

food & beverage

# securing resources, feeding our world

solutions for water, organics and green packaging



**adapted water  
and waste  
services  
for the food &  
beverage industry**

**food security.  
regulatory compliance.  
improved efficiency.**

Every day our food and beverage customers trust us to meet their specific challenges – so that they can always offer their customers the **best products at the most competitive price.**

Using our local knowledge and global expertise, SUEZ brings **innovative thinking and adapted technology** to tailor-made food and beverage solutions.

Nothing ready-made. No one-size-fits-all. Just real-world **answers that help build long-term, mutually beneficial relationships that improve brand equity and accelerate your growth.**

# TRANSFORMING CHALLENGES INTO OPPORTUNITIES

## **How can you increase your operational efficiency?**

By using innovative systems to reduce costs while improving safety.

**“Using recycled plastic reduces energy consumption by 80% to 90% compared to the production of virgin plastic.”**

## **How can water and waste deliver added value to your business?**

By utilizing smart solutions to ensure continuous water supply and turn waste into a renewable resource.

**“The food and beverage industry is the third biggest industrial user of water, after power generation and pulp and paper.”**

## **How can environmental performance increase your competitiveness?**

By making targeted environmental investments that turn tighter regulations into better results.

**“Globally, 55% of consumers are willing to pay more for products and services that are committed to positive environmental performance.”**

## **concrete benefits with SUEZ**

- Multi-resources approach (water, waste and energy)
- International presence
- Technology integrator

**a creative partner  
because resources  
really matter.**

**60%**  
**of packaging**

is used by the food  
and beverage industry

**5 litres of water**

are needed to produce  
1 litre of beer

**5.3%**  
**of all global energy**

is used by the food and beverage industry

# our food & beverage offer proven solutions

## enhancing your environmental performance

Maximize economic performance, minimize environmental impact.

Manage resources, guarantee compliance and competitiveness, reach environmental targets and build brand value.

- Audit & diagnosis
- Eco-conception
- Integrated waste management
- Water systemic approach
- Monitoring & benchmarking

### reducing your water footprint

Protect and save a precious resource.

Proven methods to **guarantee continuous, reliable supplies of water, while raising reuse and recycling levels** to reduce consumption.

- Water supply
- Increased water reuse
- Resource performance

### valorizing your organic by-products

Turn a problem into an asset.

**Recover** the potential value of your **organic by-products** with **safe, reliable** and sustainable composting, energy recovery and waste-reduction solutions.

- Biological recovery
- Energy recovery
- Treatment for recovery

### developing greener packaging

Better packaging is reduced packaging.

**Recycle, recover and reuse** with long-term solutions that recover waste, limit environmental footprints and **maximize economic benefits**.

- Collection
- Packaging recycling
- Providing secondary raw material

## Improving your operational efficiency

Lower costs. Lower risks.

Solutions to **control risks** and **costs**, improve productivity and production quality, **enhance safety** and **security** for you and your customers.

- Food security
- Continuity of processes
- Energy optimization
- Asset management

## delivering multi-channel expertise

- Consulting and impact studies
- Engineering and procurement
- Project management
- Conditioning products and services
- Mobile solutions
- Services, operations and maintenance
- Industrial maintenance and cleaning services

## collaborative answers to your requirements

At SUEZ we believe that the best answers are found by working in close collaboration with you, our customers. So we listen to your needs and then collaborate to build practical solutions that meet them efficiently.





## working with you, full-circle (water, waste and energy)

1. Process water treatment
2. Water treatment systems
3. Water supply
4. Wastewater treatment
5. Increased water reuse
6. Sludge treatment and recovery
7. Biological recovery with composting
8. Energy recovery with anaerobic digestion
9. Industrial and organic waste management
10. Recycling solid waste for green packaging
11. Energy recovery from waste and water
12. Environmental performance monitoring
13. Laboratory controls
14. Water conditioning services

## breakthrough innovation, real-world applications



Every year SUEZ invests €74 million in over 65 research and development programmes to ensure our customers benefit from continually improving, tried-and-tested technology. In the food and beverage sector, this has seen groundbreaking work into improving plastic and glass recycling, as well as new ways to treat water.

