

SWDCEP Addendum to Plan LoCaL District Heating Exercises

Introduction

A Biomass District heating network workshop was held on behalf of the South West Devon Community Energy Partnership (SWDCEP) at Tavistock Enterprise Hub on 4 July 2014. A total of 10 people attended, representing Regen SW, Devon County Council, Sustainable South Brent, Transition Town Totnes, Transition Tavistock, Newton and Noss Environment Group, 361 Energy and the North Devon Biosphere Community Energy Group. The main aim of the workshop was to run through the Plan LoCaL exercises “[Identifying and assessing a potential district heating area using the National Heat Map](#)” (referred to in this document as Exercise 1) and “[Assessing the heat demand of a whole community for biomass district heating potential](#)” (referred to in this document as Exercise 2) to provide a common level of understanding, review their usefulness and also determine what else might be useful to a community energy group considering potential local projects.

The result is this addendum to the Plan LoCaL exercise which the Partnership recommends for use alongside the existing tools.

Relationship between the Two Exercises

Both exercises were tested at the workshop because of their considerable degree of common ground. In many ways they were found to be complementary to each other and this broadened the group’s understanding of the data available and how they can improve on it.

Exercise 1

Full instructions for running the exercise

- a) The links to the main CEO Heat map website and the user guide need updating. The correct links are:
<http://tools.decc.gov.uk/nationalheatmap/>
http://tools.decc.gov.uk/en/content/cms/heatmap/user_guide/user_guide.aspx
- b) At Stage 2, once the group has used the polygon tool to draw a loop around the priority area they have identified, they should be aware that the report produced will only provide data for the sectors that exist within the area selected; in many cases only a few lines of Table 1 may be filled from the data provided.
- c) If the participants have access to tablet computers, ask them to bring them along. They can be used to supplement the projector screen views of the Heat Map.

Exercise 2

Stage 2: Carrying out the exercise

- a) If the participants have access to tablet computers, ask them to bring them along. They can be used to supplement the satellite photographs if an internet connection is available at the venue.

Table 2: Non-domestic properties

- a) The approximate floor area of non- domestic buildings is entered on Table 2, not Table 1 as suggested by the instructions.
- b) The terminology used in Table 2 and the different treatment of the calculations for overall heat demand for domestic and non-domestic buildings can cause some confusion. Tables 1 and 2 use 'Total heat demand' and 'Total heat load' to mean the same thing. Total heat load for non-domestic buildings has to consider the efficiency of the boiler because the kWh/year benchmarks you have been provided in the handout is kWh/year of fossil fuel as delivered to the building, not of useful energy as output from the boiler. Boilers are not 100% efficient at converting fuel into useful energy, hence you are asked to multiply total fossil fuel use by 0.75 to arrive at total heat load. This calculation is not necessary for domestic heat demand because the kWh/year figures provided in Table 1 already represent the heat load of the buildings.

Table 3: Summary of estimated total heat demands

- c) The asterisk used in the right-hand column links to the top of the 2nd column on page 2. This suggests that you may wish to compare the total heat load you have calculated in Table 3 with actual energy consumption statistics for your local area (the hyperlink here also needs updating). This will give you an indication as to what percentage of local energy demand your scheme could offset. An updated hyperlink for the sub-national energy consumption statistics is:

<https://www.gov.uk/government/organisations/department-of-energy-climate-change/about/statistics#sub-national-energy-consumption-statistics>