## **Boatslide Hydro Power Scheme**

A micro hydro power facility has been completed on the site of the former Bedford Boat Slide close to



the Bedford Schools Boathouse. The Boat Slide was initially installed in the Victorian period, when the river was busy with leisure boats.

The boat slide, pictured left, was constructed to provide a link between the upper and lower rivers. Passengers would disembark from the boat at the top, leaving the boat to slide down the slope on rollers to the bottom where passengers would rembark to continue on their journey.

Unfortunately, the boat slide was not operated for many years, it became overgrown with plants and trees, and increasingly unsafe.

In 2011, planning permission was granted for the installation of a hydro-electric facility to provide green energy along Mill Meadows and the Embankment in Bedford.

The hydro power facility re-establishes the tradition of using the power of the river to drive equipment as it once did for the many mills on the river throughout the borough.

The new facility was officially opened by Dave Hodgson, Mayor of Bedford, on 18<sup>th</sup> June 2012. Local residents and school children were in attendance at the launch event and were able to take a tour around the facility to find out how the hydro facility works.









View the BBC Look East television coverage

View the ITV Anglia television coverage

The facility consists of two Archimedean Screw Generators, each screw is 3 metres long and 2.4 metres in diameter. The Generators use the same type of screw that Archimedes originally designed to pump water, except water is allowed to flow down the screw causing it to rotate. Archimedes screws turn relatively slowly so a gearbox is attached to the screw to drive the generator. The whole setup produces a highly efficient source of renewable energy. In addition, the screws are the most environmentally friendly hydro electric generators; being safe for fish and other creatures to swim down.

The design also incorporates a special Elver & Eel Pass to assist with their upstream and downstream migration. Spaans Babcock were commissioned to undertake a design and build contract for the installation, having previous experience of Archimedean Screws.

The two screws run independently and will produce approximately 130,000 kWh of power each year. The renewable energy produced from this facility will be used to power the amenity lighting on the river as well as exporting spare electricity into the national grid.

For more information on this facility, please see below for the new information sign that has been installed:

## Information sign at the hydro



