

Action on Climate Emergency ACE Settle and District

Local Area Energy Plan

and

Report on Community Consultations

Autumn 2022

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Executive Summary

A significant part of the solution to the climate emergency lies in reducing the demand for energy whilst increasing the amount of energy generated from renewable resources. Along with other activist and community groups, Action on Climate Emergency, Settle and Area (ACE) also recognises that communities have a key role to play in increasing the generation capacity for their local area.

Throughout 2022, the Energy Group of ACE has been actively developing interest in local energy generation and this report is the culmination of the consultations and discussions that have taken place. The conclusion of the individuals and community groups involved in the discussions is that there is an increasing demand for renewable energy in Settle and area. There is also a desire to see this energy generated locally and to be under local control. The individuals and groups also firmly believe that, if we are to take greater local control over our energy generation, we will need to accept and embrace changes in our local landscape and infrastructure to facilitate this.

Settle has relevant experience. This was one of the first places in the country to develop a community hydro electric scheme (Settle Hydro) which has been operational for 12 years. More recently, the Trustees of Settle Swimming Pool completed a very successful crowd funding campaign to install a solar PV array on Settle Swimming Pool.

With this track record and with the support of ACE, the Energy Group is confident that these successes can be replicated, initially with domestic and commercial solar PV arrays but, in the longer term with community wind generation capacity; anaerobic digestion; and additional small-scale hydro. It is recognised that these ambitious plans will require the continuing support of the local community but will also need to attract funding from others. This Local Area Energy Plan outlines the plans for significantly increasing the capacity for generating energy within Settle and the surrounding area and to provide the starting point for further discussions with local authorities and potential funding bodies.

Introduction

Action on Climate Emergency, Settle and Area (ACE), is actively seeking solutions to the climate crisis. Given the key role of energy demand in driving emissions of greenhouse gases, the Energy Group within ACE undertook to explore ways of reducing demand and increasing local supply of renewable energy to meet the needs of the community.

The Energy Group recognized that a comprehensive plan to address the needs of the wider area could delay the process and potentially become unmanageable, so it was decided to focus initially on the adjacent parishes of Settle, Giggleswick and Langcliffe, the area covered by the <u>CO2 Sense</u> <u>Report 2012</u>. The hope is that the methodology applied to these parishes will be equally relevant elsewhere and that appropriate plans will be developed further afield.

To consider the ideas further and to elicit the views of residents of the three parishes (and the wider community who might be affected by such plans), ACE undertook a public consultation exercise which began in May 2022 with a public meeting. Details of discussions that took place at the public meeting and the follow-up discussions in September 2022 can be seen below.

This report is the culmination of the consultation exercise and seeks to gain the public support of policy makers at local, District and County level, along with other decision-makers in the Yorkshire Dales National Park Authority and the York and North Yorkshire Local Enterprise Partnership (LEP). In addition, ACE is seeking access to start up funding to enable the group to develop these ideas further and to determine the feasibility of local energy generation for the three parishes identified.

In putting forward the plan at this time, ACE recognizes the challenges presented by the imminent changes to local government in North Yorkshire but hope this will not be used as a reason to delay any decisions about supporting local energy initiatives.

The background to this discussion is the climate and biodiversity crisis which prompted local government, businesses and other organisations in the area and beyond to declare a climate emergency. For some, this led to them publishing ambitious plans for decarbonizing energy production and distribution in North Yorkshire. Most notable among these plans is the Routemap to Carbon Negative, published by York and North Yorkshire LEP. This puts forward a plan for North Yorkshire to be net carbon zero by 2034 and carbon positive by 2040.

For ACE to play its part in achieving the ambitious targets set will not be possible without public support and local involvement. It has been shown that plans for local energy generation are more successful when the local community:

- Is involved in the decision-making process;
- Benefits in some way from the project(s).

An increasing number of people within the local area now recognize that we are in a climate emergency and that rapid action is required. A change in attitude was noted in the public consultations, especially from younger members of the community. In developing these proposals, the Energy Group of ACE seeks to involve the local community at all stages and to ensure that the community benefits from any renewable energy generation project that come to fruition.