### ► customized research in recycled plastics

Plast'lab, a SUEZ laboratory, now makes it possible to analyse, test and classify plastic materials – and so formulate new ranges of plastics from recycled material that meet manufacturers' exact specifications.

### ► a world-first in recycling glass

Based in Belgium, SUEZ's groundbreaking High 5 recycling plant is the first in the world to use new optical-processing technology that separates glass into four different colours – an innovation that significantly improves energy efficiency and reduces greenhouse-gas emissions.

### ► new energy from effluent

In eastern France, a cutting-edge SUEZ biogas plant means the highly acidic brine from sauerkraut production is now being transformed into clean water and enough methane gas to power 1,500 homes.



#### objective:

Reduce ammonia in effluent water to meet legal levels

#### measured benefits:

100% compliance and reduced energy costs since implementation of project

### Heineken eliminates costly ammonia

John Smith's brewery, Tadcaster, UK

"SUEZ has clearly improved the management and control of the plant. It has succeeded in implementing a solution that no one had thought of before."

UK Environment Agency

In 2009, SUEZ was awarded a contract to operate and maintain the brewery's effluent treatment plant, which was producing costly ammonia.

An anaerobic digester was installed that not only removes the compound, but also produces natural gas then used by onsite boilers to significantly reduce energy costs.



#### objective:

Use energy from waste to power the company's largest factory in France

#### measured benefits:

90% of energy needs met and fossil-fuel emissions reduced by 8,700 tonnes a year

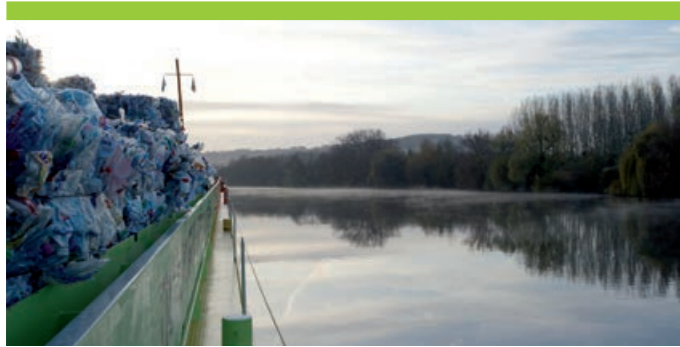
### M&Ms using waste-to-energy

Mars Chocolat France, Haguenau, France

"By reusing household waste we are playing a decisive role in the environmental transition of our client Mars Chocolat France and the development of the circular economy in Alsace."

Christophe Cros, SUEZ

Since January 2014, 90% of the energy used to run the Mars' plant in Haguenau, eastern France – where most of Europe's M&Ms are produced – comes from the incineration of 230,000 local people's household waste, cutting costs and recovering thousands of tonnes of waste.



#### objective:

**Transform** plastic bottles into food-grade-quality PET resin

#### measured benefits:

**40,000 tonnes** of plastic bottles transformed into **30,000 tonnes** of recycled “bottle-to-bottle” PET

### turning plastic bottles into... plastic France Plastique Recyclage (FPR), Limay, France

A SUEZ joint venture, France Plastique Recyclage uses innovative technology to transform used plastic bottles into PET resin that can be used to make new plastic bottles.

It also **uses 50% less water and energy** than normal PET recycling plants and has been designed to facilitate **lower-impact deliveries** by rail and river.



#### objective:

**Produce energy** and compost from bio waste

#### measured benefits:

**+ 50%** of the electricity and heat production, **33,500 tonnes** of certified compost produced a year

### Ametyst turns waste into a resource Ametyst, Montpellier, France

Operated by SUEZ, the **Ametyst anaerobic digestion plant turns local bio waste into a resource.** The methanation of organic waste from the city and local food and beverage industry produces biogas, allowing the plant to meet the majority of its energy needs and supply the EDF network with electricity.

