The environment is in our nature
«Having constructed over 350 water treatment units and 80 waste treatment facilities VINCI Environnement is the only French Design and Build company offering an unmatched set of skills in process design, process engineering and civil engineering.»
We are building tomorrow’s environment

As a leading Design and Build Contractor, our company provides its clients with expertise accumulated over 50 years in the waste treatment, flue gas treatment and water treatment sectors.

A part of the VINCI Group a world leader in construction, VINCI Environnement proposes its clients a unique model based on a variety of our in-house process technologies to ensure an appropriate response to any specific problem brought to its attention.

Whether dealing with residual household waste, food and green waste, biomass or commercial or hazardous industrial waste, the technologies developed by VINCI Environnement for energy recovery, anaerobic digestion and composting combined with our processes for flue gas treatment, odour control and wastewater treatment are among the most accomplished and effective on the market. These solutions are implemented through skilled initial conceptual design and construction, all provided by our in-house experienced teams.

Regarding water treatment our in-house processes and our savoir-faire in complex project management allow us to deliver both traditional and technically advanced wastewater treatment and drinking water production plants always to the satisfaction of our clients.

We commit to excellence in Customer Service through our dedication, professionalism and attention to detail. Environmental protection is our core value.

Didier Haegel
CEO
OUR ASSETS

Expertise that makes a difference

A specialist subsidiary of the Construction division of the VINCI Group itself a world leader in building and construction works, VINCI Environnement is capable of designing and constructing complete plants for water, waste and flue gas treatment.

A rich and irreplaceable raw material: the men and women of VINCI Environnement.

Working at VINCI Environnement involves a commitment to develop one’s skills within a dynamic company that is an expert in its field and very much committed to its various activities. It also means actively contributing to a progressive set of challenges in a way that is both fascinating and highly rewarding.

The personnel of VINCI Environnement demonstrate autonomy, adaptability, a team spirit and a talent for innovation.

To train our youngest recruits we’ve created an «engineer breeding ground» within our Technical Department. This programme welcomes young and promising graduates. During a 12 month period they receive mentoring and training on the specific techniques of VINCI Environnement.

A strength and a unique asset: the complementary nature of our skills.

Vinci Environnement is the only designer/developer and contractor in its field that is able to bring together 4 complementary skills: Water Treatment, Mechanical Biological Treatment of Waste, Waste to Energy and Flue Gas Treatment. Mastery of each of these sectors and the capacity to manage complex industrial projects provide VINCI Environnement with unique and unchallenged knowhow.

High, rigorous standards: customer focus.

For each project, VINCI Environnement strives to conciliate the following objectives:

- consider local needs in terms of environment and population,
- identify innovative solutions optimising performance and cost,
- design a sustainable project.

To achieve these goals a dedicated team is assembled for each project. This team then puts all of its efforts into developing a tailored solution to meet the specific requirements of each client.
A short history...

1960s & ‘70s Construction of first treatment plants by the group (TUNZINI using a Deutsche Babcock licence for waste incineration and SOBEA for composting).


1997 Acquisition of OTVD, subsidiary of VIVENDI, specialised in Mechanical and Biological treatment and in Vessel Composting.

1998 Acquisition of new technologies and processes: water-cooled grate, anaerobic digestion (KOMPOGAS licence).

1999 First company in its field to be ISO 9001. Acquisition of the company SPEIC (dry and condensation flue gas treatment).

2000 SGE ENVIRONNEMENT become VINCI Environnement.

2007 Registration of a English subsidiary: VINCI Environment UK.

2010 Acquisition and merging of VINCI Construction France’s Water Treatment Department. Registration of a Polish subsidiary: VINCI Environnement Polska.
Water treatment

«Our job is to provide everyone with uninterrupted access to clean water without adversely impacting on human health or the environment.»
Water treatment – either with regard to the waste water treatment or the production of drinking water - is deeply rooted in the VINCI Group’s history, knowhow and values.

Practical, real-life experience...

In the water treatment sector the VINCI Group enjoys many years of experience in the construction and operation of drinking water production plants and wastewater treatment plants.

With over 350 references VINCI Environnement can rely on the VINCI Group’s network of constructors to present an offer combining process and civil engineering.

A certain expertise, a certain line of work...

In water treatment as in all fields of its intervention, VINCI Environnement draws the greater part of its strengths from its men and women. Its diverse experience represents an unparalleled resource, a source of adaptability and creativity.