The Energy Group of ACE has prepared this Local Area Energy Plan to outline what residents and other stakeholders believe is possible. We want to gather your support for implementing these plans as we help our local councils and other decision-making bodies to meet their ambitious targets for decarbonizing the energy supply in this area of North Yorkshire.

The consultation process undertaken by the Energy Group of ACE concluded that there is the potential for the area to produce a significant proportion of its electricity requirements locally. Heat generation is more difficult and achieving a level that would make an impact on current use will be challenging.

Public Consultation

The public consultation comprised three strands:

- 1. An initial workshop with a variety of local stakeholders and representatives
- 2. A call for public responses to the outputs from the first workshop
- 3. A second workshop to synthesise ideas and concepts in preparation for this Local Area Energy Plan.

First Workshop

A full day workshop was held on 21 May 2022. This was open to any member of the public but with specific invitees from a wide range of local institutions, businesses, and community groups. Twenty-nine invitations were extended; nineteen people participated, including the presenting team of five.

The focus was on renewable energy production in relation to the present electricity use in the area. Whilst acknowledging that reducing consumption, for example, through greater efficiency, much improved insulation, adjusted patterns of use, and other measures is acrucial and urgent response to the climate emergency it is not the focus of this energy plan.

A 'Future Energy Landscape' model was used for the workshop. The method was developed by CPRE – the Countryside Charity, with the Centre for Sustainable Energy (CSE). It is being used by a range of communities around the UK to investigate available renewable energy technologies in the context of the local landscape. It was considered appropriate for this geographical area due to the range of protected areas, landscapes, and buildings. The methodology guides participants to identify what does and does not make them feel connected to the area, what infrastructure is already apparent in the area, and what the current demand for energy comprises. The output from the model is to map options for renewable energy generation onto suitable sites. The energy produced and carbon saved for each type of generation is calculated for each suggestion and compared to locality specific patterns of demand.

For a detailed explanation of the methodology, see

https://www.cse.org.uk/downloads/file/future-energy-landscapes-design-and-rationale.pdf) Delegates were provided with the following information from 2020 about energy requirements in Langcliffe, Giggleswick and Settle:

Population	4 320 people
Total electricity consumption	19 640 MWh
Domestic electricity consumption	12 264 MWh (12.26 million kWh)
Non-domestic electricity consumption	7 376 MWh
Number of electricity meters	2 984
Average domestic electricity consumption	4 110 kWh
Total gas consumption	78 748 MWh
Domestic gas consumption	29 607 MWh
Non-domestic gas consumption	49 141 MWh

Notes:

- (i) 1 kWh is 1 'unit' on an electricity bill.
- (ii) For simplicity in this consultation, we assumed that the number of electricity meters equates to the number of households, although the true figure will be somewhat less.
- (iii) Overall, households in Langcliffe consume less than the average, while those inGiggleswick consume above.

The results of the discussion were:

How and why we feel connected to the area:

- Most friendly place of anywhere lived
- Through work, volunteering, friendships, social events
- Contained community
- Well placed to get to other places
- Nature facilitates so much
- Responsive and self-reliant community that gets things done, for example:
 - Community response groups set-up during Covid
 - Community-run swimming pool

- Settle Cricket Club new clubhouse
- Keeping the library open
- Welcoming and resettling refugees.

What electrical and other infrastructure already exists:

- Electricity sub stations
- Electricity poles and overhead cables
- Radio and mobile masts
- Settle Hydro (a community-owned renewable energy project)
- Wind turbines visible from parts of the area
- Electric charging points
- Railway infrastructure
- Petrol stations
- A65
- Caravan sites

Renewable Energy options:

Consultees proposed a wide variety of options for generating energy from renewable sources that could be mapped to the locality. They assessed their contribution towards electrical demand compared with cost.

