

Settle Hydro

CO2Sense gave £50,000 to Settle Hydro, Yorkshire's first community-owned hydro-electric power generation project



The Archimedes Screw in the Settle Hydro run-of-river scheme

The scheme, which began generating power in late 2009, is sited on the River Sett, near Bridge End Mill in Settle.

An Archimedes screw has been placed alongside the river to generate electricity from the natural flow of the water. The system has a capacity of 48 kilowatts (kW).

The scheme is on track to generate 180,000 kilowatt hours (kWh) of renewable energy every year, enough to supply around 40 households. It is expected to save around 800 tonnes of carbon emissions over the first ten years of operation by displacing fossil fuel electricity generation.

“Settle Hydro is a great project - it benefits the environment whilst generating a long term revenue stream for the local community.”

Jemma Benson – Principal Consultant – CO2SENSE

Renewable Energy

- First community-owned hydro-electric power scheme in Yorkshire
- Revenue is used for local regeneration and education projects
- Set to generate 180,000 kilowatt hours of electricity every year
- Produces enough energy to power 40 houses
- Saves 800 tonnes of carbon emissions over 10 years

The income that will be generated through the sale of electricity to the National Grid, which will also be supplemented by the Government's renewable energy incentive, will be spent on projects to regenerate the local area.

CO2Sense Principal Consultant, Jemma Benson, says: “Settle Hydro is a great project because it works on two counts: it benefits the environment whilst generating a long term revenue stream for the local community which can then be used for future projects.”



The hydro system in place in Settle

// With help from CO2Sense we have managed to successfully build a renewable energy scheme which uses both new technology and a new community ownership model.

Ann Harding - DIRECTOR – SETTLE HYDRO



The Archimedes screw featured in the project is relatively new to the UK, but is fast gaining popularity as it is seen as 'fish friendly'. Fish are able to swim through the system, removing the need for expensive screens, and helping to sustain the Settle's natural biodiversity whilst generating clean electricity.



The River Settle

CO2Sense contributed a £50,000 capital grant to the overall project cost of £340,000. This was used to fund the purchase of the Archimedes screw and generator.

Additional grants were awarded to the project from Yorkshire Forward and Key Fund Yorkshire, along with a loan from the Charity Bank. The remaining funding was met via a public share issue which raised £110,000.

The project is owned by Settle Hydro, an industrial and provident society for the benefit of the community. This is organised as a co-operative, with surplus revenue used for local community



The Hydro generator works in harmony with local wildlife

projects and for promoting environmental sustainability. The formation of Settle Hydro is jointly sponsored by StART (Settle Area Regeneration Team), Settle District Chamber of Trade and Settle Going Green.

Settle Hydro Director, Ann Harding, says: "With help from CO2Sense we have managed to successfully build a renewable energy scheme which uses both new technology and a new community ownership model."

Already the scheme has won four awards for its innovation and environmental benefits, including the 2010 Yorkshire Rural, Yorkshire Post Community Environment and Yorkshire Forward Creating Better Futures awards.

Most recently, the Renewable Energy Association Community Award recognised the project's inventiveness, tenacity and advocacy in establishing a complex hydro scheme for the benefit of the whole community.

CO2Sense was established by Yorkshire Forward to help businesses in the region to prosper in the low carbon economy. We provide expertise and funding to help environmental companies to grow. We work with partners to help all organisations to fund and develop initiatives that reduce their carbon emissions.