

## Benidorm, Spain



Wastewater:  
a city's biggest  
resource

# Maximising precious water resources to benefit citizens, tourism and agriculture

### Benidorm

Benidorm is a coastal town located in the province of Valencia, Spain, by the Mediterranean Sea and is one of the most populous towns in the region. It is a leading tourist destination, and one of the most important holiday resorts in Spain. The tourism-orientated economy has seen the development and construction of many hotels and skyscrapers along this part of the coast, as well as a significant increase in the town's population in recent decades. Benidorm welcomes an average of four million visitors every season.

### Customer challenge

In Spain, there is a significant strain on potable water resources and this pressure is especially acute in Valencia during the tourist season. For this reason, the Regional Government decided to investigate the use of treated wastewater as a source of irrigation water for agricultural use in order to free up potable water for the city's visitors and inhabitants.

### Solution

In April 2003, GE started working with the Regional Government of Valencia and their contractor on the design and construction contract for the Benidorm Tertiary Wastewater Treatment Plant. The new process consists of ZeeWeed ultrafiltration membranes treating municipal effluent plus a reverse osmosis for membrane desalination stage, enabling treated water to be used as an irrigation resource. The advances in membrane technology have made water reuse a technically feasible and cost-effective solution. This project with GE provided Benidorm with a dependable supply of water of consistent quality. Optimised energy and chemical usage and a compact design also contributed to a low life cycle cost and a small system footprint.

GE's ZeeWeed ultrafiltration technology is ecomagination certified.

### For more information

GE Water & Process Technologies  
[www.ge.com/water](http://www.ge.com/water)



GE imagination at work