

13th April 2017

Stokvis Solar at Birmingham International

*A ten panel solar array featuring Stokvis Energy Systems solar collectors
installed at Birmingham International Rail Station*

The installation of a ten panel Solar array featuring Stokvis Energy Systems solar collectors, to serve existing facilities at Birmingham International Rail Station, is being assessed as a potential pilot for a wider roll out of renewable energy across the facilities operated by Network Rail and Virgin Trains nationally.

The project at Birmingham International - a station which serves both the NEC and the adjoining airport - was jointly commissioned by Network Rail and Virgin Trains, with renewables specialist ECO2SOLAR Ltd carrying out the installation of the Stokvis solar equipment.

In addition to the 10 Stokvis DF100-6 Evacuated Tube Collectors - offering a net absorber area 10.69m² - the manufacturer also supplied a Stokvis Solar Bloc Maxi pump-station, and a Stokvis Resol BX Plus differential temperature controller, providing up to eight sensor inputs.

Richard Davis, the engineer in charge of the project for Virgin Trains, commented: "We chose to use Stokvis equipment because I was already aware of the company's reputation for offering high quality products to the health sector and hotel chains; and have previously attended a seminar on their systems and products. This was always going to be a challenging retrofit, and although there have been some initial teething issues, Stokvis UK Sales Director, Keith Howard has been really proactive in resolving them. I believe we are going to see real savings."

The solar fluid contained within the solar collectors is circulated by the solar bloc pump station to a large surface area coil contained within a 1000 litre stainless steel thermal storage vessel which provides a 'pre-heat' for the domestic hot water, serving the station's toilets and various shops and eateries around the main concourse linking to the airport and NEC.

This solar preheat system raises the temperature of the incoming mains water from a typical 10 degrees to around 35 degrees centigrade, although it is expected to reach a figure of 55C to 60C in high summer.

The pre-heated cold water feed water then serves two existing gas fired water heaters which then increase the DHWS to 60C. This arrangement results in the gas fired water heaters not firing as regularly or having to raise the cold water supply from 10C to 60C as was previously the case.

The installation also features a heat meter to measure the output from the panels in kilowatt hours to enable the client to assess not just the benefit of the system, but also the level of payment possible under the Renewable Heat Incentive (RHI).

For further information on Stokvis products, call 020 8783 3050 or visit www.stokvisboilers.com.