased, in order to safeguard financial resources.

### FOCUS ADAPTING IN RESPONSE TO THE CRISIS

SUEZ ENVIRONNEMENT has taken deteriorating economic circumstances

into account by adapting its short-term priorities and concentrating its efforts on the pursuit of free cash flow growth and on boosting the selectivity of its investments. The group intends to prioritize profitable and cash-generative organic growth.

SUEZ ENVIRONNEMENT favors strict financial discipline and has strengthened it through a temporary slowdown in development investing, through maintaining a strong balance sheet (with a net debt/EBITDA ratio of less than three)

and improving the structure of its financial debt, in particular thanks to the A3 rating of its long-term debt which it recently obtained from the Moody’s rating agency.





... // Pursuing a global development plan which preserves the local ties of its businesses.

SUEZ ENVIRONNEMENT's activities are local by nature and the company's aim is therefore to be recognized as a local player by its customers. Its long-term strategic objectives reflect the processes which are specific to each region in Europe and the positions the company has established internationally.

// A balanced industrial model and improvement of operating performance.

One of SUEZ ENVIRONNEMENT's main strengths lies in its diverse and balanced exposure: short, medium or long-term contracts, local authorities and industrial customers, regulated or unregulated, mature countries or emerging markets. SUEZ ENVIRONNEMENT intends to allocate invested capital in a way which preserves the diversity and balance of its business portfolio, depending on the expected profitability of and the risks incurred by each activity.

The company's strategy also positions it firmly on the entire water and waste value chains, through encouraging maximum integration between the water and waste businesses in order to take advantage of the potential for synergies:

- Joint research programs (odor treatment, energy recovery);
  - Implementation of shared technologies (composting segments, methanization, treatment and recovery of sludge, treatment of leachates at sewage plants);
  - Generation of commercial synergies, such as a joint development department in France, or outside Europe, where some subsidiaries assume the management of both businesses;
  - Savings in general expenses generated by combining corporate functions (finance, strategy, human resources, IT, communications, legal, development).
- Moreover, the company also intends to pursue the full use of operational synergies with GDF SUEZ energy businesses. SUEZ ENVIRONNEMENT has always given

high priority to optimizing the profitability of its businesses, through ongoing performance improvement plans.

Between 2008 and 2010, the company intends to continue its efforts via the Compass program. By 2010, this program expects to generate a cumulative gain, realized at the gross operating income (or EBITDA) level compared to 2007, of €180 million, progressively distributed over the three years of the plan. 35% of these gains will be generated by savings on procurement, while the other 65% is linked to the improvement of business processes for 38%, to reduction in general expenses for 20% and to the improvement of health and safety at work indicators for 7%.

**FOCUS**  
SUPPORT  
THE TURNAROUND  
WITH NEW MODELS

Environmental issues are a priority in emerging from the

economic crisis. We need to work in a responsible and sustainable way for future generations and the planet. SUEZ ENVIRONNEMENT has been active in business innovation since 2008 through the development of a new model for its

partners: the Edelway service offer (see pages 94-95). The economy must combine economic and environmental performance. Green recovery plans and qualitative growth are now more than ever levers for emerging from the crisis.

The company must give its customers the means of facing up to the major challenges of the 21st century.

# MEETING THE EXPECTATIONS OF ALL OUR SHAREHOLDERS

FOLLOWING ITS LISTING ON THE STOCK EXCHANGE, SUEZ ENVIRONNEMENT ENTERED INTO A DIALOGUE WITH ITS SHAREHOLDERS IN ORDER TO MEET THEIR EXPECTATIONS AND ENSURE THEIR LOYALTY.

**S**UEZ ENVIRONNEMENT has shown a strong will to form a close relationship and communicate with all of its shareholders and to enable them to keep themselves informed about the life of the company and the development of its businesses. A letter to shareholders published three times a year, a shareholder's guide and a toll-free number were put in place as soon as SUEZ ENVIRONNEMENT was listed on the stock exchange. The listing of SUEZ ENVIRONNEMENT, formerly a branch of SUEZ, is the result of the distribution of shares in SUEZ ENVIRONNEMENT to SUEZ shareholders within the framework of the merger between SUEZ and Gaz De France. The challenge therefore consists in informing these shareholders about SUEZ ENVIRONNEMENT, its businesses and its growth factors. Today, SUEZ ENVIRONNEMENT has around 300,000 shareholders and is constantly welcoming new members into its Shareholders Club.

**// A stable and diversified shareholder structure.** Six major shareholders signed a shareholder agreement which pools 48.04% of the share capital at December 31, 2008 (see table). This agreement brings together GDF SUEZ, which holds 35.41% and the five major shareholders (Groupe Bruxelles Lambert, Caisse de Dépôts et Consignations, Areva, CNP Assurances and Sofina), which represent roughly 12.63% of the share capital. Should a member wish to dispose of their shares, the shareholder pact, which has a five-year term, grants a right of pre-emption to the other major shareholders who are signatories to the agreement, then to GDF SUEZ, and finally to SUEZ ENVIRONNEMENT, which has the ability, if necessary, to buy back its own shares. Moreover, SUEZ ENVIRONNEMENT carried out a shareholder survey at the end of 2008. Based on this survey, the 20 main institutional shareholders outside the agreement represent around 24% of the share capital.

## PARTIES INVOLVED IN THE SHAREHOLDER DIALOGUE

### SHAREHOLDER RELATIONS IN FRANCE

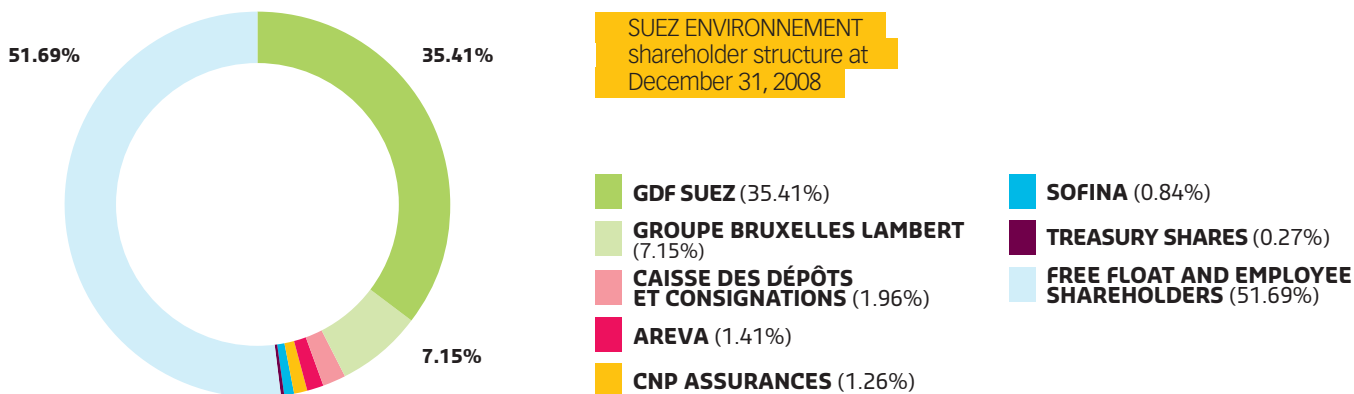
Florent Gautron  
[actionnaires@suez-env.com](mailto:actionnaires@suez-env.com)  
 Toll-free N°: 0 800 207 207  
 Calling from abroad: +33 1 45 30 86 79  
 Fax: +33 1 58 18 48 44

### SHAREHOLDER RELATIONS IN BELGIUM

Natascha Massez  
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# 300,000

PRIVATE **shareholders.**



**LORENZ D'ESTE,**  
Chairman of the Appointments  
and Compensation Committee.

## “TRANSPARENCY IS VITAL TO SHAREHOLDERS’ **CONFIDENCE**”

### **What have been your Committee’s priorities since the company’s public offering?**

The Committee, whose members are Ezra Suleiman, Amaury de Sèze and myself, has worked to ensure that the Group conforms to the standards required of a listed company in terms of transparency of its Board Members’ compensation, incentives and evaluation. The Committee ensures that the compensation of the members of the Executive Board is coherent and in line with both market standards and objectives fixed by the Group. The Committee also wanted to go beyond this, and to create employee shareholders, as previously

existed in the SUEZ Group, and in the longer term, share-based remuneration tools. It has therefore proposed to the Board that several resolutions regarding this be put forward to the next Shareholders’ Meeting. The Committee will define the methods of implementation of share-based remuneration. In accordance with the code of good governance, the Committee also examined the independence of the directors.

### **How can transparency be improved?**

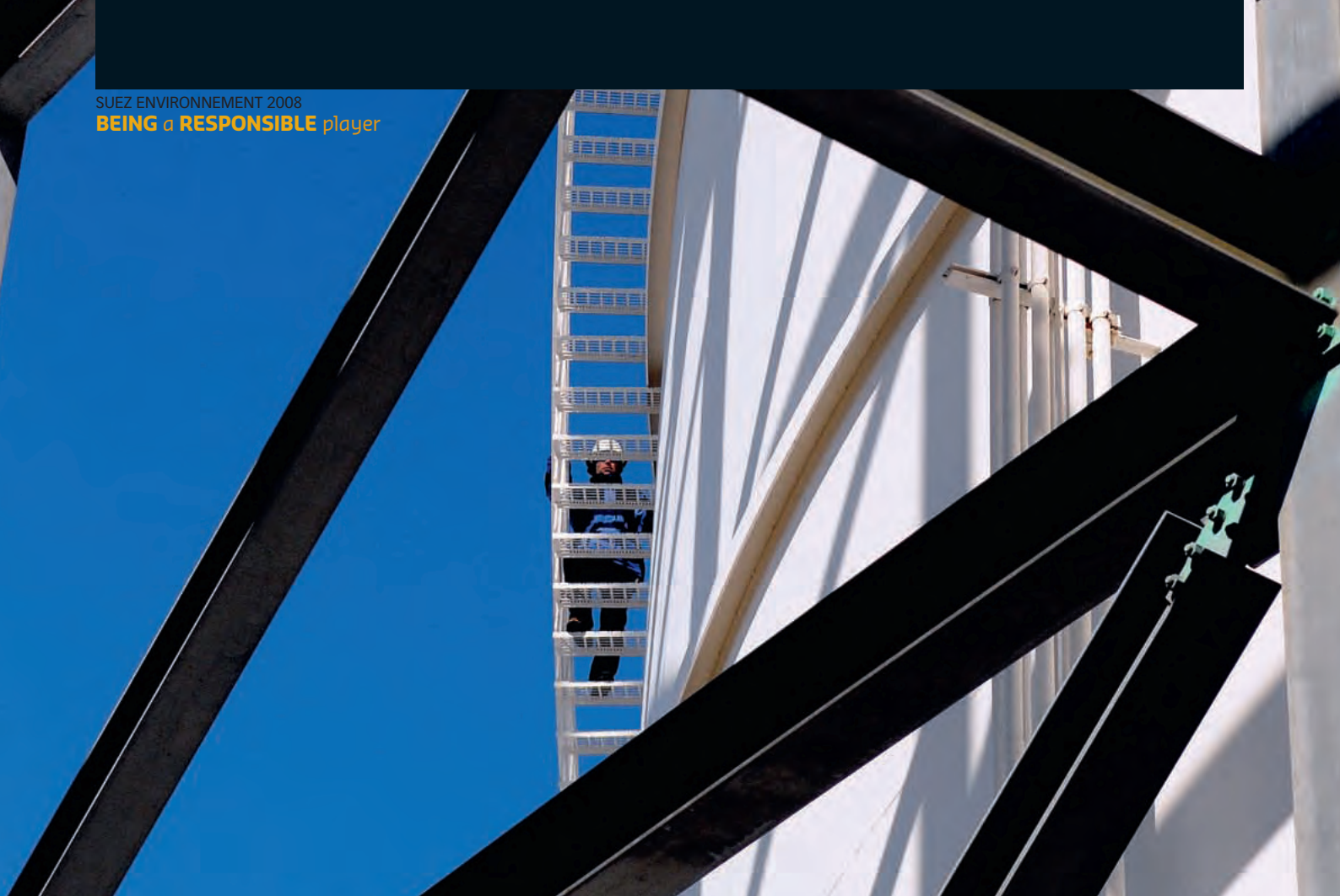
Transparency is vital to shareholders’ confidence. The Board indicated that it would adhere to last October’s AFEP-MEDEF

recommendations. The company’s Reference Document gives full details of the conditions regarding the Chief Executive Officer, who is the only corporate executive officer. The elements relating to his appointment (compensation, objectives, severance payment in case of dismissal, social and retirement benefits) have been considered by the Committee and approved by the Board. These commitments will be submitted to the next General Shareholders’ Meeting in accordance with the provisions of the regulated agreements.

**FOCUS**  
A FINANCIAL  
COMMUNICATION  
SERVICE DEDICATED  
TO INVESTORS

As soon as the shares were listed, a financial communications service was set up to inform institutional investors and analysts about SUEZ ENVIRONNEMENT’s strategy and results. Meetings are

organized regularly in the main financial centers in Europe and the United States. These enable investors to get to know SUEZ ENVIRONNEMENT and its management team better.



# COMMITMENT AND QUALITY

## HEALTH, SAFETY AND WELL-BEING AT WORK

SUEZ ENVIRONNEMENT IS COMMITTED TO HEALTH AND SAFETY AT WORK WITHIN THE FRAMEWORK OF ITS SUSTAINABLE DEVELOPMENT POLICY. IN ORDER TO MEET ITS TARGETS, THE COMPANY IMPLEMENTS **AN INTERNAL HEALTH AND SAFETY POLICY WHICH IS BOTH PROACTIVE AND INNOVATIVE.**



# 15

DAYS' ABSENCE. An average 15 days' absence per employee compared with 17 in 2008.

**W**hen it was founded in 2003, SUEZ ENVIRONNEMENT committed to an ambitious health and safety policy. The size of the company, the diversity of its activities and its international presence are all factors which have enabled the company to acquire significant experience in the safety field. The company has thus committed to a dual approach: endow the safety policy with significant rules and means, and communicate on this crucial topic. **// Internal rules accompanied by material means.** Having rules and complying with them is one of the foundations of the safety policy. SUEZ ENVIRONNEMENT imposes specifications on its suppliers which go well beyond current standards. The safety rules specific to SUEZ ENVIRONNEMENT are improved according to feedback from experience. All accidents are the subject of an in-depth investigation conducted at all levels under the supervision and

evaluation of the SUEZ ENVIRONNEMENT Serious Accidents and Investigation Commission. Each enquiry must be concluded, as far as possible, with an effort to benefit the group. Practically, this means that the report writer must evaluate the relevance of drawing up one or more new rules based on each incident applicable to the group as a whole. At the same time, SUEZ ENVIRONNEMENT is implementing a policy of making the installations it manages compliant and updating their technology. It is working towards forming an extended network of safety and insurance experts. The company is also developing specific safety indicators with a narrow sampling which enable optimal responsiveness and quality reporting. **// A safety culture.** Beyond rules and means, safety is also a matter of culture. It must be on everyone's mind at all times, in order to avoid mistakes due to inattention and to anticipate the right reactions.

SUEZ ENVIRONNEMENT has endowed itself with significant communication measures which aim to put safety at the center of the daily routine of all of its employees. Thus it has become standard at each site to use a notice board devoted to safety that is updated daily with key information such as the number of days which have passed without an accident. Today the safety culture of SUEZ ENVIRONNEMENT is shared by all its employees whether they work in China, Indonesia, Morocco or France. Accidents have been reduced by two-thirds in seven years and the company is recognized for its commitment in this area. The spirit of respect for the safety of its employees reigns at every level: evaluation of managers, safety instructions, making installations compliant. This know-how represents a core capital for the company and singles it out in its sector of activity.

## FOCUS THE LINE MANAGEMENT SAFETY VISIT (LMSV)

Launched as a pilot at Lydec from 2005 onwards and extended to SITA France and

Lyonnaise des Eaux in 2008, the line management safety visit is now a fundamental principle of SUEZ ENVIRONNEMENT's health and safety policy. Depending on their position in the company, each operating manager must make between two and

10 "LMSV"s per year, lasting 1-2 hours. This is an indicator of the managers' commitment and their exemplary attitude. It is also an opportunity for exchanging information with colleagues on risks, working conditions and difficulties on the ground

in order to target actions in a better way by promoting employee participation and buy-in to the entity's efforts. Today, standardizing this approach represents an essential challenge for consolidating safety culture at SUEZ ENVIRONNEMENT.

# A HUMAN RESOURCE POLICY FOR EVERYONE

SUEZ ENVIRONNEMENT HAD 65,400 EMPLOYEES AT DECEMBER 31, 2008. SUEZ ENVIRONNEMENT'S HUMAN RESOURCES POLICY, WHICH IS FULLY INTEGRATED INTO THE COMPANY'S STRATEGY, PROVIDES EFFICIENT HUMAN RESOURCES TOOLS TO THE HUMAN RESOURCES DEPARTMENTS OF THE OPERATING SUBSIDIARIES.

**S**UEZ ENVIRONNEMENT defines itself as a different company which puts its businesses and know-how at the service of communities and intends to prove that it is possible to combine economic performance, environmental performance and social performance on a daily basis. This strong commitment can be found in the group's sustainable development policy which aims to make every employee an ambassador for sustainable development. Dedicated to promoting the professional fulfillment of its employees, SUEZ ENVIRONNEMENT supports them via an ambitious training, professionalization and know-how transfer policy and a job mobility policy. Moreover, this human resources policy is strongly committed to promoting diversity.

// **Ethics.** Company values and respecting charters and social commitments

developed with GDF SUEZ have been integrated into a management process which makes behavioral ethics a fundamental part of how the company is managed. The compensation policy is based on three ethical principles:

- Compensation is global: it includes all the elements of the package, whether or not they are monetary, direct or indirect, immediate or deferred (salaries, social security, pensions and company savings plans),
- Compensation is competitive: in every country where the Group does business, our compensation levels are among market benchmarks,
- Compensation is equitable, as it takes both individual and collective performance into account.

// **Skills development and training.** In order to monitor global changes and

changes in the market and to adapt its businesses, the training policy of SUEZ ENVIRONNEMENT has clear aims to optimize the employability of its employees:

- Aim for heightened performance, while promoting acquaintance with the strategy and a better understanding of performance levers,
- Enable everyone to express themselves through collaborative tools so that each employee is able to share ideas and best practices,
- Be a partner for change,
- Improve teamwork and the way the networks function in order to enable a better transfer of knowledge and know-how.

In 2008, 57% of SUEZ ENVIRONNEMENT employees took part in training over an average period of three days. The main themes addressed were safety and technical know-how.



# 7,000

NEW EMPLOYEES

SUEZ ENVIRONNEMENT hired over 7,000 new employees in 2008.

**// Dynamic management of career paths and talents.** Managing careers today to adapt to employees' expectations and to tomorrow's changes is an essential issue for SUEZ ENVIRONNEMENT. The tools made available to the operating subsidiaries cover the entire range of long-term career management. The orientation process, the annual performance review, the development meeting, the "people review" cycles and succession plans are all essential tools and "passage points" that enable employees to develop alongside the company and its businesses.

**// Promoting diversity.** SUEZ ENVIRONNEMENT is proud to count over 70 nationalities among its employees. To make progress on diversity issues, SUEZ ENVIRONNEMENT has committed to a sustainable development policy through quantitative indicators that measure, in

particular, the proportion of women and disabled people in the workforce. This year, the redesigning of the reporting system and the impact of changes in consolidation explain the slippage in certain indicators. For SUEZ ENVIRONNEMENT, promoting diversity naturally involves a policy of equal opportunity in hiring but it also involves ensuring that throughout the entire career path each employee worldwide is treated according to the same principles. In order to contribute to the local development of its foreign operations, SUEZ ENVIRONNEMENT promotes local recruitment.

