ECOE Member Survey Report

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Summary

This report aims to provide a detailed description of the findings of the Members Survey undertaken by ECOE in 2017. A total of 101 members participated in the study, a response rate of just less than 50%. The survey sample were an even mix of males and females, older in age, with high levels of educational attainment and with left-leaning or 'green' politics. ECOE members are highly environmental, in terms of how they see themselves and their daily practices. Members regularly use energy efficiently in their homes and avoid car transport where possible. They insulate their homes and nearly half have installed solar PV.

Findings indicate that members purchased shares in ECOE for diverse reasons. These motivations can be clustered in terms of global sustainability (e.g. climate change), local sustainability (e.g. strengthening the community) and financial return on investment. While the most frequent motivation expressed was to support renewable energy projects, other motivations were also frequently indicated, notably tackling climate change and supporting local ownership of renewable energy. There was greater variability in relation to the motivation to gain a financial return, suggesting that ECOE encompasses those for whom a financial return is extremely important, and those for whom it is much less important.

ECOE is very positively regarded by members, highly trusted and there is strong satisfaction with actions undertaken to date. Members give strong support for engagement in future local renewable energy projects. It is also clear that members wish ECOE to have impact more broadly, for example engaging in lobbying for energy policy change and sharing knowledge with other community energy groups. There is strong support for participation in innovative energy actions such as a Home Energy Trial as well as preference for project development costs to be sourced from grant funding. There is some support for giving up part or all of interest payments to enable new project development.

Members engage with ECOE chiefly using email and newsletters. Attendance at events and the AGM is relatively low, if typical of other community energy initiatives. Member engagement is constrained by time and distance to travel, and few express interest in becoming a volunteer or Director. Analysis indicates that intentions to engage in ECOE in the future is strongly associated with past involvement, and that some members take great pride in their involvement in the cooperative.

In conclusion, findings show that members view ECOE in a very positive light. There is strong support for the future development of new renewable energy projects, for networking with other community groups and for targeting vulnerable households to reduce fuel poverty. Given the relatively narrow profile of members in social and environmental terms, it underscores the value of ECOE's Community Fund as well as projects such as Healthy Homes for Wellbeing, to reach members of the community in Exeter that are younger, less educated and have different political views.

1. Introduction

Engaging with our members is an important aspect of successful governance, given aspirations for participation and equal status. For Directors, it is critical to canvass the opinions of members, to feed into and inform deliberations about future directions. This is particularly the case for ECOE at this point in time, as we consider what kinds of projects to take forwards following the success of the solar PV 1 and 2 projects. Another reason to survey members is suggested by one of ECOE's principles and values: "ECOE seeks to be a learning organisation where people can expand their capacities and work together to create and realise collective aspiration". Gaining feedback from members is one consultation mechanism in which ECOE can collectively share opinions on past activities and potential future ones.

2. Methodology

2.1 Procedure

A survey questionnaire was selected as the optimal method to reach a wide range of members. To facilitate ease of data collection and analysis, an online software method was used. Questions were collectively designed by ECOE Directors and informed by previous research on energy cooperative members (Bauwens, 2016). The survey was conducted online during the months of August and September 2017. Regular email prompts were used to boost response rates.

2.2 Sample

The survey was completed by 101 participants. Given a total of 204 shareholders, this represents an excellent response rate of 49.5%. Further details of the characteristics of the sample are described in the results section below.

3. Findings

3.1 What are the personal characteristics of ECOE members?

The sample consisted of similar numbers of females and males (47% and 51% with 4 non-responses). The age of the sample was skewed towards older people, with 24% aged between 55-64 years and 31% aged between 65-74 years. The sample reported high levels of educational attainment, with 89% having a University degree and 42% a postgraduate degree. Reflecting the age profile, many members are retired (44%), with others split equally between self-employment, working full-time and working part-time (approx. 17% each). In terms of political affiliation and voting preferences, the sample showed strong support for Labour (44%) and Green (36%) parties. Only 6 participants indicated support for the Conservative party.