Technology	Cost	Equivalent no. of homes powered
Domestic rooftop solar PV (typically 4kW per roof) on 1032 homes	£8,256,551	986
20 Small community solar (e.g. public roofs) 30kW each	£600,000	143
3 very small wind turbines (house height i.e. 15m high)10kW each	£135,000	17
5 small wind turbines 30m high 100kW each	£1,725,000	261

3 medium turbines 60m high 1000Kw each (1 MW)	£3,000,000	1629
Anaerobic digester 50kW	£500,000	654

They also proposed two measures to produce heat locally -

Technology	Cost	Equivalent no. of homes powered
Solar thermal roof panels on 206 houses to produce hot water	£825,655	24
Install electric air source heat pumps in 609 homes	£5,573,172	619

These two measures increase electricity demand by 2,601MWh and are the only ones to reduce the heat demand, by 13%.

Adopting all the measures would supply 67% of total electricity demand (domestic and nondomestic) across Settle, Langcliffe and Giggleswick. The cost would be £20.6m and would power the equivalent of 3,690 homes. The least favourable option of simply exporting the generated electricity to the National Grid at the current 'Smart Export Guarantee' price of 5 pence per kWh would earn £744,123 per year (a 3.6% return).

If the all-important 'powering down' through extensive insulation and energy saving were deployed (i.e reducing demand) it was agreed that the locality could approach self-sufficiency.

A summary of the results of the workshop is shown in Appendix 1.

Public Responses

The outcomes from the initial workshop were widely disseminated through articles in the local press (Craven Herald) and the Community News (distributed to every household in the three parishes and beyond). Opinions were canvassed via three public events – a Market Place stall during the Queen's Jubilee celebrations, and ACE Green Cafés held in the Victoria Hall Gardens on two Saturdays in July and August. All were publicised in the press articles and multiple local notice boards. Comments were also invited by email over an 8-week period. The report from the

workshop and an invitation to respond was also distributed to local councillors and town/parish councils, the Climate Action officer at the district council, the Chamber of Trade, and the ACE mailing list of over 100 supporters.

Between 20 and 30 people responded to discussions at the Jubilee stall and approximately 15 attended each Green Café. ACE received 4written responses, including one from year 6 students at Settle Primary School who had worked on the topic. They sent numerous individual suggestions and ideas.

The public responses were overwhelminglypositive, both towards the deployment of the individual technologies but also to the benefits of local generation. Improved resilience of the local energy supply, especially in the face of increasingly uncertain national and international supplies; reduced losses in transmission; the possibility of generating and purchasing local electricity at fair local prices (amplified by the current cost-of-living crisis); and the positive effects on climate change were all highlighted by respondents with different emphases by different people and groups. Some raised the importance of sharing benefits equitably in the locality irrespective of personal assets and wealth.

Roof-top solar was well-supported and did not attract any significant negative comments although capital cost was identified as a potential barrier for individuals. Small solar farms, especially if linked with existing commercial-scale roofs were positively received.

Wind turbines divided opinion regarding their aesthetics, but smaller sizes were more likely to be looked upon favourably. The consultation has deliberately excluded large turbines from the meetings and plan because of their likely adverse impact on the valued and protected scenic amenity of the locality. Young people were strongly in favour of wind technology and pin-pointed several possible locations. There was noticeably more support and less anxiety expressed than in a report for a sustainability strategy for Settle that was published 10 years ago ("Settle – The Sustainable Town" by CO2sense, 2011).

Second Workshop

The second workshop comprised a 2-hour meeting, to synthesise reflections and responses to enable a firm LAEP to be developed.

Little fundamental change to the original proposals were suggested. It was noted the larger the scale of a single installation, the more cost effective it becomes. Solar farms are competitive

with large wind turbines, and these two sources are, by quite a long way, the largest potential producers of energy for this area. However, both these depend on finding suitable sites that are acceptable to planners and the community, while also having good connectivity to the electrical grid.

Without these larger installations, the area is unlikely to meet more than 25% of its electricity requirements from renewable resources. After the large-scale installations, greatest benefits are expected to be obtained by utilising the larger buildings and spaces, both public and commercial. At the other end of the scale, individual residential installations can only provide a relatively small proportion of local electricity requirements for our area, but widespread coverage could be very significant and has the advantage of being practical to achieve, notwithstanding recent difficulties securing supplies of equipment.

Information about these technologies is contained in Appendix 2.

Opportunities and Barriers

Opportunities

This LAEP aims to equalise costs across the community – to use locally generated energy to secure supply to local households and businesses at a reasonable cost.