**// University partnerships.** In order to support its proactive training and recruitment policy, SUEZ ENVIRONNEMENT and its subsidiaries have formed partnerships with schools of engineering, universities and research institutes in every country where the company is present.

These undertakings are based on two principles: a desire to improve awareness of environmental businesses and to strengthen academic support. Every year, SUEZ ENVIRONNEMENT and its companies suggest case studies to support the courses taught in many programs (AgroParisTech, Centrale Paris and the Ecole Nationale des Ponts et Chaussées, etc.). Many employees take part in conferences in university programs. SUEZ ENVIRONNEMENT supports students and offers scholarships at Sciences Po Paris and to students at Paris Tech (in partnership with Tongji University in Shanghai). Finally, SUEZ ENVIRONNEMENT recently helped to create a chair of business at the École du Génie de l'Eau et de l'Environnement de Strasbourg (Strasbourg Water and Environmental Engineering School) and is sponsoring the Procedures and Environment option at the École Centrale Paris.

## FOCUS WATER AND WASTE PROJECT MANAGEMENT CHAIR AT ENGEES

SUEZ ENVIRONNEMENT strengthened its ties with the Strasbourg Water and

Environmental Engineering School (ENGEES) with the creation of a chair of business in 2009. This chair, named water and waste project management, has a strong educational aim: to give future engineers the theoretical and practical means to manage a complex project in these sectors.

SUEZ ENVIRONNEMENT will contribute to lectures by providing case studies, making a contribution of €100,000 per annum to the school budget and offering internships to young graduates.





## CUSTOMER SATISFACTION AND SERVICES

IN PUBLIC WATER AND WASTE SERVICES, **SATISFYING CUSTOMERS IS A SANITARY, ENVIRONMENTAL AND ECONOMIC IMPERATIVE.** FOR SUEZ ENVIRONNEMENT, THERE ARE TWO ASPECTS TO THE CUSTOMER RELATIONSHIP: CONTRACTING WITH THE LOCAL AUTHORITY OR COMPANY AND, ON THEIR BEHALF, WITH THOSE WHO USE THE PUBLIC SERVICES ON A DAILY BASIS.

In order to succeed in all its contracts, SUEZ ENVIRONNEMENT has provided itself with the ability to manage in an optimal manner a whole series of complex relationships between the parties involved in the contracts:

- the customer with whom the contract has been signed (i.e. the local authority at our operating plants),
- industrial customers,
- end customers,
- regulatory bodies,
- all of our stakeholders (see Part 4: Involving stakeholders in our development).

**// Ensuring customer satisfaction and anticipating needs.** The users of services expect the operator to provide clear and easily understandable invoices as well as perfect service quality. It is necessary to evaluate service levels and customer satisfaction regularly in order to make sure that the service offering corresponds to customer demand, especially regarding the quality of service performed, whether in the water or waste sectors. Today, SUEZ ENVIRONNEMENT's experience enables its subsidiaries to systematically anticipate user requirements. Proposals for

# + 17.26%

INCREASE IN AGBAR'S CUSTOMER SATISFACTION RATE  
registered across all of its contracts in Spain between 2005 and 2008.

improvement are made regularly, based on what has worked successfully in one or another of SUEZ ENVIRONNEMENT's subsidiaries.

**// Continually improving customer satisfaction.** Today, throughout all of the group's subsidiaries, customer services perform very varied assignments, ranging from managing customer relationships to debt recovery, via contract and invoicing management.

Customer satisfaction surveys are an essential tool in the long-term survival of an activity. They enable the following objectives to be met:

- Optimizing customer policy by identifying the strengths and weaknesses of the offering and by detecting the levers for improvement;
- Determining the action plans to put in

In the United States, **United Water returns the calls of every customer that contacts its Customer Service Center,** to gather feedback on their experience and improve the service provided.

place in order to increase customer satisfaction and loyalty and improve the company's brand image;

- Steering the investment (CAPEX) plan;
- Evaluating actions which are already in place.

Considering the crucial challenge represented by customer surveys, SUEZ ENVIRONNEMENT's Department of Operations, Research and the Environment

(DORE) has perfected a formal method for carrying out customer satisfaction surveys. This method is the result of a study carried out in 18 subsidiaries, in collaboration with a specialist research agency. It has been delivered in the form of a teaching kit which provides a complete approach for setting up customer satisfaction surveys, from defining objectives through to the action plan.

## FOCUS

### AN INTERNET SITE DEDICATED TO WASTE COLLECTION

In Valenciennes, SITA France set up the first nationwide website dedicated to waste collection. Since 2008, this

new online information service enables the 194,000 residents involved to know everything about waste collection in their municipalities and to know the collection days and times depending on the types of waste, and so on. "Information flashes" broadcast essential

information about the sequence of the collections underway. A year after the site's launch, a survey showed that among residents familiar with the site, 96% say it is updated regularly; 95% consider it helpful; 94% thorough, and 85% convenient. They are also of the view that

the site enables them to fully understand correct sorting procedures (87% of those questioned) and that it "makes them want" to sort their rubbish (88%).

(\*): CSA Survey – Study n°0800596 – June 2008



# A RESPONSIBLE PROCUREMENT POLICY

IN 2002, SUEZ ENVIRONNEMENT CREATED A PROCUREMENT DEPARTMENT RESPONSIBLE FOR SELECTING SUPPLIERS, **OPTIMIZING SUPPLIES FOR ALL THE SUBSIDIARIES** AND ENSURING COMPLIANCE WITH QUALITY AND PROFITABILITY CRITERIA.

**S**UEZ ENVIRONNEMENT'S responsible procurement policy is based on an endeavor to reduce both costs and the environmental impact of the company's activities. Responsible procurement can indeed markedly improve environmental performance by reducing the greenhouse gas emissions linked to the company's activities. Lyonnaise des Eaux has turned to buying and using composite water meters,

which have the dual benefit of a smaller environmental impact and a cost lower than traditional meters made of brass, a material whose price has soared in recent years. The same goes for many other materials or products which can considerably improve the environmental and economic performance of the company. To meet this objective, SUEZ ENVIRONNEMENT set up a procurement department in 2006 responsible for designing high-performance





# 80%

OF THE CONTAINERS used for waste collection in Germany are recovered following melting and used as raw material by the supplier of SUEZ ENVIRONNEMENT.

## A “sustainable development” clause has been added to the text of SITA France’s framework agreements.

tools to continually improve purchasing, within the framework of its first sustainable development policy program.

**// Implementing high-performance tools.** The responsible procurement policy has been endowed with a veritable “arsenal” of tools designed at Group level and by the various subsidiaries. These include:

- The Ethical Procurement Charter (GDF SUEZ),
- The Sustainable Procurement Policy (Wastewater Sector),
- The Lyonnaise des Eaux Guide to Sustainable Procurement (Water Sector),
- A Questionnaire for evaluating suppliers,
- SEPO ‘rtal: a common portal for all

fleet buyers and managers for sharing contracts and making vehicles and equipment available to the subsidiaries,

- The Social and Environmental Responsibility procedure for risk management applied to SUEZ ENVIRONNEMENT’s top 100 suppliers.

### **// Pan-European coordination for the waste businesses.**

The various European waste business subsidiaries fully coordinate their procurement via three committees:

- SITA European Procurement Organization (SEPO) brings together procurement managers. Many contracts are the result of negotiations handled by SEPO: frames, BOMs, bin-lifters, tires, plastic containers,

hydraulic arms and lubricants. All global contracts include sustainable development clauses. These clauses represent environmental and social obligations with which our suppliers and their products must absolutely comply.

- SITA European Fleet Organization (SEFO) brings together vehicle fleet managers. The objective is to have a common approach to the truck pool at the European level.
- SEPO GREEN brings together procurement managers and leading buyers at the European level on the issue of sustainable procurement.

These committees provide important economies of scale and systematically include a “sustainable development” clause in all the agreements they make.

## **FOCUS** THE MANAGEMENT OF TIRES IN THE WASTE BUSINESS

A Europe-wide master contract has enabled us to source tires for all European waste management

subsidiaries from one supplier with full outsourcing of the tire pool. Thanks to the agreement concluded with Michelin, SITA no longer buys tires but a service for the regular inspection of the entire tire pool including:

- Equipment recommendations

- Fuel consumption reductions (a correctly-inflated tire is more fuel-efficient)
- Checking tires and treads, groove depth and the state of the side walls
- Adjusting pressure and twinning checks
- Regrooving and retreading
- The recovery of used

tires by Michelin. The result of this partnership has been a 50% reduction in breakdown call-outs for burst tires and in the number of vehicles out of service.

# ETHICS AND DIALOGUE

## PROMOTING THE RIGHT TO WATER AND SANITATION

SUEZ ENVIRONNEMENT IS THE STEWARD OF KNOW-HOW THAT HAS BEEN DEVELOPED AND ADDED TO FOR OVER ONE HUNDRED YEARS. THE COMPANY IS AN ADVOCATE FOR UNIVERSAL ACCESS TO POTABLE WATER AND HAS UNDERTAKEN TO **PUT ITS SKILLS TO WORK IN THE PUBLIC INTEREST** BY MEANS OF AN INNOVATIVE OPERATING AGREEMENT WE CALL THE “4P MODEL”.

**P**eople’s access to water and wastewater services is a great concern to SUEZ ENVIRONNEMENT. As private operator of public utilities, the Group is one of the innovators of public policy in this field. SUEZ ENVIRONNEMENT supports the universal right of access to water. Beyond recognizing this right, the public authority responsible for enforcing it should be identified, along with the powers

and obligations of that authority, and finally, an operator must be put in charge of the operational implementation of the corresponding services. In developing countries, SUEZ ENVIRONNEMENT’s contribution to the right of access to water can be evaluated through the number of people who have gained access to water and wastewater services in communities where the company conducts its business. During the past

# 880

MILLION PEOPLE in the world are deprived of access to drinking water (source: Joint Monitoring Program).

15 years, SUEZ ENVIRONNEMENT has brought drinking water to over 11 million people and connected 5.3 million people to a wastewater services network. SUEZ ENVIRONNEMENT shares this success with the local authorities which have put their trust in the company. Although this performance may seem modest when we know that 880 million people in the world are still deprived of access to drinking water (source: Joint Monitoring Program), this contribution is significant in relation to the size of the company. In towns where SUEZ ENVIRONNEMENT conducts, or has conducted business, the annual growth in service cover has generally been higher than the average increase in urban cover in the country. SUEZ ENVIRONNEMENT also makes efforts to promote access to water and wastewater services through its dedicated foundation: "SUEZ ENVIRONNEMENT - Water for everyone" (see page 54).

In 2008, **SUEZ ENVIRONNEMENT was awarded the Frost & Sullivan "Best-in-class Water and Waste Services in Developing Economies"** prize for its actions promoting access to water in developing countries.

**// The 4P model.** SUEZ ENVIRONNEMENT has worked out new models of partnership. In particular, the company has created a model for medium-sized towns and cities in emerging countries, especially in Africa, where no solutions have been forthcoming due to deficient political or governmental structures, insufficient planning, unreliable funding and so on. To meet the needs of such communities SUEZ ENVIRONNEMENT decided to create the 4P model agreement. Three of the Ps stand for "Public-Private

Partnership", with a fourth P for "Participation". The purpose of this model is to forge an institutional process of consultation and participation, from the RFP stage forward, among all the local interested parties. SUEZ ENVIRONNEMENT is bringing our vast experience to bear on developing the model. It will be put into practice sometime during 2009.

## FOCUS IN FRANCE, A PROGRAM KNOWN AS "WATER SOLIDARITY"

In France, in every department where it is implanted, Lyonnaise des

Eaux signs conventions within the framework of the Housing solidarity fund (FSL) in order to help people in need and offer them an appropriate solution by writing off recovery costs, extending payment terms, providing material assistance, helping people

open an over-indebtedness file, and so on. On site in the 120 agencies dotted around France, the Lyonnaise des Eaux "Water Solidarity" agents' sole assignment is to continually monitor the social situation of people in need and to look for customized solutions.



# MAKING ETHICS AN AXIS OF OUR PERFORMANCE

SUEZ ENVIRONNEMENT HAS MADE ETHICS AN ESSENTIAL FOCUS AREA FOR IMPROVING ITS GLOBAL PERFORMANCE. **ETHICS ARE ESSENTIAL IN CONTRACTS IN WHICH THE COMPANY PLAYS A ROLE.** THEY ARE THE BASIS OF ANY SUCCESSFUL COLLABORATION WITH THE GROUP'S SUPPLIERS AND CUSTOMERS ALIKE.

**D**ifferent forms of corruption have a damaging effect on a company's economic health and image. Corruption undermines a company's competitiveness in relation to its rivals, and results in a loss of confidence. Criminal behaviors, over time, slow or even stop the implementation of a healthy governance system and destroy the credibility of efforts in this direction. SUEZ ENVIRONNEMENT condemns such behaviors and fights them through a substantial ethics program.

**// A single ethics program for all our businesses and departments.**  
The company adheres to and plays an active part in the "Ethics & Compliance" program put in place by GDF SUEZ. This program was designed with the aim of promoting a group culture which imposes responsible behavior on every employee, in accordance with applicable ethical values and regulations. The "Ethics & Compliance" program is based on several benchmark documents:  
– The Good Behavior Guide – Ethics of information management,



**GUILLAUME PEPEY,**  
Chairman of the Ethics and Sustainable Development Committee

## "PARTICULARLY CLOSE ATTENTION TO EXCELLENCE AND INNOVATION"

**What is your vision of SUEZ ENVIRONNEMENT'S sustainable development policy?**  
SUEZ ENVIRONNEMENT is closely tied to sustainable development, down to each of its business lines. This requires particularly close attention to excellence and innovation, and the committee I chair is especially aware of this. We have reviewed the main sustainable development objectives the group has set and the resources it has put

into practice, and everything seems to fit. In 2008, the committee also focused on the group's health and safety policy, a major internal initiative that has yielded considerable results. In 2009, the committee will work on continuing all the actions it has launched.

**What instruments are used to implement the ethics policy?**  
There are three fundamental aspects to SUEZ ENVIRONNEMENT'S ethics policy: a charter and

procedures handed down from the SUEZ group, a network of ethics specialists who are essential to supervising training and education actions, and instruments for reporting or ethical alerts. The committee reviewed the actions undertaken in 2008, and its findings were up to standard. In 2009, we will tackle the issue of reinforcing training efforts and, more broadly, work to consolidate these three pillars.

“SUEZ ENVIRONNEMENT’S THINKING IN TERMS OF PREVENTING CORRUPTION IS VERY ADVANCED COMPARED TO THE THINKING OF OTHER COMPANIES WITH WHOM TRANSPARENCY INTERNATIONAL FRANCE HAS ENTERED INTO PARTNERSHIPS.”  
**TRANSPARENCY INTERNATIONAL FRANCE REPORT** dated June 26th, 2008.

- The Commercial Relationships Guide,
- The Environmental Charter,
- The code of conduct for Group finance professionals,
- Procurement ethics,
- Rules of conduct in handling confidential and privileged information,
- An ethics code for relationships with suppliers.

The program depends on a network of compliance officers who see that it is adopted and carried out.

These rules are applicable to all of the group’s employees and are available on SUEZ ENVIRONNEMENT’s intranet as well as on the GDF SUEZ website.

They have been drawn up taking particular account of standards in the field of ethics and professional ethics arising from national and international events.

**// Cooperation with Transparency International.** According to the terms of a convention signed in December 2006, SUEZ ENVIRONNEMENT asked Transparency International France, the French branch of the Transparency International (TI) association, for support in evaluating the ethics procedures it applies in the areas of commercial integrity and the fight against corruption. This approach resulted in a series of meetings which took place between March 2007 and 2008 at Lyonnaise des Eaux, SITA France, United Water, Lydec, Palyja, and SITA UK.

TI France then carried out a general analysis of SUEZ ENVIRONNEMENT’s situation with respect to preventing corruption before making a certain number of recommendations. These recommendations address, in particular, the dissemination of

the ethics rules in force within the group and employee buy-in to these, the inclusion of clauses relating to Ethics and Sustainable Development in requests for tender and in supply and subcontracting contracts, training in ethics and the rules of competition as well as the strict supervision of relationships with commercial agents. Measures will be progressively put in place in the various group companies in order to implement these recommendations.

## **FOCUS** CONTRACT TRANSPARENCY

SUEZ ENVIRONNEMENT is committed to greater transparency in its water, wastewater treatment and waste contracts.

The company is convinced that increased transparency will improve the dialogue with all its stakeholders. SUEZ ENVIRONNEMENT has therefore begun working with the University of Dundee in Scotland, which specializes in business law, in order to improve the transparency of contracts

and financial statements. First projects: the scientific analysis of various public and private operators’ transparency practices, along with the evaluation of the legal implications of wider public access to information.

## INVESTING IN COMMUNITIES

GEOGRAPHICAL, ECONOMIC AND SOCIAL CONDITIONS IN MANY COUNTRIES DO NOT ALLOW FOR THE ORGANIZATION OF PUBLIC SERVICES ACCORDING TO CONVENTIONAL MANAGEMENT METHODS. **SUEZ ENVIRONNEMENT AND ITS EMPLOYEES HAVE BEEN COMMITTED FOR A LONG TIME NOW.**





# 3

MILLION EUROS per year:  
budget of the SUEZ ENVIRONNEMENT –  
Water for All Foundation.

**U**nder the auspices of the Institut de France, the SUEZ ENVIRONNEMENT – Water for all Foundation lends its support to actions carried out to promote sustainable development in two complementary focus areas:

- Promoting community support, whether it originates in France or abroad, which promotes access to water, wastewater treatment and hygiene for people in developing countries, particularly those in an urban environment,
- Promoting and strengthening knowledge and know-how in this sector.

#### // The donation of skills.

Skills donation means making the skills of company employees available this may be in the form of supplying services, lending workers, support in getting a project off the ground or short or long-term technical support.

Here are three examples of the involvement of the SUEZ ENVIRONNEMENT – Water for All Foundation which promote access to water:

- Action led by the French Red Cross in the area surrounding Moundou (Chad 2007 to 2010): the project aims to grant access to drinking water and wastewater services

A foundation is a non-profit company founded by one or several donors in order to **carry out works in the public interest.**

to over 20,000 residents in the areas surrounding the town. This sizeable project allows for the drilling of 30 community bore holes and building 60 latrine stations in schools and public places. In addition to financial support, SUEZ ENVIRONNEMENT is making its technical skills in the areas of water treatment and infrastructure management available, both at the technical and administrative level.

- Support to the district committees responsible for distributing water and providing wastewater services in Port-au-Prince (Haiti).

In the context of the “Fédedlo” project led by the Research and Technology Exchange Group (GRET) which has enabled the setting up of over 50 delegate district committees for public water drinking services,

the Foundation contributes financial support and makes technical assistance available on a one-off basis. This technical assistance involves SUEZ ENVIRONNEMENT skills like contractual relationships between committees and the public water service.

- The creation of the “ParisTech-SUEZ ENVIRONNEMENT Water for All” chair of business has led to the introduction, within Paris Tech, of the “OPT Water for All” International Executive Master’s program. This course is financed by the SUEZ ENVIRONNEMENT – Water for All Foundation and is open to future water and wastewater services managers. The 12-month program should help build managerial skills in order to improve these essential services in developing countries.

