

## Irwell Low Carbon Catchment

## RCEF Stage: 1



Key Facts	
Land	Multiple land owners where land lease agreements will need to be arranged
Grid	Winter baseload generation that means a good match for the electrification of heat.
Engagement	Community Hydro projects are a great way to engagement communities about issues around climate change and low carbon energy.

### The Story

This groundwork, RCEF project is looking at a multi-benefit carbon catchment approach across the Irwell catchment, which is a large natural capital asset within Greater Manchester. The Irwell Catchment has the potential to be a valuable carbon sink and a holistic approach should be considered when we think about Hydroelectric power, e.g. Fish passage and improved fish migration, improving the river status under the Water Framework Directive, Flood: Mitigation, Slow the flow: peatland restoration, tree planting, directional ploughing, Identifying storm drain runoff hot spots, encouraging rain gardens, and creating urban wetlands. Also we should consider a blue amenity space, well-being and mental health, linear park and recreational space, preserving and celebrating industrial heritage - a holistic approach to the catchment becoming a carbon sink.

### Key Figures

<b>Project size:</b>	Low head hydro 1 MW
<b>Tech type</b>	
<b>Energy Generation</b>	5,500 MWhs
<b>Private finance leveraged</b>	£10,000,000
<b>CO2 savings</b>	1,500 Tonnes pa
<b>RCEF grant</b>	£40,000

### Challenges & Risks

Above are some of the 14 sites that we have prioritised as potential projects. Without the Feed-in tariff, we need a long-term stable energy contract. This could be through a 'Synthetic' Power Purchase Agreement like Devon County Council has formulated. We are looking at a community benefit development vehicle and want to look at working with Greater Manchester Combined Authority to see if they would sponsor a Community Municipal Bond for investment.

### Further notes

LEP area: Greater Manchester Combined Authority
Link for further info: <a href="#">Congleton Hydro on Vimeo</a>

### Lessons Learned

Hydro is a very visible and emotive addition to any river that draws visitors and volunteers. Benefits of hydropower include winter generation that matches the GB demand profile, as well as reducing dependence on fossil fuels. Benefits to local communities include flood protection and water supply for domestic and commercial use, as well as opportunities for employment, education and recreation. Hydropower facilities also provide a boost to national economic growth through trade, transport and tourism.