- There is an opportunity to reduce demand in the area by encouraging householders to use less energy overall but particularly at periods of peak demand.
- ACE's work on this LAEP has been chosen for a North-East and Yorkshire Net Zero Hub package of support to be delivered by Community Energy South [CES].
- ACE can learn from others and build partnerships. CAfS in Cumbria is an established group and a group has recently formed in Nidderdale. ACE is part of a steering group to bring together numerous community energy groups across Yorkshire and the North-East.
- ENWL are inviting businesses in certain supply zones to benefit from load shifting to level supply and demand and Ofgem is approving schemes that will offer discounts to customers who cut their electricity usage at peak times
- The public consultation has demonstrated that there is an appetite for local energy generation in the three parishes.
- Subject to available funding, the Energy Group of ACE is willing and able to set up feasibility studies to look further into the options for renewable energy and to facilitate the establishment of appropriate body(ies) to develop projects to fruition.

Barriers

ACE recognises there are significant barriers to be overcome if we are to see any meaningful local energy generation. These include:

- Smart meters do not receive a signal in parts of the locality which makes it difficult to monitor energy consumption locally. This may be a pre-requisite for some forms of funding.
- Location of generators (wind turbine/solar) is dependent on connection to the distribution network. Barriers include the cost of the connection, time scales for connections to be made and whether the capacity exists in the electricity grid locally.

- Opinion is divided about wind turbines, but it is anticipated that if the community is involved in the siting, size and number of turbines and benefits from their installation, objections may become less significant.
- A feasibility study considering the installation of an anaerobic digester at the Arla creamery in Settle has identified that there is insufficient space for the equipment.
- Planning opposition could be likely in or adjacent to the National Park, AONBs, SSSIs and if in view of historic houses or buildings such as The Folly or Giggleswick School Chapel.
 However, a shift in approach by the YDNPA planning authority is evident in response to the Climate Emergency.
- There is potential for conflict in land use between solar farms and agriculture. This would require discussion with individuals and NFU. Solar panels may provide shelter for sheep and be useful diversification.
- Solar panel supply problems have arisen in the UK. This is the result of multiple issues such as shortages of trained installers; complex import documentation; and commodity shortages, particularly hitting supplies of inverters and other components rather than the solar panels themselves.

Implementation

Role of ACE

It is recognised that the implementation of this LAEP will require considerable time, effort, and funds. As a voluntary organisation focused on awareness raising and activism ACE does not have capacity to implement the LAEP but would seek affiliation with any organisations implementing the LAEP.

Although it was not the focus of the consultation and of this report, in the short-term, ACE can provide information and advice to local householders and businesses about energy conservation. There is a wealth of very good advice available about this, without ACE getting involved in developing new information sources. ACE can provide a focal point for this information and signpost interested parties to relevant and appropriate information sources.

In the medium term, ACE has a continuing role as outlined below.

Rooftop Solar

- 1. Undertake or commission a rooftop survey. This would: identify suitable areasfor projects involving the bulk purchase-and-installation of solar PV; and the parts of the three parishes that would yield the greatest benefit in the shortest time and for the lowest outlay. A systematic approach to targeting neighbourhoods in specific distribution network areas will be more effective than the present system of ad-hoc individual installations
- **2.** Consult with the relevant DNO to ascertain layouts for the solar arrays that avoid costly new infrastructure works.
- 3. Develop plans for funding the installation of the solar PV in the identified areas. A theoretical plan for implementation has been outlined and can be seen at Appendix 3. This puts forward a potential capital outlay of £8 million for the first one thousand installations.
- 4. The increase in energy prices in the second half of 2022 has sparked new interest in solar and high demand for solar panels, with less affluent households, not able to afford solar PV, missing out. In the short to medium term, ACE can help meet this potential demand by exploring and implementing bulk buying and installation contracts, to reduce initial capital outlay for householders and property owners. Setting up a Local

Energy Club would not only facilitate and encourage more rapid roll out of solar PV but would enable members unable to generate power to benefit from lower local energy pricing.