## FOCUS AQUASSISTANCE: EMPLOYEE COMMITMENT

Aquassistance is an organization for humanitarian and emergency intervention

which brings together professional volunteers in the company. Founded in 1994, Aquassistance intervenes in partnership with associations which have a local presence in order to bring know-how into the environment, water and waste sectors. Financed mostly by the

SUEZ ENVIRONNEMENT – Water for all Foundation, Aquassistance carried out 68 assignments in 22 countries in 2008. Among the most memorable projects: two emergency assignments to supply water to disaster victims following natural disasters. In May and June 2008, a team

from the association, in collaboration with SUEZ ENVIRONNEMENT’s Chinese subsidiary, Sino-French Water, set up four mobile water treatment plants in the Chinese province of Sichuan for residents affected by the 2008 earthquake.

# 80

“BETWEEN FREE WATER AND SPECULATIVE DRIFT, SUEZ ENVIRONNEMENT MUST BE A PLAYER OF GREATER TRANSPARENCY IN THE WATER MARKET. WOULD SUEZ ENVIRONNEMENT AGREE TO COMMUNICATE ON THE PROFITS GENERATED?”

**QUESTION ASKED** during a stakeholder session.

NGOS AND STAKEHOLDERS, have been invited to dialogue with the Executive Management of SUEZ ENVIRONNEMENT during “stakeholder sessions”.

and prospects is divided into two committees:

– The Business and Development Committee, the majority of whose representatives come from developing countries (India, Brazil, Benin, Morocco, etc.) and are able to express their countries’ expectations and difficulties,

– The Scientific and Technical committee, which consists mostly of scientists from complementary fields (agronomy, hydrology, epidemiology, etc.).

SUEZ ENVIRONNEMENT presents its positions and action plans on topics as diverse as adapting commercial models to the situation of developing countries, taking part in certain major international events, partnerships and the choice of themes for Research & Development programs. The committee members debate freely before making their recommendations. These represent a valuable aid for SUEZ ENVIRONNEMENT. They have, in particular, led the company to play a very active part, and in a non-

ostentatious way, in the last two World Water Forums in Mexico and Istanbul.

Another decisive contribution: a reflection on the necessary development of business models.

### // Stakeholder consultation cycles.

In March and April 2007, in Paris and New York, stakeholder sessions, under the auspices of the 21 Committee, brought together university staff, elected representatives, NGO representatives, research firms and international institutions for development, with representatives of the Executive Management of SUEZ ENVIRONNEMENT and its subsidiaries. These meetings enabled very different visions of public service and the private sector to be exchanged. Eighty stakeholders were brought together around the issue of a private operators’ responsibility for access to water and transparency and the balance of power in water service contracts. This first cycle enabled identifying points upon which

SUEZ ENVIRONNEMENT might improve.

The company was questioned on, in particular: governance at the local level, universal access to water, corruption and monopoly situations, transparency.

In January 2008 and 2009, meetings featuring feedback from the first sessions were held in Paris and New York. These meetings, which brought together the same attendees, gave SUEZ ENVIRONNEMENT the opportunity to answer questions raised during the first sessions and to present the practical solutions that the company intended to apply. A debate then followed on each of the points raised.

These consultation cycles represent an important improvement lever for the group, which has created a department for social engineering that has launched a number of practical projects (see box).

## FOCUS TRAINING FOR DIALOGUE WITH STAKEHOLDERS

In 2008, the department of social engineering developed a simple

operating tool aimed at enabling subsidiary managers to initiate a process of analyzing the positions of stakeholders and a dialogue approach.

This method is implemented in six stages which result in the drawing up of a map

of stakeholders in relation to themes to be discussed as a priority:

1. Listing and describing the stakeholders,
2. Analyzing the context and external perceptions,
3. Identifying and prioritizing problems,
4. Drawing up a map

of stakeholders in relation to problems,

5. Drawing up an action plan for implementing dialogue,
6. Ensuring follow-up and reporting.



## INTRODUCING CONSULTATION PROCESSES

SUEZ ENVIRONNEMENT IS COMMITTED TO PUBLIC SERVICE ACTIVITIES WHICH INVOLVE CONSTANT RESPONSIBILITY AND **HAS MADE DIALOGUE A FUNDAMENTAL PART OF ITS DEVELOPMENT** BOTH AT THE LOCAL AND INSTITUTIONAL LEVEL. THIS DIALOGUE IS FORMALIZED WITHIN THE FRAMEWORK OF THE FORESIGHT ADVISORY COUNCIL WHICH WAS CREATED 10 YEARS AGO AS WELL AS THE STAKEHOLDER SESSIONS.

In 2004, SUEZ ENVIRONNEMENT decided to equip itself with a service for consultation of and dialogue with civil society, setting up the Foresight Advisory Council (FAC), a permanent committee of independent experts. This process was strengthened in 2007 with the launch of a formal process for stakeholder conferences with a wider group of representatives of civil society: the Stakeholder Sessions.

**// The Foresight Advisory Council.** The FAC is a permanent consultation body which brings together, twice a year, 25 members originating from every continent and from varied backgrounds: university staff, association representatives, international civil servants and former government members. This veritable council for future direction



# **TAKING ACTION** EVERY **DAY**

**TAKING ACTION EVERY DAY MEANS MAKING SURE THAT  
THE DAILY EXERCISE OF SUEZ ENVIRONNEMENT'S BUSINESS  
MAKES A POSITIVE CONTRIBUTION TO THE COMMUNITIES  
AND TERRITORIES IN WHICH THE COMPANY AND  
ITS SUBSIDIARIES ARE INVOLVED.**



# PROTECTING WATER RESOURCES

## WATER PRODUCTION AND DISTRIBUTION: IRREPROACHABLE QUALITY, A PRESERVED RESOURCE

ALTHOUGH WATER IS A RENEWABLE NATURAL RESOURCE,  
IT IS NOT PRESENT IN SUFFICIENT QUANTITY OR QUALITY EVERYWHERE.  
THE CHALLENGE IS TO SET UP **SOLUTIONS FOR SUSTAINABLE  
PRODUCTION AND DISTRIBUTION** OF DRINKING WATER THAT ARE  
SUITED TO EACH LOCAL CONTEXT.

**P**roducing and distributing quality drinking water while also protecting the resource – this is the mission fulfilled on a daily basis by SUEZ ENVIRONNEMENT teams across the world.  
**// Guaranteeing access to water and avoiding waste.** Water is a renewable resource that is present in huge quantities on our planet, but it is unequally distributed. In addition, this inequality is

increased by global warming according to the Intergovernmental Panel on Climate Change (IPCC, see p. 24-29). Guaranteeing the water supply means providing populations, wherever they are, with access to an adequate water supply. SUEZ ENVIRONNEMENT has developed solutions that enable guaranteed access to water, management of water stress situations and avoidance of waste. These



# 46%

OF THE FRENCH cite water scarcity and water pollution as being their main environmental concern (TNS SOFRES survey, September 2006).

responses are complementary and can be adapted to suit different contexts:

– Tracking leaks in the network allows considerable volumes of water to be saved and therefore helps optimize water usage from the resource. The various techniques used are based on the use of ultrasound, helium gas, and even constant leak-logging, with acoustic detection of leaks and GSM alerts. These measures allow the technical yield of networks to be increased.

Nove Acque, which runs water and wastewater services for the Arezzo region in Tuscany, Italy, won the Eco-Effective Company award in 2008 for its water-loss reduction policy that saved 1.5 million m<sup>3</sup> of water, or the yearly consumption of 30,000 people.

– The reuse of treated water is another ‘must’ solution of the future. In the world today, of the 165 billion m<sup>3</sup> of wastewater that is collected and treated, only 2% is reused. The development of procedures using ultrafiltration membranes now allows

Degrémont has been present on this market **for 40 years now, and has built more than 250 desalination plants** worldwide.

supplying water of good enough quality for urban, agricultural and industrial purposes. Such a procedure reduces the amount of water directly drawn from the resource, preserving this for human consumption.

– Almost 40% of the world’s population lives less than 100 km from the sea: desalination, which makes it possible to convert saltwater into high-quality freshwater, is a solution of the future for those countries having cheap energy resources or whose capacity to finance such facilities is in place. With Degrémont, SUEZ ENVIRONNEMENT is the world leader in desalination via reverse osmosis.

– Artificial groundwater recharge is a solution for many regions where

groundwater suffers as a result of over-exploitation. To support aquifer recharge, an injection of good quality water is carried out via trenches or boreholes. This can be done using natural resources (for example, a watercourse outside of a flood period) or artificial resources (for example, treated water from a wastewater treatment plant). This solution presents absolutely no health risk: the water reintroduced into the aquifer must meet criteria that are both precise and regularly checked. The water is also purified in the course of its descent through the ground.

## FOCUS THE BIGGEST EUROPEAN DESALINATION PLANT

Designed, constructed and operated by Degrémont and Aguas de Barcelona (both SUEZ ENVIRONNEMENT subsidiaries), the Barcelona desalination plant, the

largest in Europe, produces 200,000 m<sup>3</sup>/day. It supplies drinking water to 20% of the metropolitan area’s population, i.e. almost 600,000 inhabitants. Drawn 2.2 km from the coast, the water is first subjected to a series of treatments destined to eliminate the major impurities (plankton, colloids, bacteria and

viruses). Desalination is carried out by reverse osmosis – a system of filtration through microporous polyamide membranes – which eliminates 99.9% of salts. The water passes through the minuscule (less than 1 mm in diameter) pores of these filters, under pressure of 60 to 70 bars so as to only let molecules of water

pass. Brine (water with a high salt concentration, generated by desalination) is not discharged directly into the environment. It is diluted in water treated at a nearby wastewater treatment plant so that it can be returned to the sea with a level of salinity approaching that of the original ecosystem.



The Fujairah factory (United Arab Emirates) is the first to couple a distillation unit with a reverse osmosis unit to desalinate 170,500 m<sup>3</sup> of seawater per day, producing both drinking water and irrigation water.



“THE SUEZ ENVIRONNEMENT WATER BUSINESS COMMUNITY PUTS ITS STRENGTHS AND TALENTS TO WORK DEVELOPING INNOVATIVE SOLUTIONS BASED ON OPERATIONAL EXCELLENCE IN THE SERVICE OF ENVIRONMENTAL PERFORMANCE.”

**BERNARD GUIRKINGER**, Executive Vice-President in charge of Water Europe activities.

# 76

**MILLION PEOPLE**  
are supplied with drinking water worldwide by SUEZ ENVIRONNEMENT's subsidiaries.

### ... // Producing drinking water of irreproachable quality.

Providing drinking water is not enough. Its quality must also be guaranteed - in terms of both sanitary and organoleptic (taste and smell) considerations:

- Drinking water is the most closely-monitored food product in the world and the water distributed must meet quality requirements set by regulations. It must, for example, be free of any substance or organism whose presence could lead to a health risk for the consumers. To best ensure this level of quality, a preventative approach to risk analysis is implemented within the framework of the ISO 22000 standard. ISO 22000 is now accompanied by use of the HACCP (Hazard Analysis Critical Control Point) risk prevention tool.
- Drinking water must taste pleasant to the consumer. Even though water may be perfectly fit for consumption, it can

nevertheless be calcareous or smell unpleasantly of chlorine, factors that can pose problems for domestic or industrial use (scaling-up of machines, excessive consumption of washing powder, etc.). SUEZ ENVIRONNEMENT and its international center for research on water and the environment (CIRSEE) offers water quality control services to local authorities seeking to improve the comfort of their consumers, from decarbonation to monitoring of water's taste and smell.

**// Producing process water at a controlled cost.** Industrial entities are major consumers of water. Water plays a role within many industrial procedures, and it must often meet the requirements of these processes (demineralized water, for example). With Ondeo Industrial Solutions and Degrémont, an entity specialized in the industrial water market, SUEZ ENVIRONNEMENT directly addresses manufacturers seeking to optimize their

water consumption. Ondeo IS offers on-site solutions that are both compact and economic, and which enable process water of irreproachable quality to be produced at a controlled cost:

- The O'Mobile® solution allows a high-performance demineralization solution to be set up in record time, responding for example to the specific needs of manufacturers. This formula does not require any special investment to be made.
- The Membrane Compact Unit (Unité Compacte Membranaire, or UCM®) combines ultrafiltration with reverse osmosis in a single unit. Its compact size means that it offers an economic way of treating water with a high clogging index. Such water (for example, surface canal or river water) is usually neglected because it is considered too difficult to treat. It can then be used in cooling circuits, in the production of steam, and as industrial process water.

### **FOCUS** A TAILOR-MADE SOLUTION FOR PHOTOVOLTECH

Photovoltech is a company that specializes in the production of photovoltaic cells and modules.

The factory, based in Tienen in Belgium, needs large quantities of ultrapure water necessary for the manufacture of cells. It also has to treat effluent which is heavy in fluoride. Ondeo IS has developed a production facility for ultrapure water that is able to adapt to different water

qualities coming from three neighboring municipalities. A robust system has therefore been set up in order to deal with the significant quantities of silica that are present in the water. The facility now operates 24/7.



# REINVENTING THE WATER BUSINESSES

THE WORLD IS CHANGING, AND THE SUEZ ENVIRONNEMENT WATER BUSINESSES ARE ANTICIPATING AND EVOLVING SO AS TO OFFER **INNOVATIVE RESPONSES TO THE NEEDS OF MANAGERS IN BOTH PUBLIC AND PRIVATE SECTORS**. CONTROL OF COSTS, REAL-TIME MONITORING OF CONSUMPTION, MANAGEMENT OF CUSTOMER RELATIONS, ENVIRONMENTAL PERFORMANCE CRITERIA – EACH OF THESE THEMES CALLS FOR A RESPONSE THAT IS RESOLUTELY MODERN.

**B**y integrating the major advances provided by new information and communication technologies into its business, SUEZ ENVIRONNEMENT is reinventing the water business.

**// Better customer management and new services on offer.**

SUEZ ENVIRONNEMENT produces more than 2.5 billion m<sup>3</sup> of water, worldwide. Today, with the arrival of new technology, customer management is undergoing major development. One such application is the smart water-meter reader, which authorizes the automatic transmission of meter data. Smart meter readers allow users to track their consumption online, evaluate communal consumption by sector (buildings, green spaces, etc.) and even to track leaks on the water network. In Paris, nearly 100% of Left Bank customers were equipped by Lyonnaise des Eaux (28,000 counters).

Since February 2009, Lyonnaise des Eaux has been putting a new bill in place; it is clearer and more informative. Available in paper or electronic format, it gives precise information on water consumption and payment schedules, as well as itemized detail. It also offers information about the regional operators in the water sector and the water consumption habits of the French.

**// Conserving assets.**

Water services assets are the fruit of significant investment. Drinking water distribution networks constitute an exceptional asset. For example, in France, the 878,000 km of pipelines carrying drinking water represent an asset worth €85 billion (source: IFEN). This asset must be preserved – as much for the customers of today as for future generations. This preservation can only be achieved through effective maintenance

# 878,000

KM OF PIPELINES: this is the total length of the French drinking water distribution system (source: IFEN).

SUEZ ENVIRONNEMENT produces **2.5 billion m<sup>3</sup> of water** worldwide each year.

and renewal – particularly, with the aid of cutting-edge technology:

– The Geographic Information System (GIS) stores the structural data of a network, sometimes linking it with operational information. This extremely powerful tool offers the user complete knowledge of the underground assets.

– The Piccolo Water Distribution Network Modeling Software was developed by Consultant Engineers at Safege, a SUEZ ENVIRONNEMENT subsidiary. It simulates hydraulic flow from both a quantitative and qualitative viewpoint. This modeling tool optimizes the operation of distribution networks.

– ECAT software diagnoses the condition inside pipes, without any need for physical access.

– The PREVOIR and Wilco tools complete this set of technology by enabling optimization of renewal planning.

// **Protecting the coastline.** Seaside towns face greatly increased populations over short periods of time, a fact which obliges them to equip themselves with specific facilities and resources (under the Bathing Water Directive). The increased tourist activity makes management of a restricted area and a vulnerable natural environment all the more sensitive. This is why the new European directive on bathing

water sets standards for quality monitoring, evaluation and management that are stricter than their predecessors. Lyonnaise des Eaux has developed Gen-Spot<sup>®</sup>, a rapid detection procedure based on constant monitoring of the quality of water, using molecular biology. In Biarritz, the Aquaspot service provides vacationers with information about the quality of the water by text message (SMS). Safege has developed Qualicôte, an operational system for forecasting, management and communication that disseminates — for a given beach or section of coastline — complete information on changes in maritime conditions and on the quality of bathing water, up to 48 hours in advance. To complete its offer, in 2008 Safege acquired the Actimar company, which specializes in flow modeling along the coastline.

## FOCUS

CUSTOMER SERVICE:  
AN INTERNATIONAL  
COOPERATION

SUEZ ENVIRONNEMENT has been responsible for the management of public water and wastewater services for the city of Algiers since 2006.

This service affects 2.7 million inhabitants of the city. Among the many objectives of the contract, improvement of customer service is a very significant one. To move the customer relations center forward, a cooperation assignment has been set up with the Lyonnaise des Eaux customer relations center for

the Rhone Saône area – one of the biggest in France. The manager of the center, together with a call center agent, traveled there to train their Algiers-based colleagues. This sharing of experience was a great success, and continues today in the form of audiovisual conferences.



## WASTEWATER – OUR PRIORITY

2008 WAS DESIGNATED BY THE UNITED NATIONS AS THE INTERNATIONAL YEAR OF SANITATION. IT IS IN EFFECT A KEY ISSUE IN SUSTAINABLE DEVELOPMENT POLICIES FOR LOCAL AUTHORITIES AND INDUSTRIALS. **TREATING WASTEWATER IS A VITAL IMPERATIVE** FOR ENSURING SANITARY SAFETY, PROTECTING WATER RESOURCES, AND – ON A WIDER SCALE – PROTECTING BIODIVERSITY AND ECOSYSTEMS.

**S**UEZ ENVIRONNEMENT lies behind major technological progress in the field of wastewater treatment. Today, wastewater treatment enables the provision of alternative water resources and the attainment of new environmental objectives such as the reduction of greenhouse gas emissions through biological (production of fertilizer) and energy (production of fuels) recovery of sewage sludge. Conscious of key sanitation issues, the authorities have established increasingly demanding sets of regulations such as the European directive that takes effect in 2015 and that requires maintaining bodies of water in good condition. This directive is accompanied by a list of 39 categories of pollutants such as alachlor and naphthalene, specifying the tolerated concentration

thresholds. This is a real challenge for European local authorities and manufacturers, given that the objectives of the 1992 ERU directive have yet to be met in some countries, including France.

**FOCUS**  
UNITED WATER  
RECYCLES 34 MILLION M<sup>3</sup>  
OF WATER PER YEAR

The wastewater reuse program of the Central and West Basin Intercommunal



# 1,535

WASTEWATER TREATMENT PLANTS  
were managed by SUEZ ENVIRONNEMENT in 2008.

## // Optimal wastewater treatment technologies.

The technology of ultrafiltration through membranes was originally developed for the desalination and production of drinking water, and is now used for wastewater treatment. This technology, often coupled with UV disinfection, ensures wastewater treatment with maximum effectiveness while simultaneously achieving significant space savings. These new technologies also allow the reuse of treated water to be envisaged (see page 61). In Milan, Degrémont has built and operates the San Rocco wastewater treatment plant. This plant uses ultra-violet treatment technology, a crucial additional step in making the treated water harmless and re-usable for raising food crops. In this way a portion of Milan's wastewater is recycled. In 2008 nearly 22,000 hectares were irrigated during the summer months.

