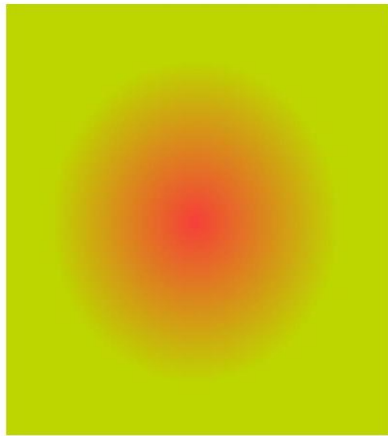


Community Energy

Ross Weddle



**Green
Community
Buildings**

My background

- Urban and Community Forestry - to 2003
- Local Strategic Partnership Manager - to 2007
- Community Renewable Energy - to 2012
- Green Community Buildings - now
- Northern Community Power - now
- Community Energy England - now

Major success



- Berwick Community Wind Turbine

GCB Approach

- Energy Audit of Community Building
 - 15% average energy reduction from low cost measures. Up to 60% reduction from capital works.
- Renewables Options Appraisal
 - Retro-fit renewables further reducing energy bills.
 - Landscape scale renewables for an income

Bullion Hall Case Study

Audit report in 2008. Recommendations included cavity wall insulation, zoning heating system, improving energy management and installing solar PV and hot water panels.

Follow up study in 2011 after heating and insulation measures installed. Hall usage had risen but electricity consumption fell by 9% and gas consumption by 38%. Investment total cost £8,600, savings annual £3,000

Bullion Hall



Mickelton Village Hall

Recommended simple draft proofing, repairs to doors/fire exits, adding additional heating zone, replacing radiators in main hall with convector units (large room, high ceilings, slow warm up times)

Follow up visit. All main recommendations installed - cost c £7,500. Oil consumption fell by 36%, cost savings £2,500pa.

Follow up also recommended small solar PV system now installed.

Mickelton Hall



Current Landscape scale projects

- Wind Park

Three Northumberland communities
developing a Community Wind Park.

Income in the range of £150k pa

- Anaerobic Digester

A new build abattoir's waste input providing
heat, electricity, fertiliser.

In conjunction with a community food
initiative.

Landscape Scale projects

- PV Array
- One hectare solar array generating an income of some £50k pa
- Tidal Hydro
- Still in Feasibility – Victorian navigation cutting that fills with water twice a day

Landscape Scale Projects

- Newcastle

On the back of work undertaken by the University we are completing a feasibility study for a 1600 m bore hole to access water at a constant 67C. From this we will provide a neighbourhood heat scheme.

- District Heat, Newcastle

Combined Groundsource and AD heat. Utilising local open space and green waste from local land maintenance.

Summary

GCB works with any community.

- We start with small steps and slowly scale up.
- We know that we can't do everything.
- We don't sell any kit, we look for and recommend solutions appropriate for your buildings, for your community.
- We focus on
 1. cost reduction
 2. sustainable income generation

Thanks for listening

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