5. Industrial roofs are a potential source of larger scale solar investment. ACE can advise the owners of suitable properties of the potential benefit from solar generation. As well as benefiting directly from local energy generation, the owners of these roofs could also contribute to the Local Energy Club.

Community Wind Turbines

- 1. Generating energy from wind is a priority to balance the seasonal benefit of the planned solar arrays. Smaller turbines are less controversial and more likely to be developed by small local groups and individual farmers. ACE, using local knowledge, can suggest potential sites and assist with others the necessary surveying and monitoring to provide accurate wind data. ACE can help liaise with the Distribution Network Operators (DNO) to identify grid connections, and preparation of planning applications. Smaller turbines serving local communities or outlying villages could significantly benefit rural communities within the existing capacity of the grid.
- 2. Support the establishment of an implementation body, possibly a Community Interest Company (CIC) or similar, to raise funds for identifying potential sites, a feasibility study, planning application and funding for the purchase and installation of a small (3 turbine) wind farm in the area. A small wind farm of this size is a way of making a significant contribution to energy requirements for the area, and to meet the overall requirements it will be necessary to introduce wind power at scale into the plans.

Anaerobic Digestion

 Support research and public consultation into the potential contribution of an Anaerobic Digestion (AD) plant to local energy needs. ACE could bring together partners to undertake this research, to identify suitable sites and oversee the establishment of an implementation body.AD may also be used to provide heat in the urban area. If a suitable site for an AD plant can be identified, the contribution to district heating could be investigated by ACE.

- 2. This technology has potential for this largely rural area where feedstock is likely to be readily available in the form of farmyard manure and other agricultural waste products. A larger, commercial AD installation can provide biogas for local heating, electricity generation and/or supply to the gas grid. However, a suitable site has not yet been identified in the Settle area.
- **3.** However, small-scale anaerobic digestion could provide heating to community buildings using food and other organic waste from households and hospitality venues as a feedstock. Given the current, high cost of gas and electricity for heating, opportunities should be investigated. ACE could: investigate relevant technologies; raise awareness of the technology with relevant local organisations and businesses; and explore waste disposal plans with the local authority, particularly in relation to food and garden waste.

Community Hydroelectric

- While not a major contributor to the overall supply of electricity, hydroelectricity generation on the river Ribble has value in supplementing generation in winter when solar generation is reduced. Despite the benefits, the relatively low output from a complex and costly installation suggests that this should not be considered a high priority at this stage.
- 2. However, current high energy prices make community hydro projects potentially more financially attractive. With three quarters of annual power generation in winter months the hydro has a valuable potential part to play in a Local Energy Club. The incorporation and reuse of historic industrial infrastructure provides such projects with more than just commercial value.

Small Scale Hydroelectric

 There is potential for small scale development of remote sites on farms, particularly offgrid and there are local examples. The role of ACE will be to alert owners to the possibility of a project and to provide guidance on implementation.

Timescales

Our target is for Settle and District to achieve net zero carbon status by 2034in accordance with the Route-map published by the York and North Yorkshire LEP <u>Routemap to Carbon Negative</u> (ynylep.com).

Potential Implementation Bodies

The proposals put forward in this report could be taken forward in a variety of ways. All will require the formation of some form of legal entity to implement the ideas and secure funding.

When considering funding sources, ACE will initially explore the availability of local authority loans. Given the reorganisation of local government in North Yorkshire, this may be a mediumterm opportunity. Some small grants may be available, particularly to help with feasibility studies or establishing appropriate community owned entities, to take one or more of these projects forward.

Ideas for implementation bodies include:

Local Energy Clubs

Local Energy Clubs (LEC) are an effective way of sharing surplus renewable generation between members and by using time of use tariffs (TOUT) help to level out supply. LECs are popular with DNOs tasked with levelling out supply and demand at local level. They can start off at small-scale and achieve organic growth as the uptake of renewable energies increases.