## // Collecting all wastewater.

One sanitation issue is managing to treat all wastewater, and continually improving the collection of water that is loaded with pollutants issuing from human activity. Waterproofed areas represented 4.75% of French territory in 2003 (source: Terruti

survey commissioned by the French Ministry of Agriculture). This increase is the cause of significant pollution brought about by running rainwater carrying pollutants. SUEZ ENVIRONNEMENT has already lined up alongside its customers to deal with this problem. In Barcelona, basins for the retention of storm run-off have been set in place to store the polluted water collected and to avoid its direct discharge into the sea. In France, the Toulouse-Blagnac airport has signed a public-private partnership agreement with Lyonnaise des Eaux to treat water running on the tarmac. In France, Lyonnaise des Eaux and SUEZ ENVIRONNEMENT have provided SIAAP with their expertise in stormwater management, sustainable management of buried infrastructures and business computing, in order to define a high-performance and dynamic flux management tool (MAGES, MODÈLE D'AIDE À LA GESTION DES EFFLUENTS DU SIAAP).

## // Attaining environmental

**objectives.** Recent technological developments from Research & Development at SUEZ ENVIRONNEMENT make it possible to add a new dimension to wastewater services.

In November 2008, SUEZ ENVIRONNEMENT launched its Edelwey offer, within which solutions developed through wastewater treatment occupy a significant place.

To give one example, the Green Cubes solution allows not only the limitation of greenhouse gas emissions related to wastewater treatment, but also the transformation of a wastewater treatment plant into an energy-producing environmental platform (biomass, heat, hydraulic energy, etc.). The Aquaviva wastewater treatment plant, whose construction by Degrémont is underway in Cannes, will be carbon neutral – a first in France. It will be operated by Lyonnaise des Eaux for a period of 20 years. Another environmental step forward through wastewater treatment: the preservation of biodiversity. The discharge from the Grasse wastewater treatment plant, also built by Degrémont, into the Siagne River, classified as a "sensitive environment", is of such good quality that it can be reused for watering plants. In this way, it ensures optimal protection of the biodiversity of this ecosystem. ...

Syndicates (2,300,000 inhabitants in total) includes a tertiary treatment plant for urban effluent in El Segundo (California) and a major distribution network in Los Angeles County. With the biggest treatment facility of this type in the United States, and a distribution

system of more than 110 km, the Syndicates save more than 34 million m<sup>3</sup> of drinking water for the region. After secondary treatment at the Hyperion factory in the city of Los Angeles, a tertiary treatment of effluent enables the production of

five different types of water with a view to its reuse for such diverse purposes as the irrigation of green spaces and other urban uses, aquifer recharge and industrial uses. Aquifer recharge prevents the intrusion of seawater, thus protecting the drinking

water resource from the risk of salinization. The Syndicates have established partnerships with the neighboring municipalities to deliver the treated water outside of their own area.



# 6%

OF THE WASTEWATER treated by SUEZ ENVIRONNEMENT in 2008 was reused – compared with a 2% rate in the world as a whole.

The quality of the discharge from the wastewater treatment station in Grasse into the Siagne River **is better than that required** for sensitive zones.

#### ... // Utilizing wastewater sludge.

The management of wastewater sludge was for a long time a thorny one, particularly in view of the volumes produced and the treatment difficulty represented by this discharge. Degrémont develops innovations that have now enabled a satisfactory response.

Digestion and drying technologies have been considerably improved, allowing the reduction of sludge produced and improvements to final quality. Sewage sludge now becomes either quality fertilizer, or fuel capable of producing renewable energy. Terralys, a SUEZ ENVIRONNEMENT subsidiary, specializes in the biological recovery of sludge – opening up quality

markets. Revegetation is one of the most relevant options. For example, the use of sludge has produced excellent results in Tignes, a prominent ski resort in the Alps, in terms of overcoming the problem of ski-run erosion.

#### // Proposing competitive solutions to manufacturers.

In addition to the directive on the good ecological condition of bodies of water, manufacturers have to adapt their production facility to the specific environmental regulations that directly concern the treatment of their wastewater. European directives REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) and IPPC (Integrated Pollution Prevention and Control) have set ecological

requirements that call for an overhaul in the treatment of industrial water. The solutions proposed by Ondeo IS offer a limited-investment response to these requirements:

– Ecoflow® is a wastewater mutualization solution for industry. It optimizes the operation of oversized facilities, and enables the supplementary treatment of wastewater from other industries.

The result: wastewater treated in the best conditions without investment, coupled with accelerated depreciation of the facilities for their owners.

– Biocontrol® is a new procedure which allows a reduction of 50 to 80% in the production of biological sludge, resulting in lower treatment costs.

## FOCUS

AN HQE®  
WASTEWATER  
TREATMENT PLANT  
IN DIGNE (FRANCE)

The Haute Qualité Environnementale (HQE®) approach requires that all new constructions follow the guidelines specified in a

defined reference standard in order to minimize their environmental impact.

Lyonnaise des Eaux and the Oasis design offices are currently drawing up this reference standard. This will then be used by the certifying body Certivéa to validate the HQE® approach of new wastewater treatment plants. In Digne-les-Bains (France),

Degrémont has prioritized compact construction, limiting environmental impact beyond the standards. The new plant must blend into the environment – in this case, a neighboring forest. Biological treatment of odors (using maritime pinewood bark) and the confinement of noisy machines will reduce the

plant's nuisance factor. Lastly, the plant will be equipped with 140 m<sup>2</sup> of photovoltaic sensors, as well as an underground rainwater recovery facility to be used for cleaning equipment. The quality of the water discharged from the wastewater treatment plant will be such that it is fit for use by the local authority for sprinkling.



# REINVENTING THE WASTE CYCLE

## CHANGING FEATURES OF A CHANGING BUSINESS

**DRIVING THE WASTE CYCLE FORWARD MEANS GIVING SUEZ ENVIRONNEMENT CUSTOMERS A CHOICE OF COMPLEMENTARY TREATMENT PROCESSES. AT THE HEART OF THIS EFFORT IS A **THREE-FOLD BENEFIT:** ENVIRONMENTAL, SANITARY AND ECONOMIC.**

**R**ecovery has taken us from waste removal to waste treatment. As a consequence, the boundary between waste and non-waste is shifting, with the scope of waste getting narrower and that of non-waste, broader. The waste treatment business is undergoing profound changes in three areas:

- The regulations. These have a considerable influence on the activity of SUEZ ENVIRONNEMENT, be it only concerning

the evolution of the frontier between waste and non-waste.

- The level of environmental awareness. Sorting and recycling rates are increasing in France and in Europe.
- The price of raw materials. The relevant issues are the evolution of plastic recovery, energy recovery and biological conversion, and increasing levels of selective sorting. The concept of waste is being adapted to a constantly-changing reality.

# 23

MILLION TONS OF WASTES  
were collected by  
SUEZ ENVIRONNEMENT in 2008.

Despite the current price declines in raw materials and commodities, **the increasing scarceness of natural resources** suggests a structural trend towards higher prices.

There are now five main categories of waste:

- Biodegradable or compostable waste (garden waste, sludge from water purification, food discards, etc.) which can be recovered;
- Recyclable waste (construction materials, metals, plastics) that can be reused following appropriate treatment;
- Final waste "no longer likely to be treated under the current technical and economic conditions" (decree no. 2002-540 of April 18, 2002, France), requiring pretreatment that makes it compatible with landfilling, after "inerting";

- "Special" and Hazardous Industrial Waste (HIW) that - unlike regular waste - can enter into the hazardous waste category, alongside toxic and radioactive waste;

- Complex waste (such as end-of-life vehicles, waste electrical and electronic equipment, airplanes, and boats) that calls for special treatment because it contains both recyclable and final waste components. The differences between these types of waste are very important, since they underscore the necessity of setting up distinct treatment channels and of having a high-performance collection system to

guarantee compliance with environmental and health regulations. There has been research aimed at developing new methods of collection: Hybrys in Lyon, silent collection with Silen'Ciom, or the collection by horse cart in Beauvais....

In another example, SITA has been using a horse cart since 2005 to collect waste on the grounds of Drottningholm Palace, the private residence of Sweden's royal family, just outside of Stockholm. As often as three times a week in the summer, a crew collects and sorts clear glass, colored glass, cans and batteries while taking care not to disturb the tranquility of the grounds, its hosts or its visitors. The public fell in love with this method of collection, which has heightened awareness of the need to recycle. ...

## FOCUS

CONVEYING WASTE WHILE MINIMIZING IMPACT

In Ile-de-France, the 2007 creation of SIT'Alternatif - a subsidiary dedicated to river transport - was

a response to a desire to minimize the environmental impact of waste conveyance. The first barge purchased is already working to 100% capacity. SIT'Alternatif plans to invest in the purchase of 5 or 6 boats within the next two years. In 2008, this dedicated subsidiary will

have transported almost 150,000 tons of waste by waterway. Moreover, bottom ash produced at the Créteil incineration facility, operated by Novergie (45,000 tons per year) has, since November 2007, been transported by truck to the port at Bonneuil-sur-Marne and then conveyed

by barge to a recovery center 70 km away. Three boats make three round trips per week, carrying 260 tons per journey. The result: the equivalent of 55,000 tons of CO2 emissions have been avoided, and the equivalent of 290,000 tons of oil have been saved.



In 1884, **Eugène Poubelle called for selective collection:** three waste containers were compulsory: one for putrescible matter, one for paper and cloth and another for glass and earthenware.

**... // Collecting and sorting waste – our expertise.**

SUEZ ENVIRONNEMENT is developing a variety of initiatives to stand up to the major challenges concerning waste collection and sorting:

**1/** Reducing the volume of waste: less volume means lower costs and greater effectiveness in treatment. To raise private individual awareness, SUEZ ENVIRONNEMENT is helping its municipal customers to communicate on sorting at

source and the potential for waste recovery. For manufacturers, specific support programs have been set up with recommendations on recoverable raw materials, an incentive for the reduction in volume and help with eco-design. **2/** Reducing the carbon impact of waste collection: Waste collection is a greenhouse gas-emitting activity. SUEZ ENVIRONNEMENT is developing cutting-edge practices and technology aimed at reducing this carbon impact:



# 18.5

MILLION TONS OF WASTE have been processed by SUEZ ENVIRONNEMENT with a view to its recovery in the form of material or energy.

– Reduction in the frequency of collection (with customer approval and equivalent service quality),  
– Optimization of collection routes,  
– Optimized driving training for drivers.  
Rational driving enables reduced fuel consumption by up to 20% (10% on average) as well as reduced noise pollution. This training is compulsory. In 2008, all SITA France drivers received this training,  
– The use of two alternative energy sources: electricity and natural gas,  
– On-board computerization applied to waste collection: combined with a communication system, this allows real-time analysis of data measured in the field. This innovative offer has helped SITA France win several contracts through competitive bidding, and more than 200 trucks have already been equipped with it,  
– Development of alternative modes of transporting. In July 2008, SITA France,

in collaboration with the Ecole Centrale Paris, conducted a study on alternative modes of transport, so as to identify the advantages and drawbacks. The purpose of the study was to offer a strategic guide to decision-making for SITA France managers seeking to introduce alternative transportation into their waste management services.

**3/ Encouraging the practice of sorting and recycling:** Beyond raising people's awareness of the importance of sorting, SUEZ ENVIRONNEMENT is committed to the industrialization of sorting center processes and waste pre-treatment, for the purpose of encouraging recovery. This commitment is materialized in:

– Qualitative sorting for more effective recycling: sorted waste can be classified into three categories, by physical characteristics: flat items (papers, magazines, cardboard boxes, etc), hollow

items (bottles, plastic and metal packaging, etc.) and industrial waste, often in large volumes (boxes, wood, plastic film, scrap, etc.) The important thing is to make sure different materials are separated. All technical solutions which will improve performance in terms of preparation, flow segmentation and conditioning are used,  
– Advanced waste pre-treatment techniques, such as mechanical-biological treatment (MBT). This solution improves the recovery yield but does not ensure total elimination of the waste.

The design, construction and operation of transfer stations: a transfer station is a place where waste from different collection systems is unloaded. The waste is then reloaded and sent on to mass transport. The transfer station enables a reduction in transport costs and in the environmental footprint. The point of such a facility is related to tonnage and distance. ...

## FOCUS MATERIAL RECOVERY IN AUSTRALIA

In Mindarie (a town near Perth on the country's west coast)

SUEZ ENVIRONNEMENT is building a waste treatment factory which will use mechanical-biological treatment (MBT) or "Sorting-Composting".

At this unit, the waste will first be mechanically sorted so as to extract part of the recyclable materials

(wood, plastic, paper, etc.) as well as any biodegradable waste – or "fermentable fraction". This biodegradable waste will then enter a controlled fermentation and maturing process, before refining to produce quality compost, which is generally used to enrich

agricultural land or green spaces. This factory should allow the treatment of 100,000 tons of waste per year. It will be commissioned in late 2009.





# 35.7

MILLION TONS of non-hazardous waste were treated in 2008 by SUEZ ENVIRONNEMENT.

Some waste **cannot be recovered**. It has to be eliminated at a cost that is economically and ecologically acceptable.

#### ... // **Eliminating final waste.**

Some waste cannot be recovered. It has to be disposed of at a cost that is both economically and ecologically acceptable. This disposal is carried out in specific landfill sites which have to comply with very strict regulations. The main regulation in question is the European Directive on waste disposal in landfills.

The landfills operated by SUEZ ENVIRONNEMENT are appropriate to the types of waste they receive; hazardous waste is subjected to treatment prior to going to landfill. Moreover, SUEZ ENVIRONNEMENT and its subsidiaries have developed computerized solutions to ensure controlled management of final waste elimination and landfill sites: – Alix software enables the operators

of landfills to orient their choices in terms of leachate treatment procedures, – Tascal software enables a simple and quick assessment of the settling of a mass of household and municipal solid waste in a landfill.

#### // **Creating appropriate channels for complex waste.**

Beyond “classic” waste, “complex waste” – such as ships or airplanes – also exists. SUEZ ENVIRONNEMENT and SITA have created appropriate channels for this complex waste that has to be dismantled in order to achieve a maximum rate of recycling of the materials it contains, and to dispose of what is not recyclable in complete safety. SITA France has been involved in the deconstruction and recovery

of end-of-life vehicles for nine years. This partnership was strengthened in 2006 with the development of Re-source Industries – the first French entity carrying out the industrial deconstruction of end-of-life vehicles. Located in Romorantin, the Re-source Industries site dismantles 25 out-of-use vehicles per day and manages the program for the recovery of raw materials resulting from the deconstruction. By offering its customers innovative solutions in terms of waste collection and sorting, as well as disposal of final waste, SUEZ ENVIRONNEMENT proves that the search for clean solutions is a matter of rigorous technical expertise. This is the first essential stage on the path to achieving waste recovery.

#### **FOCUS** SITA FRANCE DISMANTLES FISHING BOATS

A government plan calls for 180 of the oldest trawlers to

be removed from the water in 2008 and 2009. Each ship owner receives a grant of between €150,000 and €600,000, depending on the size of the ship, provided it is destroyed in a way that is completely environmentally friendly.

In Concarneau, SITA France opened a first site with fifteen employees in 2008, with others to follow in Lorient and northern Brittany. About ten trawlers are expected to be processed this year. SITA France is compensated

through the sale of scrap (steel, plastic, engines, etc.). About 95% of what is dismantled can be recovered.



# TRANSFORMING WASTE FOR ITS RECOVERY

RECOVERY MAKES IT POSSIBLE TO **REDUCE ENVIRONMENTAL IMPACTS AND GENERATE NEW RESOURCES**. DESPITE THE TEMPORARY DROP IN COMMODITY PRICES, THE INCREASING SCARCENESS OF NATURAL RESOURCES SUGGESTS A STRUCTURAL TREND TOWARDS HIGHER PRICES. IN THE NEAR FUTURE, RECOVERY WILL HAVE TO BE OMNIPRESENT.

**T**he concept of recovery refers to the many methods used to recapture some fraction of the residual value to be found in waste.

// **Energy recovery.** Energy recovery consists of exploiting the energy potential of waste. In this sector, SUEZ ENVIRONNEMENT has a complete range of technologies at its disposal. The use of this technology is often complementary to waste sorting, and the choice between the various solutions on

offer is left to the local authorities. Today, we distinguish between energy recovery through incineration, methanization through extraction and recovery of the fermentable part, and landfill biogas recovery:

**1/** Incineration is a proven solution with a controlled environmental impact. Worldwide, SUEZ ENVIRONNEMENT operates 44 sites for the transformation of waste into energy. In 2008, these sites treated 5.5 million tons of waste, producing 840 thermal GWh.



“WITHIN SUEZ ENVIRONNEMENT, SITA IS POSITIONED AS A LEADER IN WASTE RECOVERY AND ELIMINATION. IT STRIVES TO MAXIMIZE ALL FORMS OF RECOVERY: MATERIAL RECOVERY (RECYCLING), BIOLOGICAL RECOVERY (COMPOSTING), ENERGY RECOVERY (BIOGAS, INCINERATION, METHANIZATION), BY APPLYING RESPONSIBLE INDUSTRIAL STANDARDS TO THESE PROCESSES. IT AIMS TO ENSURE THAT FINAL WASTE IS ELIMINATED ACCORDING TO THE RULES, BECAUSE OUR PROFESSIONAL PURPOSE IS GUARANTEEING THAT THE ‘WASTE-RECYCLED PRODUCT BORDER’ IS CLEAR AND THAT IT UPHOLDS TRULY SUSTAINABLE DEVELOPMENT.” **CHRISTOPHE CROS**, Executive Vice-President in charge of Waste Europe activities.

Incineration stands out as a complementary solution to sorting and recycling. Germany actively demonstrates the complementary nature of sorting and heat recovery, since it has one of the highest sorting / recycling rates in Europe (40%), having doubled its incineration capacity in 20 years.

**2/** Methanization can be envisaged as a complement to other treatment channels, depending on the location of the facility and waste to be treated, because the procedure only applies to organic waste, whether it is:

- municipal: food waste, newspapers, packaging, textiles, green waste, and urban sanitation sub-products;
- industrial: sludge and effluents from the agri-food industries, transformation waste from vegetable and animal production

industries, fermentable fractions of non-hazardous industrial waste;

- agricultural: animal manure, solid vegetable substrates.

Methanization is thus particularly suited to dense suburban zones, with a reduced footprint, and the control of nuisance risks related to waste treatment.

Following treatment, waste is transformed:

- into compost,
- into biogas comprising 60% methane, which then offers a variety of energy recovery possibilities.

A methanization unit treating 15,000 tons of waste per year will not only cover its own energy needs, but also:

- the consumption of around 100 waste collection trucks or 60 urban buses,

- heating for 700 homes, or hot water for 3,500 homes, or provide the electricity consumed by 1,300 houses and hot water for 2,000 others.

Methanization enables the recovery of a renewable natural gas and reduces greenhouse gas emissions.

**3/** The recovery of biogas from landfills entails recovery of the biogas produced by the fermentation of waste so as to recover it in the form of heat or electricity. Moreover, recovery of biogas emitted avoids significant greenhouse gas emissions. ...