Each project becomes the subject of a unique and thorough examination and consideration, thus providing a specialised solution for each and every case. Such an in-depth procedure ensures our Clients’ satisfaction and the effectiveness of our completed facilities.

Mastering all conventional technologies, VINCI Environnement also offers more innovative processes including:

Wastewater treatment
- R3F®, Fluidized Fixed Film Reactor,
- R-Mes®, Membrane Bio- Reactor,
- UNITANK®, Sequencing Biological Reactor,
- VS Belt™, Compact suspended-matter separator.

Drinking water treatment
- MEMBRATEC®, ultrafiltration,
- CARBOSOGEA®, pesticides removal.

Certain values, a certain approach...

For each design and each construction project VINCI Environnement always seeks to minimize any environmental impact.

The company developed its EcoSave™ approach to ensure that its installations have the smallest possible impact on the environment yet still performing at optimum levels. Based on a life cycle analysis this approach takes into consideration and measures the environmental impact of a plant over its lifetime.

The approach starts at the initial design stage and continues through the construction phase, the long-term operation of the facility and finally decommissioning, dismantling and site clearance.
Mechanical Biological
Treatment of waste

“Transforming our waste into resources forces us to continually improve our processes to adapt to the variety and specifics of local contexts.”
This activity covers all processes for mechanical treatment (mechanical sorting, waste preparation, etc.) and biological treatment (anaerobic digestion and composting). VINCI Environnement possesses a real expertise in this field for which the company has developed specific tools and equipment having proven themselves in numerous facilities.

It all begins with mechanical treatment...

There are various existing techniques for sorting and preparing waste. This operation is carried out through mechanical equipment such as screening machines, shredders, metal separators, aeraulic separators and densimetric sorting. The main objectives are extracting and separating recyclable materials, biodegradable organic matter, refuse derived fuel from the waste to be landfilled.

Key factors for the performance of any treatment facility these waste sorting and preparation operations are the subject of detailed research and customised design by VINCI Environment.

... and continues with biological treatment.

Biological waste treatment covers the composting and anaerobic digestion processes.

Composting

This microbiological process consists of the fermentation of organic matter via aerobic treatment. The end result is compost a valuable soil-enriching agent. VINCI Environnement is a leader of the market of composting plants. The company’s exclusive technologies have been installed successfully in numerous French plants.

The composting process can be adapted to the specific requirements of each local context as well as to the nature and quality of the waste to be treated: food waste, green waste, kitchen waste, mixtures of several types of biological waste, etc.

Composting is followed by a refining – and occasionally a packaging – operation.

Anaerobic Digestion

This process consists of the fermentation of biological matter in the absence of oxygen. It permits the recovery from waste of high quality compost and biogas, a renewable energy source that can be converted into electricity.

Patented processes and very advanced technology.

VINCI Environnement has numerous technologies which offer customised solutions to the problems faced in this field by the Communities and the producers of I&C waste most notably:

BRS®, technique for pre-fermentation and preparation of household waste,

SILODA®, automated composting with forced aeration,

ECOSILO®, compartmented composting with regulated, forced aeration,

ECOTUNNEL®, tunnel composting.

Finally the KOMPOGAS® anaerobic digestion process a most proven process on the market developed exclusively in France by VINCI Environnement and non-exclusively on other territories.
«Waste reduction is one of our priorities. By converting waste into renewable energy sources we demonstrate a commitment to environmental protection in the most responsible manner.»
Waste to Energy – or Energy from Waste - constitutes a sustainable development activity in several respects. Firstly it represents the most effective means of reducing the amount of waste produced. Secondly it facilitates the effective recovery of the energy contained in the waste whilst at the same time conforming to the particularly strict European regulatory constraints regarding atmospheric emissions. These essential considerations justify the use of Waste to Energy within an integrated waste management scheme.

A certain principle, a certain effectiveness...

Waste to Energy allows the optimum reduction of waste (70% reduction in mass, 90% reduction in volume) while converting the energy contained within the waste into a renewable source of thermal and/or electric energy. The resulting residues («bottom ash») can also be reused as aggregate substitutes.

The principle consists of self-combustion uniquely via the calorific value of waste within a specially designed furnace mainly composed of a grate and a combustion chamber. The system is completed by a boiler recovering the energy released during combustion and converting it into steam.

Certain processes, a certain “avant-gardism”...

