

# Dall Energy to supply turnkey boiler island for Dalkia in France

Dall Energy has developed a new, disruptive biomass furnace that reduces dust and particle emissions by more than 90% and can easily meet the demands in the new directive, and offer a whole new set of other benefits to outperform current state-of-the-art, the well-known grate combustion technology:

- Lower investment (much simpler design with very few moving parts)
- Lower maintenance costs (no technical difficulties, low power consumption)
- Very wide load window (fast and easy modulation between 10 and 100% load without problems)
- Reduction of fuel cost as the technology is very fuel flexible, enabling conversion of a wide range of low-value fuels such as wet and dry biomass, organic waste streams, willow, pellets, etc. in the same furnace

A new EU directive tightens emission values, puts forward demands for emissions monitoring. Today's technologies cannot meet the demands set forth by the directive by any other means than adding expensive emission reduction systems to their solutions.

The new directive will be a strong driver for Dall Energy, as Dall Energy technology meets these new demands at no extra cost.

The low emissions and the fuel flexibility was the main reasons why Dalkia – a subsidiary of EDF the main electricity company in France - in 2015 started to investigate the Dall Energy Furnace.

After several meetings and a fuel test of French fuel, Dalkia decided to purchase a first Gasifier unit from Dall

Energy for the city of Rouen in France.

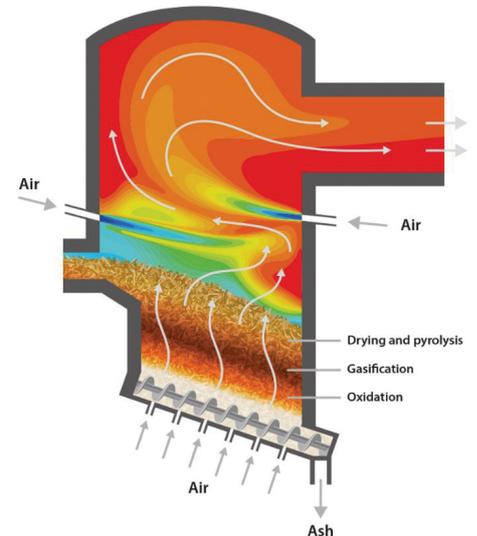
The new heating plant in Rouen is based on the Dall Energy gasification technology in order to comply with the city's requirement for reducing its environmental footprint.

Dalkia's selection of Dall Energy's technology was based on two main reasons; Firstly the patented gasification system allows for a cleaner combustion ensuring air emissions to be significantly lower than what can be obtained with traditional grate incineration system. Also, the furnace design contains no moving mechanical parts which limits the extend of maintenance works over the lifetime of the plant.

### Support from Horizon 2020

Dall Energy have received a received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement no. 811529, to upscale and demonstrate their technology.

The plant will supply up to 17 MW of heat to the network and run for more than 7 000 operation hours per year. A seemingly straightforward demand, however, the constraint is that the district heat network has no buffer tanks for hot water storage.



Thus the new heat plant needs to be able to respond and adjust accordingly to fluctuating daily heat demands on network.

### Construction underway

The fifth biomass gasification plant project for Dall Energy, the Rouen plant will be the largest of its kind to date. The company has previously built and commissioned three biomass gasification plants in Denmark and one in the United States in the range from 2 to 9 MWth.

The procurement and construction is ongoing according to the project time schedule. The plant will be put into operation in 2020. ●