**FOCUS**  
HIGH PERFORMANCE  
COGENERATION

Household waste energy recovery factories often suffer from a loss of energy, about 50% of which could

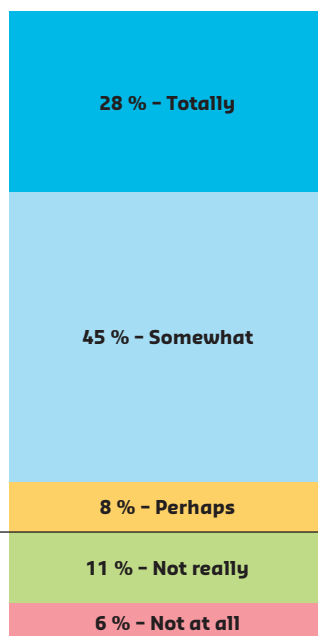
be recoverable. On the basis of this observation, SUEZ ENVIRONNEMENT and its subsidiaries have developed the innovative concept of high performance cogeneration (CHP+). This entails the installation of a specific item of equipment which recovers all or part

of the heat available at a low temperature (around 45° to 50°C). Research and Development is aimed at examining the best match between the procedure for recovery of the available heat and its use for the heating of market-garden greenhouses. For instance,

the production of vegetables in greenhouses requires major consumption of heat, which can represent more than a third of the cost of production.



**To what extent would the fact that a product was made from recycled material encourage you to choose this product rather than another? Totally, somewhat or not at all? 73% said they would purchase a recycled product over another.**



The vast majority of the French say they are in favor of recycling (from the Eco-Emballages study "Image of recycled products", Sept. 2007).

... // **Recycling.** Recycling aims at the reintroduction of reprocessed resources into the production-consumption cycle. There is a twofold advantage to this: limitation of the impact of waste management services, coupled with preservation of natural resources. Recycling differs from recovery in that it involves a transformation which mobilizes financial investments, technologies and complex industrial procedures in the treatment of waste, and supplies quality secondary raw materials. SUEZ ENVIRONNEMENT has all the know-how needed to carry out large-scale reprocessing of complex high-quality materials - such as aluminum intended for aeronautical use, or transparent plastics for multiple applications. Regene is a subsidiary of SITA France

specialized in the recycling of rubber products. Since September 2007 it exploits an entirely automated pilot recycling line, using the very latest techniques for the separation of rubber from textile fibers and scrap from used tires, while retaining the ability to monitor production quality at each key stage.

In France, SITA now covers 10 recycling channels, with no less than 35 industrial treatment-production units.

**// Biological recovery.**

SUEZ ENVIRONNEMENT is strongly committed to biological recovery through its specialized subsidiaries such as Terralys in France, which specializes in the treatment of sludge. The water industry may produce wastewater in the form of sludge. This sludge can be put to use, becoming quality



# 24

KWH PER TON OF TREATED WASTE  
were consumed by SUEZ ENVIRONNEMENT  
in 2008, compared to 32 kWh in 2007.

## Best practice in the use of the recycling logo is defined by the **international standard ISO 14021**.

organic soil conditioner and compost whose use serves to limit the additional use of fossil-derived soil amendment. Terralys markets four authorized or standardized product ranges: organic soil amendments, organic fertilizers, lime soil amendments, and organic soil amendments based on agricultural matter issuing from water treatment. Terralys prioritizes marketing to local players in the following sectors: gardens; ski areas; green spaces belonging to local authorities or highways; and agricultural, horticultural, and forestry sites.

**// Ground cleanup and rehabilitation.** Industry has produced its share of extremely

polluted sites, with buildings contaminated by asbestos or other toxins and deeply damaged soils. These sites represent unexploited real estate, and are often close to cities. Their rehabilitation entails dismantling facilities and processing each element of their waste in the most appropriate way possible. There are biological, thermal and physical-chemical treatments for contaminated soils, depending on the extent of pollution and type of pollutants. These treatments may take place on-site or off-site. Once the treatment is complete, the residual fraction of the waste is transferred to a hazardous waste landfill.

### FOCUS

#### A DEGRADED-WOOD RECYCLING INDUSTRY

The new treatment facility at Flixborough Wharf, which is managed by SITA UK, recovers degraded wood

and treats it for reuse as fuel or for recycling purposes. The disposal in landfill of almost 100,000 tons of wood was thus avoided in 2008. The recovered wood is degraded by paint, resin veneer or metallic inclusions. It is treated to meet customer

requirements. The first load of 1,100 tons of re-treated wood was delivered in Sweden in April 2008. Previously, the majority of this degraded wood ended up in landfill. By setting up this industry, SITA UK has implemented a sustainable solution that enables the

production of green energy. Even taking into account the greenhouse gas emissions generated by the transport, the carbon balance of this solution remains positive.





# COMMITTING TO AND TAKING STOCK OF OUR PERFORMANCE

COMMITTING TO AND TAKING STOCK OF OUR PERFORMANCE

MEANS PROVIDING OURSELVES WITH AN AMBITIOUS

SUSTAINABLE DEVELOPMENT BASED ON 4 MAIN PRIORITIES,

A DYNAMIC INNOVATION POLICY AND ANTICIPATING

CUSTOMER REQUIREMENTS.







# 4 PRIORITIES FOR SUSTAINABLE DEVELOPMENT

## 1/ CONSERVE RESOURCES AND PROMOTE THE CIRCULAR ECONOMY

OUR FIRST PRIORITY AT SUEZ ENVIRONNEMENT IS TO ASSIST IN **THE TRANSITION TO AN EFFECTIVE ECONOMY THAT RESPECTS THE ENVIRONMENT.** "THE CIRCULAR ECONOMY" IS A PROPOSAL FOR A SYSTEM BASED ON WASTE RECOVERY AND CONSERVATION OF WATER RESOURCES.

**F**or many years, waste management services and recovery activities were partitioned. Waste management services amounted to the collection and disposal of waste in the best environmental conditions. Recovery activities, such as the scrap metal business, concentrated on recovery of the most "easily recoverable" part of waste such as metals that are easy to recover and resell.

The development of new waste treatment technologies, the collective desire to manage waste better, and the structural increase in the price of raw materials – are all factors that have been instrumental in enabling the hatching of new waste

management service practices, founded on recovery.

SUEZ ENVIRONNEMENT intends to develop this approach and has set itself the priority of promoting a recovery economy. In waste, it is necessary to obtain optimum recovery by taking account of both economic constraints and analysis of the life cycle. SUEZ ENVIRONNEMENT therefore specifically measures the share of household and municipal solid waste that is recycled and marketed in the form of secondary raw materials (SRM) or organic soil amendments (composts). In 2008, SUEZ ENVIRONNEMENT increased the rate of recycling of the waste entrusted to it: 31.6% (in comparison with

# 31.6%

OVERALL RATE OF MATERIALS RECOVERY  
for household and non-hazardous industrial waste in 2008.

# 9.5

M<sup>3</sup>/KM/DAY WERE LOST  
in our water distribution networks.

30.9% in 2007). This has enabled the return of more than 12 million tons of secondary raw materials and compost to the market, extracted from 40 million tons of initial waste.

This commitment is also present in our drinking water management activity.

The company has set itself the goal of conserving water resources by avoiding waste in drinking water distribution networks.

By reducing water loss in the distribution networks, it is possible to substantially limit what is drawn from the natural environment and to conserve access to water for generations to come, at a controlled cost.

In 2008, SUEZ ENVIRONNEMENT increased the yield of the water distribution networks

it operates by bringing the linear index of network losses to 9.5 m<sup>3</sup>/km/day (in comparison with 10.1 m<sup>3</sup> in 2007). About 27 million m<sup>3</sup> of water have been saved. SUEZ ENVIRONNEMENT is committed to this policy in all its water management contracts.

In line with the policy, since 1999 Lydec set out on a wide-ranging campaign in Casablanca to reduce leaks and saved 25 million m<sup>3</sup> per year, i.e. the equivalent consumption of a city of 800,000 inhabitants. Today in Paris, the efficiency of the network is 97%, versus 78% in 1985, and is the most efficient system in France.

## OUR COMMITMENTS TO CONSERVING NATURAL RESOURCES AND PROMOTING THE CIRCULAR ECONOMY

COMMITMENT NO. 1  
Optimize waste recycling and recovery rates.

COMMITMENT NO. 2  
Increase the technical yield of drinking water networks and reduce leaks so as to avoid wasting a precious resource.

## FOCUS SUEZ ENVIRONNEMENT'S FIGURES IN RECYCLING

**1/ Recycling of plastics:**  
– Regene Atlantique (France).  
Production of PET flakes

from household PET bottle waste (about 12,000 tons/yr).  
Production of PEHD flakes from household PEHD bottle waste (about 2,000 tons/yr).  
– SOPAVE (France). Treatment of agricultural tarps and industrial plastics. Production of bags after washing, grinding and extrusion (30 tons/day capacity).

– CVP (Germany). Treatment of mixed plastics issuing from sorting centers. Treatment capacity: 30,000 tons/yr.  
**2/ Composting:**  
– Cröbern (Germany). 120,000 tons per year of the fermentable fraction of household waste issuing from an upstream

mechanical separation.  
Tunnel composting:  
Thermal oxidation for odorous final compounds.  
– Grammont (Belgium). 50,000 tons of biowaste issuing from selective collection each year; automated composting in hall.

## 2/ INNOVATE TO RESPOND TO ENVIRONMENTAL CHALLENGES

SUEZ ENVIRONNEMENT AIMS TO MEET THE CHALLENGE OF GLOBAL WARMING THROUGH PROGRESS. THE EMISSION OF GREENHOUSE GASES IS A PROBLEM THAT CAN NOW BE SOLVED AT ALL LEVELS. **SUEZ ENVIRONNEMENT IS THEREFORE COMMITTED TO A CONSISTENT SET OF ENERGY AND CLIMATE PRINCIPLES IN EVERY ASPECT OF ITS OPERATIONS.**

In December 2008 the European Council adopted the Energy and Climate Package that included the directives revising the emissions trading scheme (ETS) for greenhouse gases and promoting renewable energy sources. Although the activities of SUEZ ENVIRONNEMENT do not come under the EU-EUTS directive, the urgency of the struggle against global warming has prompted the company to undertake a concrete plan to reduce its greenhouse gas emissions (GHGs). Nevertheless, its energy consumption can only be expected to increase inasmuch as the company is expanding and the pollution it treats is expanding as well. Moreover, SUEZ ENVIRONNEMENT has certain

particularities: the company's operations are atomized, spread over a great many sites that do not belong to it and cannot be modernized unless the customer decides so. In fighting global warming, the overriding objective is first to reduce GHGs as far as possible, bearing in mind that incinerators emit an irreducible quantity of GHGs. SUEZ ENVIRONNEMENT therefore strives to reduce emissions from its landfills, its vehicle fleet, its workshops and buildings, as well as to increase its contribution to avoided emissions due to recycling and energy recovery. This contribution to avoided emissions should be compared to its direct and indirect emissions in 2008 of 5.93 MT CO<sub>2</sub> equiv. as against 6.56 MT in



# 5.9

MILLION TONS OF CO2 EQUIV. Direct and indirect greenhouse gas emissions in 2008.

# 2,600

GWH: RENEWABLE ENERGY produced by SUEZ ENVIRONNEMENT in 2008.

2007. In 2008 SUEZ ENVIRONNEMENT made it possible to avoid 5.75 million metric tons of GHGs, largely from materials recovery and energy generated from waste management.

**// Producing renewable energies.**

Fifty percent of the energy recovered by household/general industrial waste incinerators is of renewable origin.

The biogas from landfill and wastewater treatment plants is a source of renewable energy.

In 2008, SUEZ ENVIRONNEMENT increased its useful production of renewable energy in both of its sectors:

– Waste: +6% to 2,486 GWh

– Water: +115% to 100 GWh.

Installed capacities have remained relatively stable after having increased strongly in 2007. Alongside renewable energies,

SUEZ ENVIRONNEMENT is also a producer of alternative fuels which contribute to economizing fossil fuels. This is essentially a matter of recovery of special industrial waste (SIW, solvents, oils, etc.).

**// Protecting biodiversity.**

Whether the job of closely monitoring and protecting water supply catchment areas falls to entities in the water business or to those specialized in waste management services that operate numerous treatment facilities, the operational subsidiaries of SUEZ ENVIRONNEMENT manage a significant amount of land estate. These facilities aim to preserve and restore quality natural environments in both agricultural and urbanized areas. This is why biodiversity is built into site management.

## OUR COMMITMENTS, AIMED AT MEETING ENVIRONMENTAL CHALLENGES

COMMITMENT NO. 3

Reduce greenhouse gas emissions.

COMMITMENT NO. 4

Improve energy efficiency.

COMMITMENT NO. 5

Increase and promote renewable energy generation.

COMMITMENT NO. 6

Build biodiversity into site management.

## FOCUS

### SITA JOINS THE FIGHT AGAINST CLIMATE CHANGE

In Australia, SITA has determined its carbon footprint and estimated the emissions it has avoided

within the context of the "Greenhouse Gas Initiative".

This national initiative aims to quantify the impact of SITA Australia and its subsidiaries in terms of greenhouse gas emissions so as to identify possible solutions to control and reduce them.

In the United Kingdom in

2007, the capacity of facilities for recovery of biogas increased by 17% compared with 2006. Annual production of electricity routed by SITA UK to the network reached 470,000 MWh, i.e. the equivalent of the annual consumption of 142,000 households (based on average annual

household consumption of 3,300 kWh). Furthermore, in 2007, SITA UK installed the first wind turbine in the U.K. on its Teeside site that is directly connected to an incineration plant. Certain landfill sites will have to follow this example in order to increase the production of renewable energies.

## 3/ EMPOWER OUR EMPLOYEES AS ACTORS OF SUSTAINABLE DEVELOPMENT

SUSTAINABLE DEVELOPMENT ACTORS ARE EMPLOYEES WHO SUPPORT THE MISSION SUEZ ENVIRONNEMENT HAS SET FOR ITSELF: **ACTIVE PARTICIPATION IN THE DEVELOPMENT OF THE NEW SUSTAINABLE ECONOMY.**

**T**he commitments made by SUEZ ENVIRONNEMENT within the context of its sustainable development policy cover all of the company's responsibilities. At the heart of our priorities is the fulfillment of our employees: this is key to the group's success. In order to attain this objective, SUEZ ENVIRONNEMENT has made ambitious commitments that mobilize all the levers through which the company can act in favor of its employees.

**// An active training policy.**

By undertaking to develop professional know-how, SUEZ ENVIRONNEMENT seeks to attain a double objective: providing

employees with the resources to work more effectively for sustainable development and creating a stimulating career environment for knowledge building and acquisition.

To attain this twofold objective, SUEZ ENVIRONNEMENT uses two indicators which allow it to track the progress of results from year to year:

- The annual number of hours of training per employee and
- The proportion of employees having benefited from a training course.

The number of hours of training per employee fell slightly between 2007 and 2008. This was largely due to the recession-based freeze on



# 8,900

HOURS OF LOST WORK were avoided in 2008 due to better workplace safety.

# 18.2%

OF EMPLOYEES WERE FEMALE in the Group in 2008.

training at certain subsidiaries starting in the fourth quarter of 2008. The percentage of individuals trained, however, remains high: over 50% across all job categories.

#### // Improving safety at work.

For SUEZ ENVIRONNEMENT, safety at work is a fundamental priority. For the Group, the safety policy is the best way of demonstrating the esteem in which it holds its employees and the attention it pays them. SUEZ ENVIRONNEMENT has set itself the objective of being a model of safety in its industry.

The benchmark adopted is the accident frequency rate.

In 2008 SUEZ ENVIRONNEMENT continued to make progress in workplace safety, bringing its frequency rate down to 17.45 from 18.5 in 2007 and 21.9 in 2006. This saved 8,900 hours of work stoppage. In order to continue progressing, the company has prepared a very complete action plan. One of the essential levers

in health and safety policy is the 10% variable part of a managers' bonus that is conditional on safety results.

#### // Employees in line with society.

SUEZ ENVIRONNEMENT counts more than 70 nationalities among its employees.

For the Company, this diversity corresponds to a reality that is more complex than just the representation of many nationalities. Diversity must translate to all levels – and this is what the quantified monitoring indicators must help improve:

- Gender equality among employees with breakdown by professional category,
- Proportion of non-French among senior managers,
- Proportion of disabled people employed.

The diversity rate at SUEZ ENVIRONNEMENT remains stable in a sector in which it has a tendency to erode. The proportion of disabled employees went from 1.61% in 2007 to 1.46% in 2008, essentially as a result of changes in methods of reporting.

## OUR COMMITMENTS AIMED AT GIVING OUR EMPLOYEES AN ACTIVE ROLE IN SUSTAINABLE DEVELOPMENT

### COMMITMENT NO. 7

Foster professional knowledge.

### COMMITMENT NO. 8

Work constantly to improve workplace safety.

### COMMITMENT NO. 9

Commit to diversity.

## FOCUS

### TWO NEW RULES AIMED AT REDUCING ACCIDENTS

– Group Health and Safety Rule No. 4 concerns the evaluation and control of risk. It aims to generalize

the principle of analysis of risks particular to the activities and processes with a view to anticipating accidents and limiting their consequences. Each operational entity specifies the process by which it will comply with the principles that apply to risks generated by the company, risks

introduced to the company and, risks related to products and services provided externally.  
– The "Health & Safety in Projects/CAPEX at early stages" procedure is intended to establish an initial report in terms of health and security before and during the decisive

stages of all investment projects, in such a way that the operations committees can make "CAPEX" investment decisions with full knowledge of the facts.





## 4/ BUILD OUR DEVELOPMENT WITH ALL STAKEHOLDERS

SUEZ ENVIRONNEMENT PLEDGES **TO TAKE INTO ACCOUNT THE EXPECTATIONS OF STAKEHOLDERS AND THEIR PARTNERS** IN DRAWING UP ITS STRATEGY AND TO ESTABLISH WITH THEM AN OPEN DIALOGUE AND A CONSTRUCTIVE CONSULTATION.

**S**UEZ ENVIRONNEMENT is convinced that partnership and dialogue are essential conditions for the success of contracts in managing environmental services. This spirit of openness and dialogue translates to multiple levels, and is the subject of a defined policy resulting in a sustained dialogue with stakeholders at the institutional level in the everyday exercise of its activities and in transparent communication practices.

**// Pursuing active dialogue with stakeholders.** Through its sustainable

development policy, SUEZ ENVIRONNEMENT formally pledges to sustain a constructive dialogue with civil society at the local level. A quantified indicator – the percentage of revenues covered by a deployment of dialogue with stakeholders – will enable monitoring the company's development. In concrete terms, SUEZ ENVIRONNEMENT and its commercial entities participate in all consultation meetings, conferences and instances of dialogue relating to its activity, and at every level (both international and local). In addition, the company will itself

# 4

STAKEHOLDER SESSIONS  
have been held in New York  
and Paris since 2007.

initiate dialogue, organize round tables, debates and encounters on a variety of subjects.

**// Being a player in sustainable local development.** SUEZ ENVIRONNEMENT is, by the very nature of its activities, strongly committed at local level. Public service missions, the provision of services to manufacturers and the construction of infrastructures – each of these activities place the company in direct relationship with the local players, conferring upon it a significant level of responsibility in terms of territorial economic dynamism. Conscious and proud of this responsibility, SUEZ ENVIRONNEMENT pledges to accompany its local presence with willing involvement in favor of sustainable development. The company has thus equipped itself to measure its progress by

using quantified indicators such as the number of partnerships or agreements having a non-commercial purpose and the number of people reinserted within the context of a social program.