A LEC would:

- Provide an opportunity for all members of a community to be involved and to benefit from local energy generation, whether they were contributing to generation capacity or not. Households unable or unwilling to purchase solar panels can join the club and benefit from lower energy prices.
- A LEC enables generators to supply surplus energy to consumers in half-hour blocks.
 Each member household/building will have a smart meter to record and transmit half hourly data to a central operator
- The energy suppliers that support LECs at present are Octopus and Green Energy UK. Green Energy UK supports multiple generators. The operator analyses the metering, bills consumers and pays suppliers at the month end, as appropriate.
- Time of Use tariffs [TOUTs] are agreed by the club at an AGM. TOUT's encourage load shifting to take advantage of lower tariffs, also contributing to levelling up supply and demand.
- Set-up cost is circa £6k £7k.

• ACE is already in contact with Energy Local CIC about the formation of a LEC.

Community Interest Company or similar

Share ownership is the most common form of funding for larger projects. Options include a Community Interest Company (CIC), or a Co-operative Society. Whichever is considered, a formal constitution, board of directors and a bank account will be needed. A feasibility study will require the services of an independent consultant. Subject to a successful outcome a share prospectus and share offer is produced. This requires initial seed funding to facilitate the feasibility study.

Crowd Funding

For small community projects crowd funding or a local appeal arealso options.

Action Required

In order to meet the Routemap, ACE is now seeking:

- 1. Wider public engagement with this Local Area Energy Plan.
- 2. Adoption by district, county and regional agencies as a local contribution to their plans.
- 3. Access to support technical, financial and practical from partner agencies.
- 4. Funding to establish a Local Energy Club.

Appendices

- **Appendix 1 Results of FEL Workshops**
- **Appendix 2 Preliminary list of Projects**
- **Appendix 3 = List of Potential Technologies**
- Appendix 4 Local Energy Club, Start-up Programme

Appendix 1 – Results of FEL Workshops

Total cost		£20	,615,378
Total equivalent homes powered	3690		
Total homes in community area	2064		
After the 'Energy transition exercis	e'		
Annual local electricity supply [MWh]			
14882			
Annual local electricity consumption [MWh]			
22241			
Annual local heat supply [MWh]			
8147			
Annual local heat consumption [MWh]			
60992			
Smart Export Guarantee (SEG) tariff [p/kWh]			
5			
Potential annual SEG earnings			

£744,123





Appendix 2 - Preliminary list of Projects

The following were identified at the first consultation meeting

Туре	rated capacity	details	Number	MWh
Wind turbine	10kW 5 homes	15m hub height 9m rotor	3	70
Wind turbine	110 kW 55 homes	30m hub height 22m rotor	5	1,000
Wind turbine	1MW 550 homes	60m hub height 52m rotor	3	6,500
Solar PV panels	4kW domestic	roof mounted	1,000	4,000
Community solar	30kW instn	roof or ground mounted	20	600
Anaerobic dig'n	50kW installation	farm based	1	2,500
Solar thermal	1 per house	DHW supply	200	310
Air Source Heat Pump	1 per house	Heating and DHW	600	8,000
Total electricity supplie	ed			14,670
Annual local consumpt	ion			22,241
Total heat supplied				8,310
Annual local consumpt	tion (heat)			60,992

Appendix 3 - List of Potential Technologies

Electricity Generation

turbines, generally west of the A65 bypass. Needs minimum average annual wind speed of 5m/ sec. For larger turbines 12 months monitoring by anemometer strongly advised. Grid connectivity at 3 phase could be a problem.



Solar PV domestic, normally on rooftops, non- north facing, but can be ground mounted in gardens. Consider community project to give economy of scale and include low income families.





Community solar,

30kW capacity based on proposed array on Settle Swimming pool roof, but could include other community buildings or open fields, subject to no shading.

Heat Generation and Combined Heat and Power

Anaerobic Digestion

Anaerobic digestion, could be farm based and biogas used either for heating or to generate electricity, or CHP for electricity and using waste heat to heat buildings or processing.

Could also be industry based (eg ARLA) and combined with local food waste collection, possibly linking to a district heating scheme



Biomass District Heating, potentially supplying heat to a cluster of large public building such as a hospital, school or community building. Proposed in the CO2Sense report to supply heat to Settle / College and Middle School and Settle Swimming Pool and possibly Victoria Hall.



