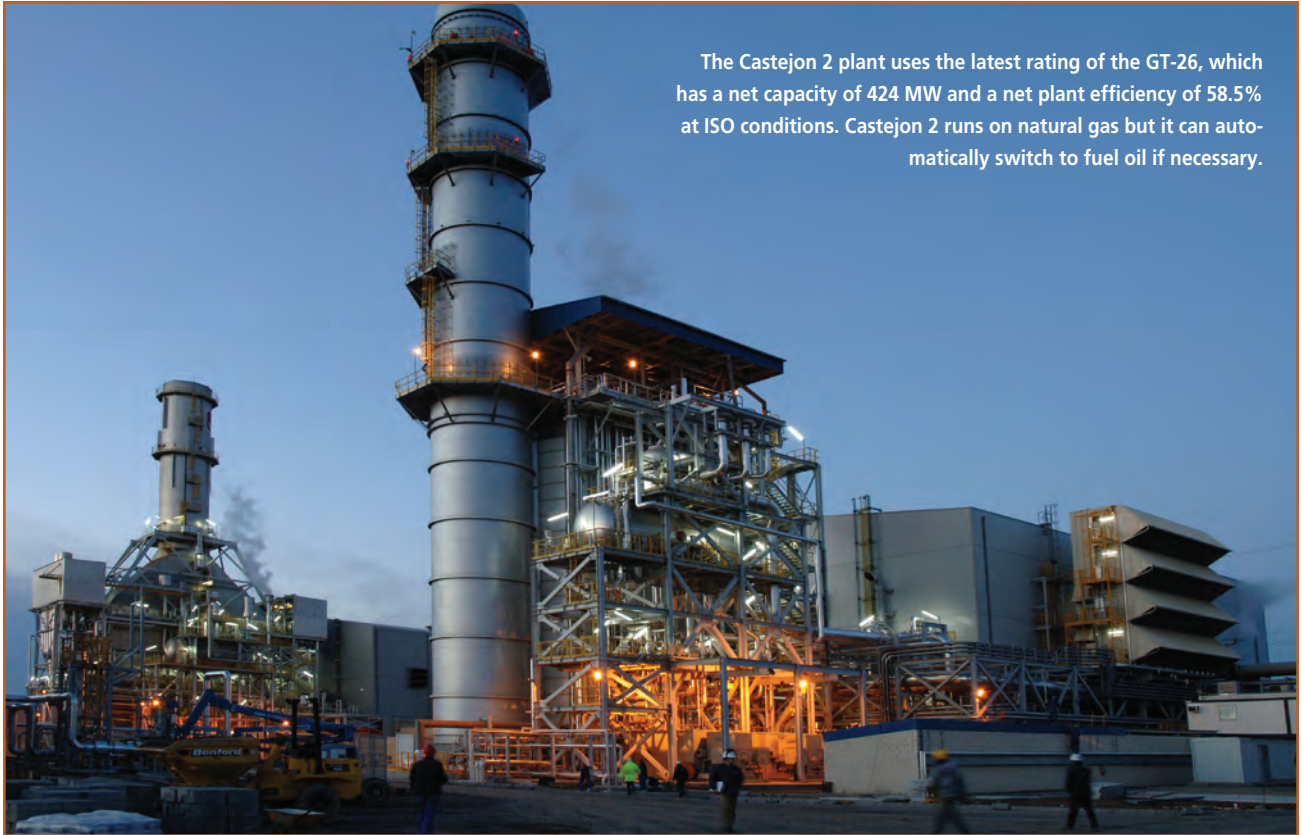


# World's Best Power Plants



The Castejon 2 plant uses the latest rating of the GT-26, which has a net capacity of 424 MW and a net plant efficiency of 58.5% at ISO conditions. Castejon 2 runs on natural gas but it can automatically switch to fuel oil if necessary.

## ANOTHER OVERACHIEVER FOR SPAIN'S MERCHANT POWER MARKET

### ALSTOM POWER

The combined-cycle power plant Castejon 2, constructed in Navarra, Spain, is a KA26-1 Single Shaft Power Train delivering 424 MW to the grid at ISO conditions that was delivered in just 24.5 months, thanks to Alstom's Plant Integrator approach.

Alstom's ability to design and build all the main components of Castejon 2 in-house made it possible to integrate the gas and steam turbines, the HRSG and other key equipment in a way that maximized the plant's operational and fuel flexibility, while minimizing its emissions. Another important enabler of fast-track execution was a system-oriented working approach that allowed the erection and commissioning of different systems at the same time.

Operational flexibility — the ability to operate in base-load or part-load mode or intermittently, with fast start-up and shutdown times was required to back up the intermittent output of the numerous wind farms in the region of Navarra, where Castejon is located.

The unique design of the GT26 gas turbines makes the KA26-1 combined-cycle power plant one of the most fuel-

efficient combined-cycle power plants, when operating both at less than full and full load. Castejon 2 uses the latest rating of the GT26, which sports a still higher power output and an improved part-load operational range. The KA26-1 has a net capacity of 424 MW and a net plant efficiency of 58.5% at ISO conditions. The GT26 enables fuel flexibility as well as operational flexibility. Normally, Castejon 2 runs on natural gas, but it can also automatically switch to oil, the backup fuel, if gas supplies are curtailed. In addition, an inlet fogging system increases the GT26's output by as much as 10 MW when ambient temperature is high and the plant requires additional output. Just as importantly, thanks to the GT26's two combustion chambers, Castejon 2 is well within regional air emission standards, even at partial load.

Castejon 2, just like the KA26-1 power plant Castejon 1, which averaged 98% plant availability during its first three years of operation, is the "overachiever," which provides the kind of performance crucial to generators operating in the merchant power market in Spain and elsewhere. 📍