**// Providing information on our actions in favor of sustainable development.** SUEZ ENVIRONNEMENT is convinced that transparency is necessary to nourish a trusting relationship and constructive dialogue with civil society. The company pledges to communicate about its sustainable development actions in a way that is both regular and comprehensive. This undertaking is also combined with the use of monitoring indicators aimed at measuring the progress made. For example, sustainable development reports are subject to systematic verification by external auditors.

## OUR COMMITMENTS TO BUILDING OUR DEVELOPMENT WITH ALL STAKEHOLDERS

COMMITMENT NO. 10  
Pursue active dialogue  
with stakeholders.

COMMITMENT NO. 11  
Take part in local,  
sustainable development.

COMMITMENT NO. 12  
Provide regular, easily accessible  
information about our sustainable  
development actions.

## FOCUS A CONTRIBUTION TO THE WORLD WATER FORUM

The 5th World Water Forum was held in Istanbul, Turkey, from March 16 to 22, 2009. This gathering of all the players in the water sector,

organized by the World Water Council and the Turkish authorities, was an opportunity for SUEZ ENVIRONNEMENT to offer a constructive contribution to the cause of access to water in the world. The program was organized around six themes, divided into two categories (objectives/ resources). The forum was

about making progress on the objectives of the millennium: better management of the resource in order to respond to human and environmental needs, and improvement of its supervision and management. Company representatives participated in numerous official sessions, addressing the themes of fair

and affordable water rates, the relationship between water and energy and the optimization of private and public roles in water services. This participation in the official sessions was completed by involvement in the "Espace France" and a dinner/debate on the themes of decentralized cooperation and management modes.

# CREATING NEW OPPORTUNITIES

## ORGANIZING APPROPRIATE, HIGH-PERFORMANCE RESEARCH AND DEVELOPMENT

INNOVATION IS AT THE HEART OF THE SUEZ ENVIRONNEMENT STRATEGY. THE CHANGES WITH WHICH WE ARE CONFRONTED CALL FOR **INDUSTRIAL SOLUTIONS THAT ENABLE PEOPLE TO PROTECT NATURAL RESOURCES** WHILE CONTINUING TO CREATE WEALTH.

**S**UEZ ENVIRONNEMENT's research and development makes use of an organizational structure that itself is novel, combining research centralized in world renowned institutions such as CIRSEE (Centre international de recherche sur l'eau et l'environnement) and research conducted over a network, with experts working in the operating units.

**// Recognized research centers.**

The main SUEZ ENVIRONNEMENT competence

center is the Centre International de Recherche Sur l'Eau et l'Environnement located in Le Pecq, France. CIRSEE specializes in water treatment, wastewater, analysis and computer applications for the industry. It provides more than 7,000 days of technical assistance per year. Denard, the Degrémont research center (in Richmond, VA, USA) specializes in water treatment and purification. It develops economically, socially and environmentally acceptable products.



# 65

MILLION EUROS, of which 49 went for R&D, is the sum that SUEZ ENVIRONNEMENT devoted to technological development in 2008.

The SCIP Water Research Center (Shanghai, China) is working on the treatment of industrial water. The Agbar group's Laboratorio Aigües de Barcelona (Barcelona, Spain) for its part specializes in water analysis, while the NWTC (Northumbrian Water Technical Centre - Newcastle, United Kingdom), specializes in distribution and wastewater networks. Lastly, the Centre technique comptage de Lyonnaise des Eaux (Lyon, France) specializes in qualification, scaling and metrological controls of water meters.

#### // A worldwide network of experts.

In all, over 400 researchers and specialists work full time on technological Research and Development projects in the innovation centers and expert networks. This network draws together the R&D effort of the Group's various operational units within the water business, guiding research programs

into the domain of the strategic programs common to the main SUEZ ENVIRONNEMENT subsidiaries. In 2005, Lyonnaise des Eaux, AGBAR, United Water, and their partner Northumbrian Water created the R+i Alliance partnership. R+i Alliance conducts Research & Development work on the control of seaweeds and odors, energy efficiency, sludge management, the dynamic management of storm run-off and water / health issues.

#### // Diversified scientific partnerships.

Beyond the frontiers of the Group, numerous partnerships with public and private entities have been established and maintained with:

- Cemagref
- the CNRS
- the University of Tongji (Beijing - China)
- the University of California
- the University of California, Los Angeles (UCLA)

- private entities  
- networks of expertise and innovation: centers like Axelera, Advancity and Vitagora in France. These enable the group's research effort to be reinforced by the collaborative work of some of the world's very best research teams. In 2008, SUEZ ENVIRONNEMENT's R&D centers won 60% of the French National Research Agency's calls for proposals on eco-technology or health in which they participated.

## FOCUS PATENTS – A TOP-PRIORITY INTANGIBLE ASSET

The SUEZ ENVIRONNEMENT patents portfolio comprises 301 families of patents.

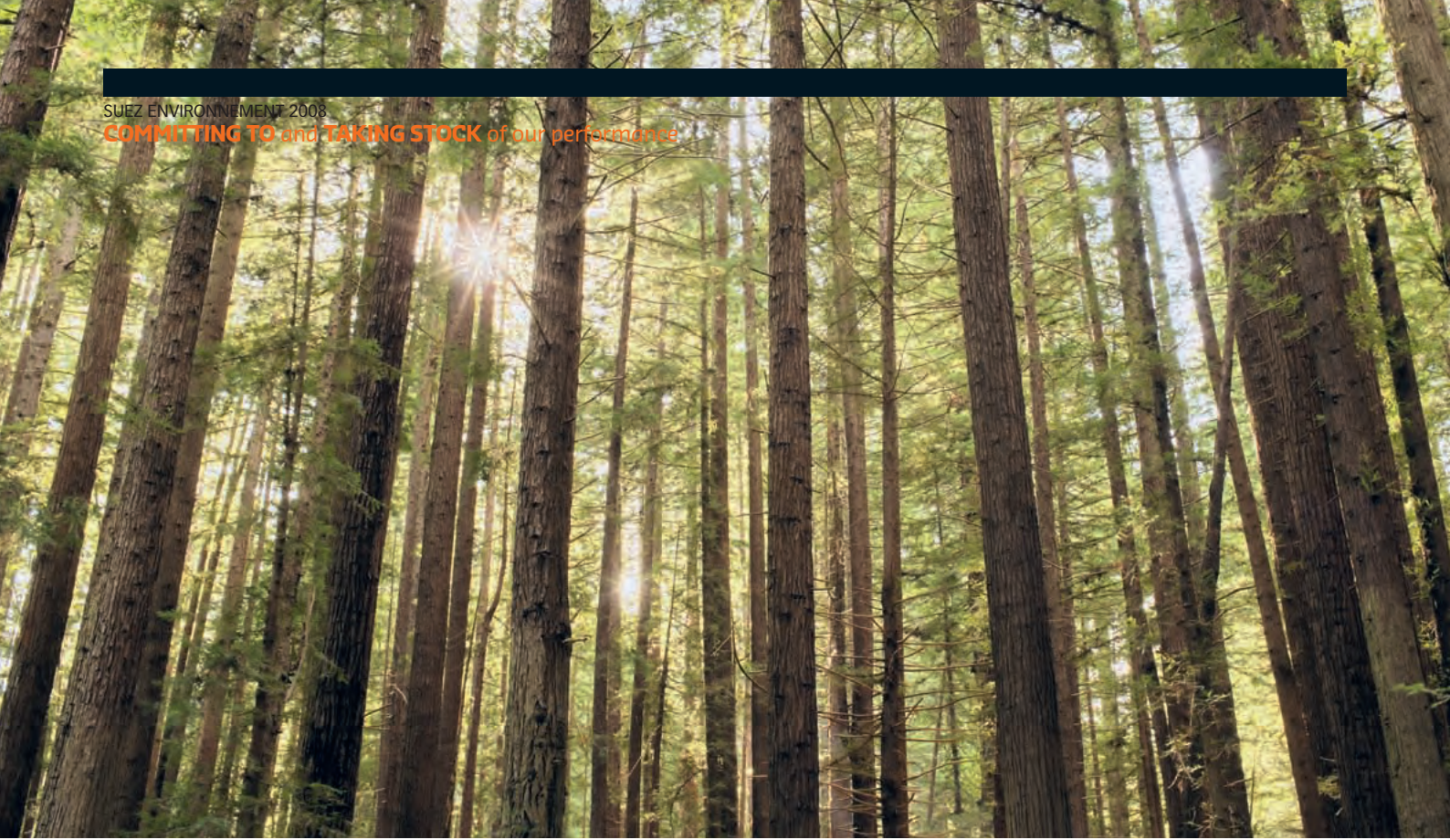
The group holds approximately 2,000 national patents, registered in more than 70 countries. In 2008, the company applied for 23 patents, 14 in 2007 and 18 in 2005.

There are a number of potential sources of patentable inventions;

they may arise from:

- the group's Research Centers,
- shared research efforts within the group (such as the R+i Alliance, etc.),
- one-off collaborations with partners (universities, laboratories, etc.),
- operational subsidiaries.

These patents protect not only the products but also the processes - for example, reed-bed treatment of wastewater by small local authorities.



# RESEARCH PROGRAMS AT THE HEART OF VITAL ISSUES

PROVIDING LOCAL AUTHORITIES WITH THE MEANS TO **REDUCE THEIR ENVIRONMENTAL FOOTPRINT WHILE INCREASING THE QUALITY OF THE ENVIRONMENTAL SERVICES** THEY BENEFIT FROM – THIS IS THE AMBITION OF THE RESEARCH PROGRAMS CONDUCTED BY SUEZ ENVIRONNEMENT.

**O**ur research programs, whether in the water or the waste sector, share common themes such as combatting climate change, the conservation of biodiversity and the monitoring of sanitary risks.

**// Combatting climate change.**

The technologies involved in water and waste management offer communities and industrial companies who wish to control their greenhouse gas (GHG) emissions many opportunities through combined solutions. SUEZ ENVIRONNEMENT's R&D programs concern direct reduction of GHGs, along with energy recovery and the development of the potential in renewable energy sources, including:

- Producing energy based on biogas from biomass (landfills and sludge);
- Increasing energy recovery from incineration units;
- Using renewable energy in connection with treatment processes;
- Recapturing heat from wastewater (a system known as Degrés Bleus);
- Reducing GHGs related to waste collection.

Examples include: waste collection by pneumatic network and our partnership with Renault to develop Hybris alternative fueling. Both are examples of innovation to lessen the impact of collection trucks and their GHG emissions.

# 400

SCIENTISTS AND EXPERTS  
work full time on research and  
development.

**// Limiting the impact on natural resources.** Both the water and waste businesses can make direct contributions to the conservation of a wide variety of natural resources: water, raw materials, soil quality, and the fauna and flora of ecosystems. These waste businesses already enable the consumption of raw materials to be limited through recycling. To explore this solution for the future and to enable it to become economically viable, SUEZ ENVIRONNEMENT has launched research programs covering every stage of waste management services:

- Improvement in the treatment of solid waste through material recovery, the recycling of plastics, rubbers and metals, and of organic waste (compost);
- Improvement to automatic sorting techniques such as the optical sorting of bottles, the sorting by flotation of wood from demolition activities and of metals.

For the water businesses, the priority is to

conserve water, both by giving people access to new resources (recycling of wastewater, desalination) and by contributing to the protection of the natural environment (optimal treatment of wastewater). Among recent breakthroughs, one might cite:

- The patenting of a membrane pre-treatment process using microcoagulation;
- The Aviz’eau real-time consumption monitoring program, aimed both at developing tools for consumers to monitor their own consumption and tools for professionals to increase general knowledge about flux in the networks.
- The dynamic rainwater management program aimed at limiting problems caused by storm floodwaters.

**// Controlling sanitary and environmental risks.**

True to its traditional field of expertise, the Group continues to make significant

investments in health monitoring programs related to drinking water quality in order to ensure that the finest quality tap water is distributed to its customers. SUEZ ENVIRONNEMENT has one of the world’s very first laboratories in this field and is participating, alongside French and international public health authorities, in the analysis and ongoing study of the real risk of emerging pollutants, their potential pathogenic effects, and the adaptation of technologies to the elimination of these pollutants in current or new treatment channels.

**FOCUS**

MICRO-POLLUTANTS:  
SUEZ ENVIRONNEMENT  
TAKES ACTION

CEMAGREF, the leading center for applied research on sustainable water and

land management, and SUEZ ENVIRONNEMENT signed a three-year framework agreement in 2007 which includes the AMPERES program, co-financed by the French Agence Nationale de Recherche. AMPERES is a French acronym for “Analysis of priority and

emerging micro-pollutants in waste and groundwater.” Micropollutants are one of the targets of the European framework directive concerning water. Even though they occur only in small amounts in rivers and streams, their harmful effects on the environment

and especially biodiversity have now been recognized in numerous studies. This program ran throughout 2008, and its findings should be submitted sometime in 2009.



# 295

LOCAL AGENDA 21 PROGRAMS

were set up by French authorities in 2008.

“TOGETHER, WE WILL RISE TO THE CHALLENGE OF ACHIEVING THE NEW ECOLOGICAL GROWTH THAT WILL ENABLE US TO SUCCESSFULLY RECONCILE ECONOMIC, ENVIRONMENTAL AND SOCIAL PERFORMANCE.”

**JEAN-LOUIS CHAUSSADE**, Chief Executive Officer of SUEZ ENVIRONNEMENT, at the launch of Edelway.

of biodiversity, carbon balance and the conservation of natural resources within the current context of public water, wastewater and waste management services.

The study of local environmental policies demonstrates that the needs of regional public authorities essentially concern these three sectors. SUEZ ENVIRONNEMENT has therefore decided to bring its technical solutions together under a global approach that is equipped with diagnostic tools.

Along with its partners, the Group can now contractually commit itself to a series of precise environmental objectives – such as, for example, the reduction of greenhouse gas (GHG) emissions.

The Edelway program relies on high-performance diagnostic tools for calculating the environmental impact of the public services overseen by local authorities.

These tools have been in development for many years within the Group’s subsidiaries. SITA France was thus the first to offer local authorities an online calculation of the environmental impact of its household waste collection service.

### // Coupling economic and environmental performance.

Edelway mobilizes innovative technical solutions which make environmental excellence a source of value for local authorities. In many cases, technological innovations bring an end to wasted resources of which we were previously unaware.

The Lyonnaise des Eaux’s Degrés Bleus program, launched in late 2008, is emblematic in this respect. The wastewater collected from local authorities or manufacturers is warm, with temperatures

of around 15°C. Until now, this heat was not used and was freely released into water and transport networks. The Degrés Bleus program has made it possible to recover this heat and uses it to heat buildings in winter. In summer, the process is reversed; the water becomes cooler, thus enabling these same buildings to be cooled. Outcome for the operation: the city lowers both its energy bill and its greenhouse gas emissions, since the energy mobilized is “green”. Edelway and its numerous solutions offer proof that environmental protection can go together with effectiveness and cost control.

## FOCUS GREEN CUBES – THERE IS ENERGY IN WATER

Green Cubes is a set of solutions combining energy efficiency and environmental

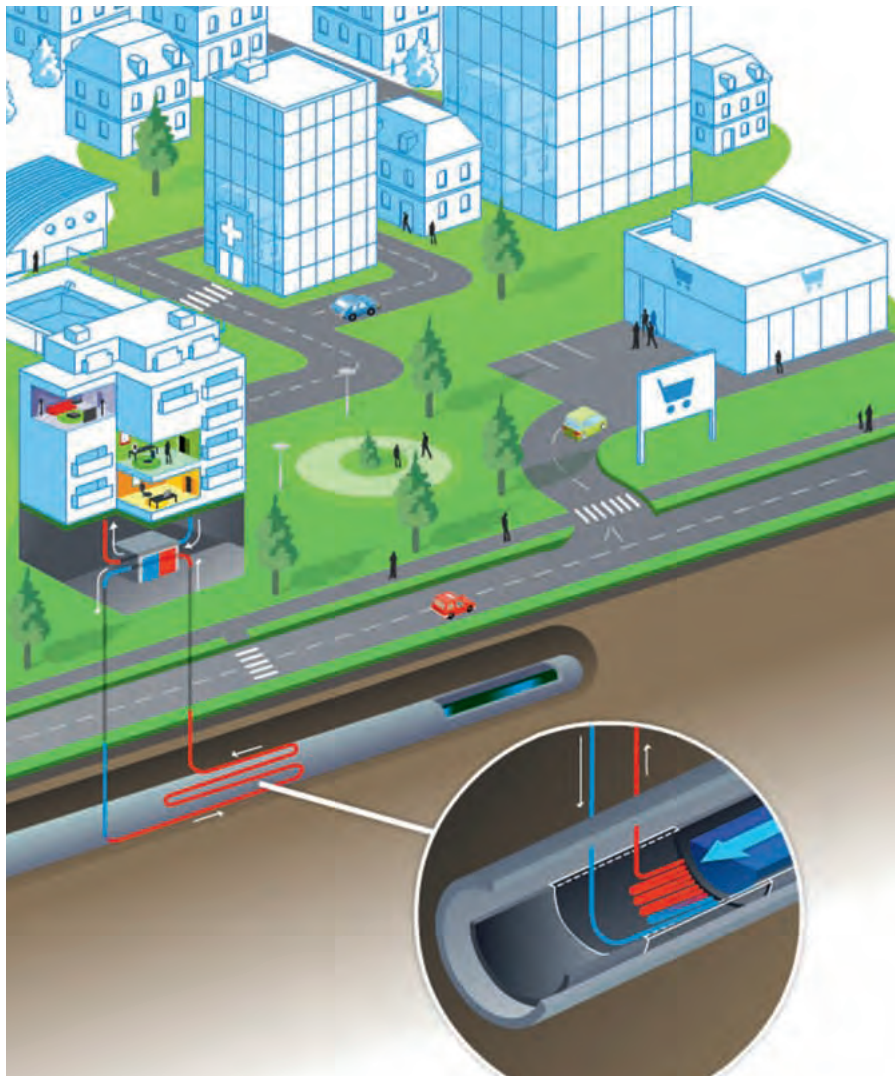
performance. It is a service that enables local authorities to achieve their sustainable development ambitions in compliance with the opportunities their wastewater facilities have to offer: rehabilitation or modernization of existing facilities, improvements to

performance. Green Cubes uses a proven method that mobilizes a virtuous combination of more than 60 different solutions. The Green Cubes “3+1 range” combines:  
– Products that consume little energy;  
– Products for recovering

energy (thermal, hydraulic, kinetic, etc.);  
– Products for recovering energy from biomass;  
– Recourse to external renewable energies: solar, wind turbines, etc.

# ACCOMPANYING LOCAL AUTHORITIES AND MANUFACTURERS TOWARDS HIGH ENVIRONMENTAL PERFORMANCE

WITH THE HELP OF INNOVATIVE TOOLS AND PROGRAMS, SUEZ ENVIRONNEMENT HOPES TO HELP OUR CUSTOMERS NOT ONLY MEET TODAY'S ENVIRONMENTAL CHALLENGES BUT ALSO **TO TURN ENVIRONMENTAL EXCELLENCE INTO A SOURCE OF VALUE.**



In France, regional public authorities are the most important players in terms of the environment.

They are committed, on an everyday basis, to conserving our lifestyle and our natural assets.

Regulations at all levels, including European, national or local – commitments made within the context of the national Grenelle de l'Environnement or local "Agenda 21" programs or climate plans –, impose ever-more-stringent environmental objectives on local authorities.

