

# Reconciling economic growth and green growth at SCIP industry park in China

In China, environmental issues are governed by increasingly strict regulations. The challenge for SCIP chemical industry park, the 4th largest of its kind in the world, is to be competitive, attractive and durable whilst respecting the environment and local residents... SUEZ took up the challenge by installing and maintaining water and waste management solutions designed to adapt to the fast-growing development of the park

## The mission

## Reduce the impact of the chemical industry and recycle industrial waste

Aware that the health issues linked to pollution were becoming increasingly urgent for the Chinese population, the Chinese authorities launched an environmental policy. With the manager of the SCIP (Shanghai Chemical Industry Park), they contacted SUEZ in 2002 for the design and build of a water treatment plant on the industrial site. In the end SUEZ were given the task of **managing the hazardous waste** on the site, **supplying drinking water and industrial water**, and **treating** its particularly polluting **effluent**.

**29.4** km<sup>2</sup>

The surface area of the SCIP petrochemical industrial park, the 4th largest site in the world.

**2010/75/EU**

The European standard with which the SUEZ incinerator complies

## Our answer

To respond to the request of the site, SUEZ extended its project to the production of a very high temperature hazardous waste incinerator (1100°C). Thanks to a joint venture set up with the industrial estate in 2003, waste processing was up and running by 2006!



## Brought the Chinese site SCIP up to the European standards

What challenges did the project present? To build and operate an hazardous waste incinerator which meets the EU standards in China. To succeed we recruited and trained local staff. We managed to implement cutting-edge technology based on equipment produced on-site. However, our response goes beyond just technological solutions. We offer a **chain of services**: logistics support, transport, packaging and labelling, training, etc.

## Keep up with the production rates of a fast-growing site

We designed a system adapted to this exceptional industrial site: almost 30 km<sup>2</sup> of fresh material arriving on a regular basis... In the incinerator, **two lines** with a capacity of **30,000 tonnes** were built first. To absorb the growing needs of the industrialists, they



will be supplemented by a **third**, soon-to-be-finished **line** with a capacity of **60,000 tonnes**.



## Create a circular economy

The combustion of the hazardous waste produces energy which is recovered and reused in the form of steam, partially replacing fossil fuels. The smoke is treated and filtered.

Each factory on the site is connected to the wastewater treatment network. The water is reused and feeds the **demineralised water production plant** which can produce **200,000 m<sup>3</sup> of industrial water** and **7,000 m<sup>3</sup> of drinking water per day**.

## Guarantee and constantly optimise the quality of waste processing

The SCIP Water Research Center (SWRs), the partner laboratory situated at the heart of the site, works on developing technologies to treat and reuse wastewater. To this end it regularly analyses the waste processed and puts forward new processes.



The results

The SUEZ wastewater treatment and waste processing solutions have made the SCIP petrochemical estate more competitive, attractive and durable thanks to cleaner production which saves the resource.

Inserted into the Chinese industrial fabric, the traceability and safety of which can improve still further, the SCIP industrialists can turn to SUEZ for 100% reliable solutions, precluding any risk to their image.

**30,000**  
**tonnes**

of carbon. This is the annual reduction made possible by waste-to-energy on-site.

**50,000** m<sup>3</sup>

of wastewater treated each day. The wastewater treatment plant is designed to receive a wide variety of heavily-polluted effluent

**25**

representatives of the Chinese government departments are trained each year by SUEZ at the SCIP site.

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