Energy audits of existing buildings would be required to assess potential for energy savings, followed by a feasibility study to investigate technical and financial

viability. The increased price of gas, currently used for heating, and the relatively stable price of biomass would work in favour of this as a solution. However storage is required for fuel and regular bulk deliveries by road could give rise to objections, but unlikely from residents benefiting from the heating they provide!



Solar thermal panels are most effective in the summer months when heat demand in the building is smallest, however there is a requirement for DHW throughout the year. Can provide the entire DHW demand of a family home during summer and provide background heating to reduce heating bills in winter

Heat Pumps

Water source heat pumps, are a more efficient version of Air Source Heat Pumps but require a source of water such as a river or pond. Inserting pipe-work into the mill pond at Locks Weir might be a possibility to heat adjacent holiday chalets.



Ground source heat pumps, are the most efficient form of heat pump system, gathering heat from the ground, either via a borehole, or rows of pipes known as "slinkys" laid in trenches in a field. This could be used for larger buildings or even housing estates.









Borehole

GSHP installation

Appendix 4 – Local Energy Club, Start-up Programme, solar

The programme is based on two separate installation contractors working on different phases of the whole project. Contracts will be to supply and install around 50 - 60 houses in each phase. The Local Energy Club will carry out a preliminary roof survey to identify suitable rooftops, in consultation with residents and the DNO to establish the scope of each contract. Standardising the specification in advance and working street by street will allow a flow of work to proceed, giving continuity to the installer, simplifying supply and reducing down time between each installation.

Within each 50 - 60 house phase, a group of 20-30 houses will be tackled first, allowing the remainder of the group to be prepared for installation. At the end of each contract the installer will be able to bid for the next project phase.

Rate of growth of the club could be matched to the development of new sources of renewably generated electricity.

Number	Task	Start	End	Duration	ation 2023											
		Start	Liiu	Janucion	January	February	March	April	May	June	July	August	September	October	November	December
1	SOLAR neighbourhood phase 1	1/3/2023	8/11/2023	158												
2	Carry out solar roof survey	1/3/2023	2/14/2023	30	1											
3	Set up Local Energy Club	1/12/2023	3/9/2023	40												
4	Appoint Advisor	1/3/2023	1/10/2023	5												
5	Traning	1/11/2023	2/8/2023	20	2											
6	Consult with DNO & residents	2/8/2023	3/14/2023	24												
7	Finalise scope Phase 1 - 15 houses	3/16/2023	4/6/2023	15												
8	Call for supply/install tenders Phase 1	4/7/2023	5/5/2023	20												
9	Award contract Phase 1	5/6/2023	5/20/2023	10			<u> </u>									
10	Installer mobilisation	5/21/2023	6/29/2023	28												
11	Installation Phase 1	6/30/2023	8/11/2023	30								- 1				
12	Consult with DNO & residents Phase 2	3/20/2023	4/21/2023	24				h								
13	Finalise scope Phase 2 - 15 houses	4/22/2023	5/13/2023	15												
14	Call for supply/install tenders Phase 2	5/14/2023	6/10/2023	20												
15	Award contract Phase 2	6/11/2023	6/24/2023	10												
16	Installer mobilisation Phase 2	6/25/2023	8/3/2023	28												
17	Installation Phase 2	7/30/2023	9/13/2023	32				i .								
18	Consult with DNO & residents Phase 3	4/24/2023	5/26/2023	24												
19	Finalise scope Phase 3 - 15 houses	5/27/2023	6/17/2023	15									i			
20	Agree extension to phase 1 contract	6/18/2023	7/8/2023	15												
21	Installer Mobilisation Phase 3	7/9/2023	8/17/2023	28												
22	Installation Phase 3	8/18/2023	9/29/2023	30					i							
23	Consult with DNO & residents Phase 4	5/28/2023	6/30/2023	24									1			
24	Finalise scope Phase 4 - 15 houses	7/1/2023	7/17/2023	10									i			
25	Agree Extension to Phase 2 Contract	7/18/2023	8/8/2023	15												
26	Mobilistion Phase 4	8/9/2023	9/16/2023	28												
27	Insallation Phase 4	9/17/2023	10/28/2023	30												
	Local Energy Club Installer no 1 Installer no 2															