

Improving Energy Efficiency



We continue to optimize energy use at our different plants by **exploring an array of energy-saving opportunities**, from visual management to heat capture.

Energy efficiency is a key pillar of Constellium’s sustainability commitment, and one that we constantly seek to improve at all of our plants. Altogether, we achieved a 2% improvement in energy efficiency from 2018 to 2019, with a 6.4% improvement against our 2015 benchmark, the equivalent of more than 370 GWh in energy savings⁽¹⁾.

We can attribute most of this progress to two main causes. First, two of our U.S. plants, Muscle Shoals and Bowling Green, vastly improved their energy efficiency in 2019, along with their overall production efficiency. Secondly, our Ravenswood, U.S.; Issoire, France; and Singen, Germany plants maintained or improved their energy performance with robust management and specific programs devoted to energy.

One case worth particular mention was Singen, where steady progress was made despite limited energy-related investments, proof that constant focus

on energy management can pay off. Also, at Ravenswood, implementation of visual energy management at the casthouse allowed operators to see



The Issoire plant’s project is expected to recuperate heat from the furnace exhaust fumes to provide a new source of heat for municipal facilities

the real-time effects of their practices on energy consumption. This led to further improvement in energy use and contributed significantly to the plant’s performance.

In France, we have a different kind of energy project on the horizon, with exciting potential. In April 2019, the city of Issoire officially (and unanimously) approved a joint energy project with our Issoire plant. The project entails recuperating heat from Constellium’s furnace exhaust fumes and transferring it to water via an exchanger, thereby providing a new source of heat for the municipal swimming pool, high schools, and other community sites. This initiative is expected to reduce the city’s energy expenses while cutting down on greenhouse gas emissions.

2020 TARGET	2019 ACCOMPLISHMENTS	NEXT STEPS
<ul style="list-style-type: none"> • 10% energy efficiency improvement compared with 2015 baseline <p>●●○</p>	<ul style="list-style-type: none"> • 6.4% energy efficiency improvement against the 2015 benchmark • Energy savings of more than 370 GWh compared with 2015 	<ul style="list-style-type: none"> • Further develop good practices in energy management throughout Constellium sites • Prepare the group for additional actions to take us beyond our 2020 target • Continue to look for new opportunities to save energy in all areas of activity

(1) The percentages and values of energy savings, compared with previous years, have been reviewed by PwC as part of the non-financial performance statement.