

Dane Valley Community Energy

Congleton Hydro

Outline Scope of the Development of an Education Plan

Overview

The Congleton Hydro Scheme, as well as generating “Clean Energy” and realising annual funds for Environmentally/Sustainability based community projects will also *facilitate an Increased awareness of environmental and sustainability issues by the provision of an accessible Education resource for local schools, colleges and community groups.*

Objective

To properly realise these educational aspirations, we are producing an Education Plan. We recognise the potential educational value of our scheme, as does the Local Authority (Cheshire East) who have made the production (and subsequent implementation of such a plan) one of the planning approval conditions.

Scope/Outline Requirements

Key elements of the plan to be developed include:

- Recipient Base
Schools/Colleges—KS1, KS2, KS3 and maybe KS4
Community &U3A Groups.
- Modules
(see potential brainstorm list)
- Module Content and Preparation
- Module delivery
Who by? where?
- Identification of the Design and construction of “Hands on kits” e.g. water wheel, mini weir/ waterfall, small generator etc
- Site Activities/Tours
Recruitment/training of suitable volunteers to guide, “teach” demonstrate etc.
- Identify links between sessions and relevant parts of the National Curriculum and the key stages where pupils are likely to meet concepts underpinning the proposed sessions.

Key Deliverables

For each education we will need to produce material to promote and support visits:

To promote we need to devise:

- Introduction sheets
- Advertising Material
- Curriculum links to KS and exam syllabi
- Simple user-friendly booking procedures
- etc

To support visits, we need to develop:

- Scripts for session leaders
- Guidance for session activities/advice/procedures etc
- Illustrations e.g. PowerPoint slides
- Feedback/data collection procedures
- Booklet/worksheets for students
- Education kits
- Training and delivery/task allocation plans for volunteers
- Etc

On-line presence

There will be an expectation that we have an on-line presence and we will thus need to develop this and ensure that the supporting material is both available and of professional quality.

Policies

Even though school groups will invariably be under the supervision of teacher/assistants, suitable policies will be developed and put in place to cover the work of additional (DVCE recruited) volunteers eg:

- Children Safeguarding (including Nominated Designated Safeguarding Lead and Deputy)
- Adult Safeguarding
- Safer Recruitment
- Equality and Diversity
- DBS Process

Timescale

The Education Plan to be developed in parallel with the construction of the site i.e. Draft Plan complete by December 2020. First educational sessions will depend on the exact timescale of operation and site safety etc, but probably initial sessions trialled mid-2021.

The education plan will be developed by DVCE specialists, Volunteers and in association with the STEM leads from local schools.

Appendix

Possible Modules to be investigated to form part of the plan:

- *Possible causes of climate change
- *Green Energy Generation (solar, wind, hydro etc)
- * Hydro Power –how do we derive useable power from water
- *Rivers---spate rivers, flood plains, water erosion etc
- *How does our scheme work?
- *Woodland management
- *local Flora and Fauna
- *Fresh Water Habitats
- *Sustainable Communities
- *Local Government—The Planning and Approvals Process
- *STEM---modules to include mechanical conversion e.g. Archimedes screw and gearbox, Electrical Conversion e.g. generator and vsd. Volts, Amps, Power, Resistance etc. Losses mechanical and electrical. Control and Instrumentation. Power transfer—use of transformers and so on.