**// Making a commitment to environmental objectives.**

SUEZ ENVIRONNEMENT is actively involved in helping local authorities rise to specific environmental challenges. With the Edelway service offer, launched in November 2008, they can act directly on the themes

Degrés Bleus technology enables recovery of heat in wastewater and uses it to heat part of the city.







# **MONITORING** OUR **PROGRESS**

**REPORTING METHODOLOGY & SCOPE**

**PERFORMANCE INDICATORS**

**STATUTORY AUDITORS' REPORT**

**FINANCIAL SUMMARY**

**GLOBAL REPORTING INITIATIVE INDEX**

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# REPORTING METHODOLOGY & SCOPE

## // METHODOLOGY FOR ENVIRONMENTAL REPORTING IN 2008

The following points should be noted regarding the environmental data contained in this report:

### 1/ Scope.

Apart from the figures on populations benefiting from water and wastewater services provided by SUEZ ENVIRONNEMENT, which are given for the Group's full financial reporting scope, the figures in this report refer only to fully consolidated (FC) companies, where SUEZ ENVIRONNEMENT controls the capital and management and therefore exercises operational control. Whenever a company is fully consolidated for the first time its environmental data are 100% integrated irrespective of SUEZ ENVIRONNEMENT's percentage stake in the capital. The scope is determined as of June 30 each year. If any disposals take place after that date the entity concerned completes the environmental questionnaire with the data available as of the last day in the month immediately preceding its disposal. Companies acquired after June 30 will not normally be included for that year unless they are large in size and have a significant influence on the scope as a whole. The legal entities included in the environmental reporting scope are those whose activities are significant in terms of environmental impact. The main activities excluded are therefore financial operations and the construction and engineering activities of companies such as Safege,

Fairtec, Ondeo IS, etc.

Water management contracts such as those in Algiers and Jeddah fall outside the scope of this environmental report.

Year-on-year comparisons are based on like-for-like scope. All data from the years before 2008 have been adjusted to correspond to the 2008 scope described in the following paragraphs.

### Waste businesses.

The report covers subsidiaries based in:

- Europe: Belgium, Czech Republic, Finland, France, Germany, Great Britain, Luxembourg, the Netherlands, Poland and Sweden, and Teris's hazardous waste activities in six countries: France, Belgium, Germany, the Netherlands, Italy and Spain;
- Asia-Pacific: Australia, Reunion Island, and the United Arab Emirates;
- North Africa: Morocco.

Waste management services include collection, sorting and recycling as well as material, biological and energy recovery; incineration, landfilling and treatment of hazardous waste including the depollution of soil and ground.

### Water businesses.

This report covers contracts located in:

- Europe: Germany, France, Spain, Portugal, the Czech Republic and Slovakia;
- Asia-Pacific: Australia, Indonesia, India and Malaysia;
- North America: United States, Mexico;
- North Africa: Morocco.

The main activities covered by the report are drinking water management, wastewater treatment, and treatment of sludges.

### 2/ Reporting tool.

SUEZ ENVIRONNEMENT uses the software CERIS, an environmental reporting IT solution developed by GDF SUEZ in cooperation with the company ENABLON. The first version dates from 2003. CERIS allows the Group to manage its network of environmental correspondents and coordinators and to manage and document the environmental reporting scope, to input, check and consolidate indicators, publish reports and, lastly, retrieve or produce the documents needed to collect data and control the process of compiling information. CERIS has been audited by the GDF SUEZ internal audit team. In 2007, the CERIS computerized reporting solution was migrated to a new version, which allowed the Group to enhance control systems for data input by the operating units. In 2007, the tool was rolled out in SUEZ ENVIRONNEMENT's Water sectors.

### 3/ Procedures.

When compiling environmental information SUEZ ENVIRONNEMENT follows the procedures and instructions defined by GDF SUEZ. These consist of a generic procedure and instructions to be applied at the appropriate stages of the reporting process. The generic procedures are then customized to create procedures and indicators tailored to SUEZ ENVIRONNEMENT's specific needs. A Group-wide network of environmental correspondents and coordinators, appointed by the CEO of each reporting entity, is responsible for applying all of the procedures and instructions.



The Group and subsidiary level procedures and working instructions describe in detail the various phases for collection, control, consolidation, validation and transfer of environmental data at different organizational levels as well as the rules for defining the scope of reporting and consolidation.

They are supported by technical documents laying down methodological guidelines for calculating certain indicators (e.g. tools for calculating greenhouse gas emissions). All documents are available on the Group's intranet or on demand from the Environment and Performance Assessment Department. The following points should be noted regarding the data contained in this report:

- Where significant data items are unavailable the report uses extrapolations from the previous year's figures.
- Energy consumption indicators can be hard to obtain from each site. Reported figures only cover data that is available or can be inferred at entity level.
- Data on greenhouse gas emissions from landfills and on leachates are partly based on calculations (calculation tools developed in-house by SUEZ ENVIRONNEMENT or, in some cases, by particular business units).

## // METHODOLOGY APPLIED TO SOCIAL RESPONSIBILITY REPORTING IN 2008

Social responsibility reporting is based on:

- The GDF SUEZ User Guide, which contains all definitions and procedures that make up the common reference document for the GDF SUEZ Group.
- The Group's Magnitude reporting tool (see paragraph 1 below) which, besides collecting data, includes integrated control procedures to apply when compiling social data.

Quantitative data on social performance are derived from the HR function of Magnitude, the GDF SUEZ Group's consolidation tool.

After data have been collected, they are processed and consolidated according to clearly defined procedures and criteria.

**1/ Magnitude** is a financial consolidation software tool that allows the Group to collect, process and retrieve data input by the legal entities that make up its local subsidiaries. Each entity is allocated a financial consolidation method, which is also used by the HR function: full consolidation

(FC), proportional consolidation (PC) or equity affiliate (EA). The social analyses contained in this report refer only to the fully consolidated companies, where SUEZ ENVIRONNEMENT effectively controls the capital and management and therefore exercises operational control. Whenever a company is fully consolidated in SUEZ ENVIRONNEMENT's books for the first time its social data are 100% integrated, irrespective of the percentage stake held in the capital.

### **2/ Scope of coverage.**

Each indicator is accompanied by a scope of coverage figure, given as a percentage of the Group's total workforce (all employees of fully consolidated companies on the books of SUEZ ENVIRONNEMENT). Some companies may have failed to report their data or the information submitted may show inconsistencies, in which case they will be eliminated from the scope of coverage. All indicators presented in this report are based on a coverage ratio of 94% or more.

The following points should be noted regarding the data contained herein:

- The basis for the breakdown of employees by professional category is unchanged from that used in 2005. Administrative staff are recorded among senior technicians and supervisors (STS).
- In contrast to the report on social performance, health and safety reporting includes data on entities leaving the Group or which were acquired in the two previous years, where the criteria for operational control and reliability of data are met. This results in a slight difference between the scope of employees covered in the two cases.
- The turnover indicator only counts redundancies and resignations.
- Given the deadlines involved, training data are not yet complete and therefore refer to the most recently established situation.
- The concept of "manager" can be hard to define in some countries where the Group operates outside France. This may lead to a small underestimation of the number of managers as some entities may only include their senior managers in this category.

## // COMPLIANCE WITH FRANCE'S NEW ECONOMIC REGULATIONS (NRE) LAW AND GRI GUIDELINES

The correspondence of the Group's environmental and social performance indicators with France's NRE law and the global reporting initiative is documented in the tables summarizing environmental and social performance in the following pages.



	Verification by statutory auditors		Unit	2006	2007	2008
	Reasonable assurance	Moderate assurance				
<b>8/ IMPROVE SAFETY AND HEALTH IN THE WORKPLACE</b>						
Accidents at work frequency rate (FR)		•	No.	21.89	18.47	17.45
Accidents at work gravity rate (GR)			No.	0.83	0.74	0.65
<b>9/ SUPPORT DIVERSITY</b>						
Diversity rate	••		%	18.0%	18.3%	18.2%
Diversity rate among managers			%	22.8%	23.9%	23.7%
Diversity rate among qualified staff			%	32.9%	33.7%	33.7%
International (non-French) rate among senior managers			%	27.8%	31.7%	32.1%
Proportion of employees with a disability			%	2.2%	1.6%	1.5%
<b>10/ MAINTAIN AN ACTIVE DIALOGUE WITH OUR STAKEHOLDERS</b>						
% of revenue covered by the stakeholder dialogue procedure			%		4 stakeholder sessions since 2007	
<b>11/ BECOME A KEY ACTOR OF LOCAL SUSTAINABLE DEVELOPEMENT</b>						
Number of partnerships or non-commercial agreements concerning local educational, social, environmental, cultural, sporting or consumer actions.			No.			to be defined in 2009
Number of people retrained under return to work programs supported by the company or its subsidiaries			No.			to be defined in 2009
<b>12/ PROVIDE REGULAR AND ACCESSIBLE INFORMATION ON OUR SUSTAINABLE DEVELOPMENT ACTIONS</b>						
Information available on environmental, social and corporate issues through websites and annual sustainable development reports at each significant operational level						yes
Audit of transparency and completeness of sustainable development reports by external auditors						yes
Non-financial indicators offering reasonable assurance						5
Accredited dissemination of sustainable development good practice and dedicated sustainable development section on local websites						see Edelway - SE and subsidiaries' websites

## // ENVIRONMENTAL PERFORMANCE INDICATORS

	Unit	Correspondence		Coverage scope (FC)	
		NRE	GRI3	2007	2008
<b>MANAGEMENT</b>					
WASTE - Environmental commitment policy or statement	% Rev	3	4.8	96.3%	97.6%
WASTE - Environmental program	% Rev	3	4.8	93.2%	95.3%
WATER - Environmental commitment policy or statement	% Rev	3	4.8	83.8%	80.8%
WATER - Environmental program	% Rev	3	4.8	72.1%	78.7%
WASTE - Tonnage of household and similar waste with ISO 14001 certification	T	3	4.8	30,609,344	32,623,727
WASTE - Tonnage of household and similar waste with EMAS certification	T	3	4.8	380,212	325,830
WASTE - Tonnage of household and similar waste certified to other standards	T	3	4.8	857,142	857,142
WASTE - Share of activity (tonnes) covered by environmental management system (EMS)	%	3	4.8	81.6%	85.0%
WATER - Volumes covered by ISO 14001 certification	Mm <sup>3</sup>	3	4.8	1,028	1,670
WATER - Volumes covered by EMAS certification	Mm <sup>3</sup>	3	4.8	-	527
WATER - Volumes covered by other certification	Mm <sup>3</sup>	3	4.8	1,608	1,921
WATER - Share of activity (volume) covered by environmental management system (EMS)	%	3	4.8	54%	70%
WASTE - Environmental risk prevention plans	% Rev	6	4.9	92%	92%
WASTE - Environmental crisis management plans	% Rev	6	4.9	95%	95%
WATER - Environmental risk prevention plans	% Rev	6	4.9	78%	79%
WATER - Environmental crisis management plans	% Rev	6	4.9	100%	99%
Complaints leading to compliance orders (related to environmental incidents)	No.	8	EN28	13	14
Convictions for environmental damage	No.	8	EN28	9	2
Compensation paid as a result of convictions (related to environmental incidents)	K€	8	EN28	291	-
Total legal costs of defending suits	K€	8	EN28	46	53

# PERFORMANCE INDICATORS

## // SUSTAINABLE DEVELOPMENT IN FIGURES: 4 PRIORITIES, 12 COMMITMENTS

A total of 22 performance indicators, published regularly with accompanying comments, will allow us to monitor progress (for further information : [http://www.suez-environnement.com/document/?f=profile/en/4\\_priorites\\_12\\_engagements\\_VA.pdf](http://www.suez-environnement.com/document/?f=profile/en/4_priorites_12_engagements_VA.pdf)). The Group's sustainable development policy also entails the publication of an internal "Sustainable Development Roadmap". This covers in greater detail the technical and managerial issues facing the company in the fields of environmental, social and community responsibility and corporate governance. It also allows the Group to monitor progress on environmental and social issues. All major Group subsidiaries have their own "Sustainable Development Roadmap" spelling out the Group's objectives at the level where they operate and monitoring progress made.

	Verification by statutory auditors		Unit	2006	2007	2008
	Reasonable assurance	Moderate assurance				
<b>1/ OPTIMISE WASTE RECYCLING AND RECOVERY RATE</b>						
Recovery rate for materials from household and non-hazardous industrial waste			%	30.0	30.9	31.6
Recycled materials offered to the market (tonnes)						
Outgoing tonnage of sorted paper and cardboard			T	2,272,000	2,659,489	2,662,135
Outgoing tonnage of sorted plastics			T	235,981	259,074	346,224
Outgoing tonnage of sorted glass			T	507,656	646,076	656,621
Outgoing tonnage of sorted wood not used for energy recovery			T	280,008	452,628	554,586
Outgoing tonnage of sorted metals			T	197,681	948,044	836,505
Outgoing tonnage of tyres			T	17,227	29,087	56,102
Incineration of H-NHIW - Bottom ash recovered			T	1,060,087	1,049,913	1,000,149
Incineration of H-NHIW - Metal scrap recovered			T	72,362	82,409	95,049
<b>2/ INCREASE THE YIELD OF DRINKING WATER NETWORKS</b>						
Linear index of UFW from networks	••		m <sup>3</sup> /km/d	10.7	10.1	9.5
<b>3/ REDUCE GREENHOUSE GAS EMISSIONS</b>						
Direct and indirect greenhouse gas emissions	••		TCO2e	6,065,954	6,559,722	5,928,175
Contribution to avoided emissions			TCO2e	- 4,326,396	- 5,746,756	- 5,748,154
<b>4/ IMPROVE ENERGY EFFICIENCY</b>						
Total energy consumption by SUEZ ENVIRONNEMENT	••		MWhe	5,317,081	5,695,122	5,924,539
Energy consumption as proportion of revenue			Wh/€ Rev	855	732	741
<b>5/ INCREASE AND PROMOTE RENEWABLE ENERGY GENERATION</b>						
Production of renewable energy (Waste - Water and Wastewater)		•	MWh	2,069,018	2,390,029	2,586,049
Energy recovery installed capacity		•	MW	469	559	547
Caloric value of refuse derived fuels supplied by SUEZ ENVIRONNEMENT			ktoe	203	231	234
<b>6/ INCORPORATE BIODIVERSITY INTO SITE MANAGEMENT</b>						
Biodiversity - Number of sensitive sites identified			No.			233
Biodiversity - Number of biodiversity audits carried out			No.			173
Biodiversity - Number of action plans drawn up and implemented			No.			127
<b>7/ FOSTER PROFESSIONAL KNOWLEDGE</b>						
Number of training hours per employee (scope: all employees)		•	hr/pers	14.5	15.2	13.5
% of employees attending training			%	58.6%	60.0%	57.2%
% of managers attending training			%	64.0%	74.2%	69.5%
% of STSs (senior technicians and supervisors) attending training			%	71.3%	67.8%	69.4%
% of WETs (workers, employees and technicians) attending training			%	53.9%	54.9%	50.8%

**// ENVIRONMENTAL PERFORMANCE INDICATORS  
(CONTINUED)**

	Unit	Correspondence		Coverage scope (FC)	
		NRE	GRI3	2007	2008
<b>ENERGY</b>					
Installed capacity - Electricity - Biogas recovery	MWe	1	EN3	120	122
Installed capacity - Electricity - Energy recovery from household waste	MWe	1	EN3	439	425
Installed capacity - Heat - Biogas recovery	MWth	1	EN3	5	13
Installed capacity - Heat - Energy recovery from household waste	MWth	1	EN3	1,220	1,229
WASTE - Electricity consumption	MWhe	1	EN3	425,876	483,380
Energy consumption of waste treatment	MWh	1	EN3	3,283,784	3,237,309
WATER - Electricity consumption	MWhe	1	EN3	2,049,135	2,300,469
Energy consumption of drinking and wastewater activities	MWh	1	EN3	2,411,338	2,687,230
Electricity consumption per tonne of waste treated	kWh/T	1	EN3	32	24
Electricity consumption per m <sup>3</sup> of drinking water produced	Whe / m <sup>3</sup>	1	EN3	502	517
Electricity consumption per m <sup>3</sup> of wastewater collected and treated	Whe / m <sup>3</sup>	1	EN3	671	665
<b>WATER</b>					
WASTE - Water consumption excluding cleaning services (urban, industrial)	m <sup>3</sup>	1	EN8	6,260,508	7,101,958
<b>AIR</b>					
Direct emissions of greenhouse gases					
*Waste - collection	TCO2e	1	EN16	517,320	595,444
*Waste - incineration	TCO2e	1	EN16	1,880,613	1,733,894
*Waste - landfill	TCO2e	1	EN16	2,721,011	2,100,841
*Waste - treatment of hazardous industrial waste	TCO2e	1	EN16	214,775	233,141
*Water - wastewater treatment-fuel consumption	TCO2e	1	EN16	81,294	92,867
Indirect emissions of greenhouse gases					
*Waste - Annual electricity consumption	TCO2e	1	EN16	280,149	232,026
*Water - Annual electricity consumption	TCO2e	1	EN16	670,210	800,212
Contribution to prevention of greenhouse gas emissions					
*Waste - by materials recovery	TCO2e	1	EN16	3,814,915	3,765,734
*Waste - by energy recovery (incineration)	TCO2e	1	EN16	708,229	682,515
*Waste - by energy recovery (landfill)	TCO2e	1	EN16	295,335	324,551
*Waste - by energy recovery from hazardous waste	TCO2e	1	EN16	39,787	48,183
*Waste - by alternative fuels prepared and supplied by SE	TCO2e	1	EN16	869,864	880,268
*Water - by energy recovery	TCO2e	1	EN16	18,626	46,902
<b>DRINKING WATER PRODUCTION AND DISTRIBUTION</b>					
Number of treatment plants	No.	1	SE**	1,634	1,746
Annual production volume (input to network)	Mm <sup>3</sup>	1	SE	2,315	2,495
Volume of drinking water distributed	Mm <sup>3</sup>	1	SE	1,582	1,620
Technical performance of drinking water distribution networks	%	1	SE	75	76
Percentage of boreholes and groundwater catchment areas with protected perimeters	%	2	SE	21	78
Network length	km	2	SE	146,626	147,458
<b>WASTEWATER COLLECTION AND TREATMENT</b>					
Total number of treatment plants	No.	2	EN 26	1,554	1,535
Network length	km	2	EN26	61,060	65,260
Wastewater treated	Mm <sup>3</sup>	2	EN26	1,859	2,025
Purification performance (BOD5 eliminated) of the sewage plants	%	2	EN26	88	89
Percentage of water reused after treatment	%	1	EN10	2	6
Percentage of sludge reused (agricultural recovery)	%	1	EN22	59	56
<b>COLLECTION SERVICES</b>					
Population covered by collection services	No.	1	SE	44,558,498	50,934,156
Industrial and commercial customers covered by collection services	No.	1	SE	444,009	501,092
Tonnage of household waste collected	T	1	EN22	9,214,237	9,496,686
Tonnage of medical waste collected	T	1	EN22	118,247	160,940
Tonnage of industrial and commercial waste collected (NHIW)	T	1	EN22	12,773,784	12,884,461
Tonnage of hazardous waste collected	T	1	EN22	2,050,569	2,465,486
Number of trucks	No.	1	EN29	11,742	12,368
Percentage of truck fleet running on alternative fuels	%	1	EN29	6	5
Fuel consumption per truck	m <sup>3</sup> /No.	1	EN3	14	14
Average fuel consumption per tonne collected	L/T	1	EN3	8	8