The energy recovery processes developed by VINCI Environnement apply to a wide variety of waste forms: residual household waste, refuse from mechanical biological waste treatment, SRF, diverse co-combustion waste and industrial waste.

The plants delivered by VINCI Environnement always use the best available technologies with regard to pollution control and environmental protection.

VINCI Environnement is the only Waste to Energy designer to in-house master all of this sector’s diverse technologies: its various models of rotating, stepped-grate and roller-grate furnaces as well as its recently developed water-cooled grate, constitute a complete and innovative range.
We always strive to develop ever cleaner treatment plants by considering how to protect the atmosphere in a responsible and sustainable manner.
The flue gas treatment plants developed by VINCI Environnement mostly apply to the emissions resulting from waste combustion. They form an integral part of our approach to targeting zero air pollution. Our company continually commits resources to research with this in mind. Thus VINCI Environnement specifically targets and develops ever more effective processes for the filtration and neutralisation of pollutants.

A certain context, a certain urgency...
Flue gas treatment represents a major challenge. Protecting the environment by reducing the atmospheric emissions of industrial activities is an essential objective for VINCI Environnement.

Our reflection, our means....
25 engineers are dedicated to this specific activity having at their disposal the most advanced calculation and simulation tools. They design 3-dimensional technical solutions to provide facilities that are ever more effective, reliable and cost-efficient.

Our services and skills...
VINCI Environnement also offer numerous services such as existing plant assessments and audits, refurbishment works and upgrading sites up to the latest standards. Its skills and savoir-faire guarantee solutions that are suited to new installations and the upgrading of existing facilities.

Its Research & Development Department is ever capable of developing the latest process and technical improvements as necessary. That’s what makes VINCI Environnement stand out.

Our processes and technologies...
VINCI Environnement design and build turnkey units to treat an especially wide range of gas flows, from 10,000 to 1,000,000 Nm³/h using the following recognised processes:

- treatment of acid pollutants via dry, semi-dry and wet processes,
- reduction of nitrogen oxides via catalytic and non-catalytic processes,
- treatment of dioxins/furans via dry and catalytic processes,
- treatment of heavy metals via dry processes,
- filtration of flue gases and particulates removal.

The company also develops its own in-house equipment notably:
- electrostatic precipitators and bag filters,
- scrubbers, cooling towers, and semi-dry reactors,
- catalytic reactors.
Spirit of openness

«We extend our approach beyond borders. We stretch ourselves constantly and challenge our expertise in every way possible, thereby standing by our commitment to always exceed our Client’s expectations.»
VINCI Environnement is characterised by its openness to quality, to the world, to progress and to others.

**An international presence:**

**subsidiaries closest to demand.**

VINCI Environnement uses the Group’s presence around the world to establish subsidiaries integrating the delivery of process equipment and civil engineering. Two subsidiaries have already been created in England and in Poland for our environmental activities:

- VINCI Environment UK,
- VINCI Environnement Polska.

These subsidiaries offer treatment solutions in harmony with local industrial procedures and standards. They oversee the treatment units’ design, construction and implementation, in coherence with the context of each country.

**An openness to new technologies:**

**always the most advanced processes.**

To ever improve its efficiency and satisfy its clients, VINCI Environnement is committed to a permanent approach centred on progress and innovation. Its two latest innovations concern waste combustion and water treatment.

**The water-cooled grate**

VINCI Environnement has developed water-cooling methods for its furnace grates while preserving their simplicity and low maintenance features.

The SOGE’O water-cooled stepped-grate is therefore available both for new projects and as an upgrade for existing facilities.

**The R3F® biological treatment for wastewater**

VINCI Environnement’s new patented process increases the purification capacity of reactors dedicated to the treatment of wastewater by utilising bacteria colonisation media known as «biomedia». This fluidized Fixed Film Reactor permits the creation of more compact installations for a reduced environmental impact.

**An openness to others:**

**a priority commitment.**

VINCI Environnement seeks to develop a socio-economic project for the long-term with the objective of sharing its successes with its employees, clients, partners, suppliers and all participants working towards an ever greater environment.

At the social level, emphasis is placed on health and safety, forward-looking work and skills management and on equal opportunity by involving the subcontractors in the same responsibility-centred approach.

At the environmental level, VINCI Environnement is convinced of the necessity to adopt a responsible attitude and measure the environmental impact of its facilities throughout their life cycles.
REAL SUCCESS IS THE SUCCESS YOU SHARE