



FOGGING SYSTEM—ENERGY FROM WASTE CASE STUDY

AIR COOLED CONDENSER

In 2017, Kelvion Thermal Services completed an audit of an Energy from Waste plant located in France. The site's electricity production was limited to a maximum of 5MW during the summer.

The design temperature was stated at 18°C ambient. This creates a problem during the summer time, as there are extended periods of >35°C in that part of France.

A fogging system was installed, the system was used to control the peak temperatures providing an artificial lower ambient temperature at the inlet side of the fans.

The system is used only during the higher than design temperature periods.

The site had demineralised water available due to other onsite processes.

The ambient temperature was reduced by roughly 7.0 ° C, thus increasing the units exchange capacity.

Results:

The installation of a fogging system provided two benefits, firstly it allowed operators to have a greater control of the unit, secondly providing an increase in electricity production by roughly 1MW during the peak ambient temperature periods.

Key Figures:

- Production of electricity before installation of the fogging system : 5.0 MWe
- Production of electricity after installation of the fogging system : 6.1 MWe

