

Visit to Lincolnshire Energy from Waste Facility (EfW)

4th February 2015

The U3A group of 19 members met in the foyer of this huge imposing building which has dominated the North Hykeham landscape since the summer of 2013. FCC Environment manage the facility, after securing a 25 year contract from Lincolnshire County Council.



We were welcomed by Sally Hood, the Lincolnshire EfW Visitor Centre Manager, who expertly guided us throughout the tour. It began with a presentation in the conference room. We sat back as Sally talked us through screen after screen of fascinating information.

Concern regarding the future of our planet and the government directive on the reduction of landfill waste, has resulted in the introduction of processing centres for turning waste into energy throughout the UK, their purpose being to generate steam from burning the waste and turn it into electricity. The EfW facility is configured as a Combined Heat and Power Plant with capacity to export heat to local users and power to the National Grid. Since it began operating in July 2013, the North Hykeham site daily processes 462 tonnes of non-hazardous commercial and household waste that would otherwise go to landfills. It is designed to generate sufficient energy to power 15,000 homes each year.

The entire EfW site includes the incineration line, waste reception, storage, water, stacks, flue gas and air systems, facilities for treatment of exhaust gases and treatment or storage of residues and waste water. There are devices and systems for controlling incineration operations and recording and monitoring conditions.

Sally explained the various stages of treatment, starting with the arrival of the lorries at the Tipping Hall. We were surprised to learn that there are certain by-products of the process, the main one being bottom ash which is recovered and used for road building and in the construction industry.

Sally also stressed the importance of composting, re-using, recycling and upcycling (trendy name for remaking old items into something different). To most of us, this has become a way of life. However, there are apparently still households who will sneak a bag of grass cuttings into the black bins, slowing down and affecting the efficiency of the process.

After the presentation we were taken, via a series of security controlled corridors, to the Visitor Centre on the 3rd floor. The front of the building has huge windows providing a commanding view of Lincoln towards the cathedral. Looking down from our vantage point, we saw the arrival of one of the waste lorries. Deliveries are received from 5 transfer centres across Lincolnshire. Could this have been the lorry which emptied my black bin a few hours earlier? We spent some time in the control area where two members of staff were observing the recording screens and monitors which surrounded them, but they were not the main attraction! Opposite the front windows is a large glass screen overlooking a vast bunker where the raw waste is deposited. We gathered around the operator of an indoor crane device as he controlled the giant arm and claw through the screen, lifting and moving the waste and at the same time passing a cursory glance over the contents for any explosives detected at this early stage of the process. We were fascinated by what we saw. Rubbish can be so interesting!

Sally had to persuade us to tear ourselves away and continue the tour. This took us along the back of the building. There are windows at intervals, enabling us to look out on the impressive array of metalwork housing the processing system. I found this immense silvery casing strangely attractive and would like to have captured an image, for an unusual background on my new laptop! We were guided to the end of the building and into the schoolroom. There are currently 33 members of staff from varied backgrounds, mostly in engineering. New apprentices and graduates are expected to be starting soon. The schoolroom window has an excellent view of The Turbine, (Siemens of course) affectionately called Maria and complete with nameplate!

It was not possible to take the whole party round the Centre together. We split into 2 groups, taking turns to remain in the conference room where we were able to watch a film showing the progress of the Facility and enjoy the coffee, tea and biscuits kindly provided for us. This was very much appreciated. The visit ended with a huge thank you to Sally, for

such an interesting, informative and entertaining morning. She clearly loves her job and her passion and enthusiasm were infectious!

Grateful thanks also to John Dunn, for arranging the visit and Alan Campion for organising the group, in his familiar way.

Further information indicating the important work carried out by FCC Environment can be found on the Company's website www.fccenvironment.co.uk.

Jenny Porter