## Lancashire Waste Project - E,C&I Design and Construct

The Lancashire Waste Project is located in the Lancashire County of the UK. In March 2007, Lancashire County Council, Blackpool Council and Global Renewables Lancashire Ltd, signed what was then the UK's largest waste PFI contract; a £2bn, 25-year agreement to process the household waste of 1.4m people in Lancashire. The project comprises the construction and operation of two ground breaking UR-3R™ mechanical biological treatment facilities with joint capacity to process up to 600,000 tonnes of household waste per annum, and in doing so, divert 75% of household waste from landfill.





The project consists of two facilities – one in Farington, near Preston, and the other at Thornton, near Blackpool, with each plant handling the following three prime input streams:

1. Household residual waste or municipal solid waste is processed through the UR-3R™ (Urban Resource – Reduction, Recovery and Recycling) plant that is a configuration of processes that treat and remove recyclable products (such as HDPE, PET, paper, cardboard and ferrous and nonferrous metals and glass) and convert the organic fraction to compost and power. The

compost is used in the planting of 2.5 m trees across the project life span and thereby producing a further renewable resource and the 12,000 MWh of power produced each year is feed back into the national grid.

- 2. Green waste, including garden and kitchen waste, is processed through an aerobic composting process that produces a refined compost product that is used by gardeners and the horticultural industry.
- 3. Source separated dry recyclables are processed through a Materials Recycling Facility that converts the co-mingled feed of glass, ferrous and non-ferrous metals and mixed plastics into a fully separated stream of glass, steel, aluminium, HDPE and



PET for end-users. In addition, source separated paper, card and textiles which are received, stored and transferred to end-users.

MO Consultants were engaged by Waste to Resources, the head contractor for the design and construct of the two facilities and delivered the following services to the above project:

- Principal Electrical, Control & Instrumentation Engineer
- EC&I Project Manager