The Ametyst plant also produces certified compost which is marketed for use as fertiliser on nearby farmland. Thus, SUEZ **offers a smart and economical solution** for organic waste, sludges and by-products from the food and beverage industry.



#### objective:

**Reduce** water footprint in cleaning and heating processes

#### measured benefits:

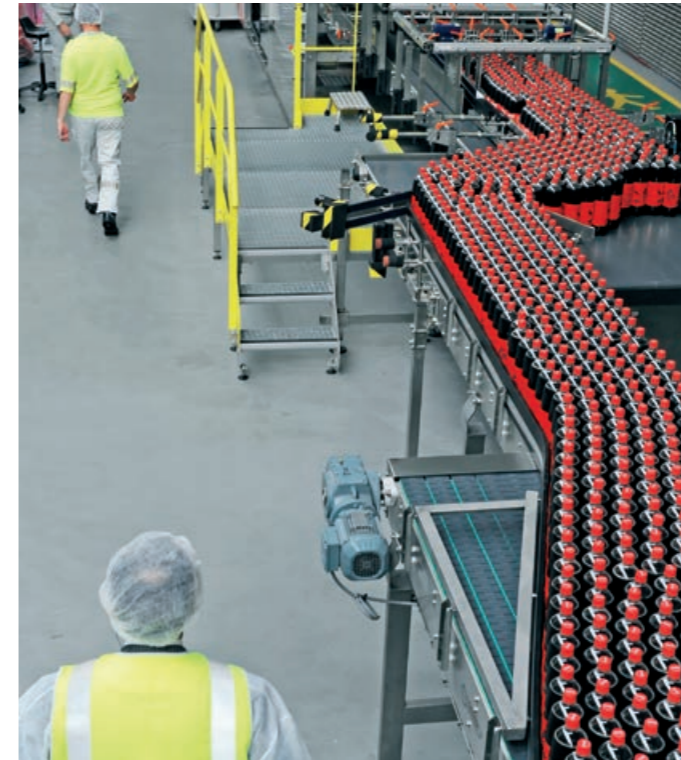
**€ 140 000 in annual savings** and sharp reductions in water and gas use

### more water reuse at Lactalis Lactalis – Société Laitière de Mayenne, Mayenne, France

“The results are the fruit of a successful collaboration that has allowed us to **reduce significantly water use and operating costs.**”

**M. Ruby, site energy manager**

Société Laitière de Mayenne in western France produces casein and whey, a process that requires large amounts of water to wash and clean milk tanks, pasteurizers and evaporators. Thanks to SUEZ’s expertise, the company is now able to reuse much of the water released during production for cleaning and in the boilers, and so **reduce its need for potable water by nearly 90%.**



### they trust us

- BACARDI
- BONGRAIN
- CERVECERA
- COCA-COLA
- DANONE
- GENERAL MILLS
- GRUPPO DAMM
- HEINEKEN
- KRONENBOURG
- LABEYRIE
- LACTALIS
- MARS
- MATERNE
- MONDELEZ
- NESTLÉ
- PEPSICO
- PROCTER & GAMBLE
- SODIAAL
- UNILEVER
- WRIGLEY
- ZUVAMESA





**SUEZ,**  
**a worldwide leader**  
**in water and waste** **resources**  
**management**

Our goal is to ensure the most rational, efficient and sustainable management of today's and tomorrow's resources: optimizing processes, securing new alternatives for water supply, protecting the environment and recovering value from waste and by-products.

Committed to sustainable development, SUEZ is a key partner for industries and cities to support them in making the most of their resources. Focusing on environmental and economic performance, SUEZ provides solutions to manage the complete water and waste cycle – a core element of the circular economy.

**€14.3**  
billion in total revenues  
in 2014

**81,000** employees

**SUEZ**

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ready for the resource revolution



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