**// ENVIRONMENTAL PERFORMANCE INDICATORS  
(CONTINUED)**

	Unit	Correspondence		Coverage scope (FC)	
		NRE	GR13	2007	2008
<b>SORTING/RECYCLING</b>					
Number of transfer stations	No.	1	SE	293	305
Number of sorting/recycling centers	No.	1	SE	252	278
Tonnage incoming to sorting centers	T	1	EN22	11,202,449	11,746,853
Tonnage of recovered materials outgoing from sorting centers (excluding monoflow)	T	2	EN22	7,044,440	7,202,247
Percentage of non-recyclable waste from sorting centers	%	2	EN22	35	39
Tonnage sent directly to recycling subsidiaries after collection (dumps, voluntary collection center, transfer) without going through a sorting/recycling center.	T	1	EN22	1,903,695	2,274,098
<b>COMPOSTING</b>					
Number of composting sites	No.	1	SE	114	106
Tonnage incoming	T	1	EN22	1,561,154	1,597,441
Tonnage of compost produced	T	2	EN22	564,866	619,297
Tonnage of sludge recovered by spreading on the land	T	2	EN22	724,461	753,978
Efficiency of biological recovery	%	2	EN22	56	58
<b>THERMAL TREATMENT OF NON-HAZARDOUS WASTE</b>					
Number of urban waste incineration plants	No.	1	SE	47	47
Tonnage incoming	T	1	EN22	5,990,774	5,888,233
Tonnage of waste incinerated	T	2	EN6	5,669,406	5,530,878
SOx emissions	T	1	EN20	231	212
NOx emissions	T	1	EN20	4,863	4,909
Dust emissions	T	1	EN20	59	53
Mercury emissions	T	1	EN20	0.266	0.273
Residues from incineration (fly ash) produced	T	1	EN22	244,364	245,500
Metal scrap recovered	%	2	EN22	86	88
Quantity of electrical energy produced	MWhe	1	EN6	2,392,694	2,440,279
Quantity of thermal energy sold	MWhth	1	EN6	760,542	845,577
<b>STORAGE OF NON-HAZARDOUS WASTE</b>					
Number of landfills (K1+K2+K3)	No.	1	SE	144	143
o/w household waste landfills	No.	1	SE	116	114
o/w inert waste landfills	No.	1	SE	16	16
Tonnage incoming to household landfills	T	1	EN22	15,437,034	15,515,011
Leachates treated	m <sup>3</sup>	1	EN22	2,678,468	2,679,838
Proportion of landfills operated equipped with systems to capture and treat biogas	%	1	EN22	80	84
<b>TREATMENT OF HAZARDOUS WASTE</b>					
Number of hazardous waste incinerators	No.	1	SE	11	8
Number of hazardous waste platforms (pre-treatment and transfer)	No.	1	SE	133	126
Number of industrial waste storage plants	No.	1	SE	12	13
Number of medical waste treatment sites	No.	1	SE	5	9
Hazardous waste treated - total not including contaminated soils	T	1	EN22	1,548,712	2,727,706
o/w recovered in cement plants	T	1	EN22	586,937	428,745
o/w incinerated with energy recovery	T	1	EN22	316,732	409,068
Tonnage of soils treated/recovered	T		EN23	979,242	1,093,629
Alternative fuels used to replace fossil fuels supplied by SUEZ ENVIRONNEMENT	TOE	1	EN22	230,920	233,682
Tonnage of Class 1 (HW) waste sent to landfill by the Group	T	1	EN22	644,051	841,071
<b>END-OF-LIFE ELECTRICAL AND ELECTRONIC WASTE</b>					
Number of sites for treating end-of-life electrical and electronic waste	No.	1	SE	26	85
Tonnage incoming for dismantling/recycling	T	1	EN22	19,735	18,902
Tonnage of materials sent for recycling	T	1	EN22	14,494	36,847
<b>TOTAL</b>					
Total tonnage of waste treated	T			39,006,984	39,581,704
Total tonnage recovered (materials)	T			11,930,232	12,539,163
Total tonnage recovered (materials or energy)	T			18,315,635	18,498,787
Total tonnage of non-hazardous waste treated (sorting, composting, incineration, landfill)	T			36,479,030	35,760,369

## // HUMAN RESOURCES INDICATORS

	Absolute value			Ratios		
	2006	2007	2008	2006	2007	2008
<b>EMPLOYEES BY DIVISION</b>						
Water Europe	11,610	11,914	11,679	20.2%	19.2%	17.9%
Waste Europe	31,460	33,891	35,536	54.8%	54.7%	54.4%
International	13,879	15,565	17,581	24.2%	25.1%	26.9%
Head Office	497	545	586	0.9%	0.9%	0.9%
TOTAL EMPLOYEES OF FULLY CONSOLIDATED COMPANIES	57,446	61,915	65,382	100%	100%	100%
<b>EMPLOYEES BY GEOGRAPHICAL AREA</b>						
European Union	48,785	52,477	54,931	84.9%	84.8%	84.0%
Rest of Europe	73	78	80	0.1%	0.1%	0.1%
North America	2,553	2,704	3,250	4.4%	4.4%	5.0%
South America	272	231	222	0.5%	0.4%	0.3%
Africa / Middle East	3,265	3,646	3,948	5.7%	5.9%	6.0%
Asia / Oceania	2,498	2,779	2,951	4.3%	4.5%	4.5%
TOTAL	57,446	61,915	65,382	100%	100%	100%
<b>EMPLOYEES BY SOCIO-ECONOMIC CATEGORY</b>						
Managers	7,091	7,766	8,358	12.3%	12.5%	12.8%
Senior technicians and supervisors (STS)	10,406	11,365	12,420	18.1%	18.4%	19.0%
Workers, employees and technicians (WET)	39,949	42,784	44,604	69.5%	69.1%	68.2%
TOTAL	57,446	61,915	65,382	100%	100%	100%
<b>RATIO OF WOMEN IN THE GROUP</b>						
Men	47,115	50,593	53,482	82.0%	81.7%	81.8%
Women	10,331	11,322	11,900	18.0%	18.3%	18.2%
TOTAL	57,446	61,915	65,382	100%	100%	100%
<b>RATIO OF WOMEN IN MANAGEMENT</b>						
Men	5,478	5,911	6,380	77.3%	76.1%	76.3%
Women	1,613	1,855	1,978	22.7%	23.9%	23.7%
TOTAL	7,091	7,766	8,358	100%	100%	100%
<b>PROPORTION OF EMPLOYEES WITH A DISABILITY</b>						
Percentage in year-end workforce				2.2%	1.6%	1.5%
<b>BREAKDOWN OF WORKFORCE BY CONTRACT TYPE</b>						
Permanent (C.D.I. contracts)				92.9%	92.1%	91.8%
Other contracts				7.1%	7.9%	8.2%
<b>EMPLOYMENT</b>						
Turnover				9.0%	8.7%	8.4%
Voluntary employee turnover				5.3%	5.7%	5.2%
Hiring rate				16.6%	19.6%	19.5%
Hiring rate under permanent contracts				59.0%	59.7%	57.4%
<b>RECRUITMENT</b>						
Number of external recruits on permanent contracts	5,580	7,073	7,169			
Number of external recruits on temporary contracts	3,894	4,760	5,313			
<b>WORKING CONDITIONS</b>						
Absenteeism (days absent/employee)				17.3	15.5	14.7
Overtime				5.1%	5.0%	5.0%
<b>WORKPLACE SAFETY</b>						
Number of lethal accidents (employees)	4	6	2			
Rate of frequency (per million of working hours)	21.89	18.47	17.45			
Rate of severity (per thousands of working hours)	0.83	0.74	0.65			
<b>TRAINING</b>						
Percentage of workforce trained				58.6%	60.0%	57.2%
Number of training hours per employee trained (hr/employee)				24.8	25.3	23.6
Training expenses employee (€/employee)				703.8 €	889.9 €	819.5 €
Breakdown of training time by topic						
				29.8%	31.2%	31.1%
				38.5%	36.6%	39.7%
				8.2%	8.5%	6.4%
				23.6%	24.1%	22.9%

# STATUTORY AUDITORS' REPORT ON THE REVIEW OF SELECTED ENVIRONMENTAL AND SOCIAL INDICATORS

Year ended December 31st, 2008

This is a free translation into English of the original report issued in French and is provided solely for the convenience of English speaking readers.

At the request of SUEZ ENVIRONNEMENT COMPANY and in our capacity as the company's Statutory Auditors, we performed a review with the aim of providing moderate and reasonable assurance on the environmental and social indicators selected by SUEZ ENVIRONNEMENT COMPANY and identified by the symbols • or •• shown on pages 100 and 101 for fiscal year 2008 and at Group level ("the data").

The data was prepared under the responsibility of SUEZ ENVIRONNEMENT COMPANY management, in accordance with the following internal reporting criteria:

- The set of procedures relating to environmental data reporting,
- The set of procedures relating to social data reporting, available for consultation at the Environment and Performance Assessment Department, the Human Resources Performance Department and the Health & Safety Department, as

summarized in pages 98 and 99 (hereinafter "the reporting criteria").

It is our responsibility, based on the work performed, to express a conclusion on the data. The conclusion expressed below relates solely to this data and not to the entire annual and sustainable development report.

## // NATURE AND SCOPE OF OUR WORK

We performed our procedures in accordance with the applicable professional guidelines.

### **Moderate assurance.**

We conducted the following procedures in order to provide moderate assurance that the selected data<sup>1</sup> identified by the symbol • did not contain any material anomaly. A higher level of assurance would have required more extensive work. Our work covers the data consolidated at Group level; it does not include the coverage related to the data. ...



... – We assessed the environmental and social reporting criteria in terms of its relevance, reliability, neutrality, understandability and completeness.

– We interviewed the persons responsible for the application of the reporting criteria at the Environment and Performance Assessment Department, the Human Resources Department and the Health & Safety Department, at the head office and within the audited entities.

– We conducted substantive tests at 11 sites owned by 8 selected entities<sup>2</sup> for the environmental data, representing on average 82% of SUEZ ENVIRONNEMENT COMPANY consolidated data; and at 10 selected entities<sup>3</sup> for social data, representing 64% of SUEZ ENVIRONNEMENT COMPANY consolidated staff.

– In addition, we have carried out analytical reviews and consistency tests for 3 additional entities for environmental reporting and 4 additional entities for social reporting. We examined, on a sampling basis, the calculations and verified the data reporting at different consolidation levels.

**Reasonable assurance.**  
For the data identified<sup>4</sup> by the symbol ••, the degree of precision applied to the measurement and the more extensive nature of our work than that previously described, particularly in terms of the number of samplings, enable us to express reasonable assurance. To assist us in conducting our work, we referred to the environment and sustainable development experts of our firm under the responsibility of Mr. Eric Duvaud.

**// COMMENTS ON THE PROCEDURES**

The reporting criteria call for the following comments from us:

**Environmental reporting.**

– Progress has been made in the application of the procedures and the general understanding of the indicator definitions. However, further efforts are needed in adapting and applying them correctly at the different reporting levels, especially regarding “energy consumption” and “renewable energy capacity”.

– Improvements have been observed at headquarters and at the major business units in implementing controls and formalizing the data processing. However, controls and formalization need to be reinforced in all entities involved in reporting, with a view toward the deployment of systematic controls throughout the Group.

**Social reporting.**

– Hiring more corporate staff has been part of SUEZ ENVIRONNEMENT COMPANY’s continuing effort to enhance its internal control. Implementation of internal controls needs to be continued throughout the entities involved in the reporting process.

– Social reporting can yet be improved by reinforcing the application of the reporting criteria and the control of its application for the “number of training hours”, “total worked hours” and for the definition of the reporting perimeter.

**// CONCLUSION**

**Limited assurance.**

Based on our review, we did not identify any material anomaly likely to call into question the fact that the data identified by the symbol • were prepared, in all material respects, in accordance with the above-mentioned reporting criteria.

**Reasonable assurance.**

In our opinion, the data, identified by the symbol •• were prepared, in all material aspects, in accordance with the above-mentioned reporting criteria.

**1** These data are the following [contribution to group data from the entities selected for our work is mentioned between brackets]: Installed capacity for renewable energy recovery (93%); Usable renewable energy production (82%); Frequency rate of work accident (hours worked: 74%); Number of training hours per person (70%).

**2** LDEF, Degrémont (Viveros de la Villa and Grimonpont sites), United Water (Toms River and Indianapolis sites), SITA France (business unit and Val Auve, ISD MMS Les Ménils sorting sites), SITA UK (business unit and Kirklees and Packington sites), SITA Sweden (business unit and Kovik site), SITA Germany (business unit and Zorbau site) and TERIS (business unit and Givors Teris Labo-Services site).

**3** LDEF, SDEI, Lydec, SITA France (four entities: SITA IDF, SITA Centre-Ouest, SITA FD, SITA MOS), SITA UK, SITA Poland and SITA Deutschland.

**4** These data are the following [contribution to group data from the entities selected for our work is mentioned between brackets]: total primary and secondary energy consumption (87%); direct and indirect greenhouse gas emissions (76%); Drinking water distribution – linear network losses index (based on drinking water input into the network) (67%); total workforce (73%); proportion of women in the group (70%).

# FINANCIAL SUMMARY

## // CONSOLIDATED BALANCE SHEET (IN MILLIONS OF EUROS)

	Dec. 31 2008	Dec. 31 2007	Dec. 31 2006
<b>NON-CURRENT ASSETS</b>			
Intangible assets, net	1,867.2	1,712.9	1,721.5
Goodwill	2,897.5	2,720.2	2,244.2
Property, plant & equipment, net	6,205.8	5,918.6	5,689.6
Available-for-sale securities	729.2	1,143.6	827.7
Loans and receivables carried at amortized cost	457.4	312.7	425.9
Derivative financial instruments (including commodity derivatives)	89.6	58.2	45.0
Investments in associates	265.6	237.7	220.9
Other non-current assets	120.0	55.1	45.5
Deferred tax assets	500.2	574.0	673.7
<b>TOTAL NON-CURRENT ASSETS</b>	<b>13,132.5</b>	<b>12,733.0</b>	<b>11,894.0</b>
<b>CURRENT ASSETS</b>			
Derivative financial instruments (including commodity derivatives)	0.3	14.9	12.4
Loans and receivables carried at amortized cost	151.8	188.6	145.4
Trade and other receivables	3,588.4	3,147.5	3,083.9
Inventories	245.9	242.5	245.9
Other current assets	872.6	765.5	685.0
Financial assets at fair value through income	51.0	179.5	53.5
Cash and cash equivalents	1,668.5	1,466.2	1,994.8
<b>TOTAL CURRENT ASSETS</b>	<b>6,578.5</b>	<b>6,004.7</b>	<b>6,220.9</b>
<b>TOTAL ASSETS</b>	<b>19,711.0</b>	<b>18,737.7</b>	<b>18,114.9</b>
<b>CONSOLIDATED SHAREHOLDERS' EQUITY</b>			
Shareholders' equity Group share	3,532.4	3,643.9	3,547.0
Minority Interests	637.6	613.0	1,120.1
<b>TOTAL CONSOLIDATED SHAREHOLDERS' EQUITY</b>	<b>4,170.0</b>	<b>4,256.9</b>	<b>4,667.1</b>
<b>NON-CURRENT LIABILITIES</b>			
Provisions	1,021.1	955.2	1,025.6
Long-term borrowings	5,100.5	4,722.6	3,335.8
Derivative financial instruments (including commodity derivatives)	22.5	16.1	17.4
Other financial liabilities	18.9	2.3	2.6
Other non-current liabilities	514.2	246.8	121.5
Deferred tax liabilities	332.7	561.1	605.3
<b>TOTAL NON-CURRENT LIABILITIES</b>	<b>7,009.9</b>	<b>6,504.1</b>	<b>5,108.2</b>
<b>CURRENT LIABILITIES</b>			
Provisions	306.9	341.2	354.0
Short-term borrowings	2,620.8	2,350.1	2,598.9
Derivative financial instruments (including commodity derivatives)	83.3	5.4	6.3
Trade and other payables	3,863.7	3,714.7	3,852.9
Other current liabilities	1,656.4	1,565.3	1,527.5
<b>TOTAL CURRENT LIABILITIES</b>	<b>8,531.1</b>	<b>7,976.7</b>	<b>8,339.6</b>
<b>TOTAL CONSOLIDATED SHAREHOLDERS' EQUITY AND LIABILITIES</b>	<b>19,711.0</b>	<b>18,737.7</b>	<b>18,114.9</b>

## // CONSOLIDATED INCOME STATEMENT (IN MILLIONS OF EUROS)

	Dec 31, 2008	Dec 31, 2007	Dec 31, 2006
Revenues	12,363.7	12,034.1	11,446.6
Purchases	(2,677.2)	(2,210.1)	(2,384.4)
Personnel costs	(3,062.2)	(3,140.1)	(2,967.4)
Depreciation, amortization and provisions	(776.0)	(754.9)	(679.8)
Other operating income and expenses	(4,789.2)	(4,867.6)	(4,354.6)
<b>CURRENT OPERATING INCOME</b>	<b>1,059.1</b>	<b>1,061.4</b>	<b>1,060.4</b>
Mark-to-market on operating financial instruments	3.2	(5.7)	(1.9)
Impairment of property, plant and equipment, intangible and financial assets	(1.7)	(35.4)	(53.9)
Restructuring costs	(20.9)	(12.3)	1.0
Expenses linked to the Initial Public Offering	(50.8)	-	-
Disposal of assets	46.9	181.4	149.7
<b>INCOME FROM OPERATING ACTIVITIES</b>	<b>1,035.8</b>	<b>1,189.4</b>	<b>1,155.3</b>
Financial expenses	(420.8)	(365.7)	(331.5)
Financial income	91.0	103.0	167.5
<b>NET FINANCIAL INCOME/(LOSS)</b>	<b>(329.8)</b>	<b>(262.7)</b>	<b>(164.0)</b>
Income tax expense	(92.7)	(273.5)	(276.1)
Share in net income of associates	34.0	22.6	20.7
<b>CONSOLIDATED NET INCOME</b>	<b>647.3</b>	<b>675.8</b>	<b>735.9</b>
Minority interests	114.1	184.1	162.1
Net income, Group share	533.2	491.7	573.8
<b>EPS (GROUP SHARE)</b>	<b>1.09</b>	<b>1.00</b>	<b>1.17</b>

# GLOBAL REPORTING INITIATIVE INDEX

The *Global Reporting Initiative* (GRI) was launched in 1997 with the goal of introducing globally accepted guidelines for reporting on the economic, environmental and social activities of companies and other organizations.

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\* RD: Reference Document



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# COMPLIANCE WITH THE PRINCIPLES OF THE **UNITED NATIONS GLOBAL COMPACT**



THE UNITED NATIONS GLOBAL COMPACT ASKS COMPANIES TO EMBRACE, SUPPORT AND ENACT, WITHIN THEIR SPHERE OF INFLUENCE, A SET OF **TEN CORE VALUES** IN THE AREAS OF HUMAN RIGHTS, LABOR RIGHTS, THE ENVIRONMENT, AND ANTI-CORRUPTION. SUEZ ENVIRONNEMENT HAS BEEN A MEMBER OF THE GLOBAL COMPACT SINCE 2008.

## **BUSINESSES SHOULD SUPPORT**

**1** AND RESPECT THE PROTECTION OF INTERNATIONALLY PROCLAIMED HUMAN RIGHTS WITHIN THEIR SPHERE OF INFLUENCE  
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