High levels of environmentalism were indicated by responses to several questions. First, members reported taking frequent pro-environmental behaviours in everyday settings, in particular energy efficient actions (e.g. turning off lights when leaving a room), re-using plastic bags and choosing sustainable transport options. Second, 73% reported installing extra insulation into their homes, and 46% had installed solar PV. Third, members showed strong support for renewable energy projects. 95% responded 'strongly agree' to the statement 'I support the increased use of renewable energy'. Over 60% indicated strong support for a wind farm or ground-mounted solar farm to be located nearby to where they live. The gap between the figures for renewable energy generally and specific projects can be explained by responses

to a statement about support for energy system decentralisation (local supply and small-scale energy generation), to which 67% indicated 'strongly agree'. Finally, members have strong 'environmental identities', as captured by a series of questions about how members view themselves. Statements about caring for and feeling concern for the environment were answered particularly strongly. These findings are illustrated in the Figures below.

Figure 1: Age distribution of survey participants

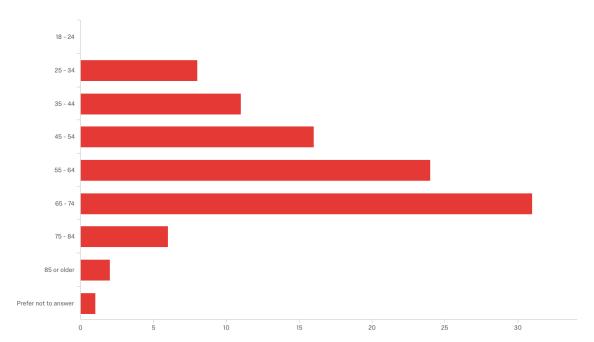


Figure 2: Educational attainment

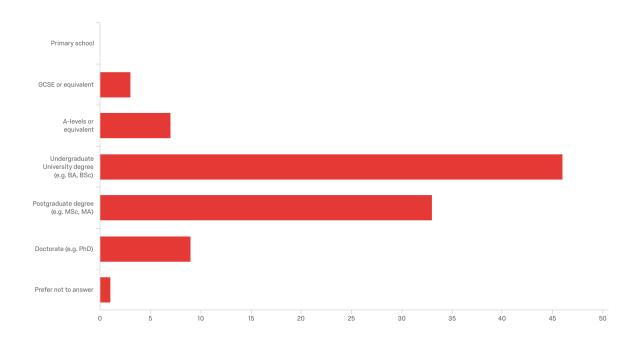


Figure 3: Voting preferences

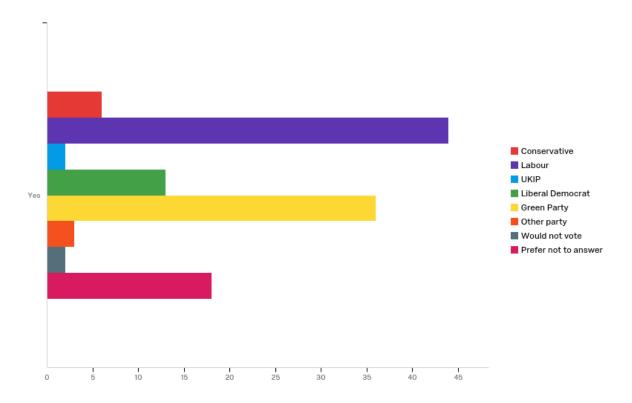
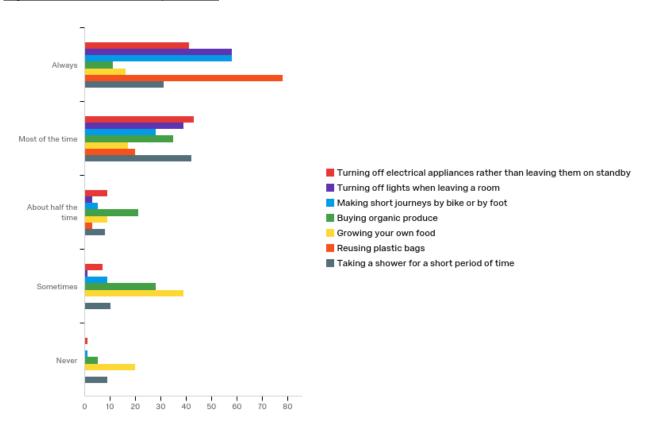


Figure 4: Environmental practices



Strongly agree Somewhat agree

I am the type of person who cares about the environment Neither agree nor I think of myself as an environmentally responsible consumer disagree I think of myself as someone who is very concerned with environmental issue... Somewhat disagree Strongly disagree

3.2 Motivation to become a shareholder

Figure 5: Environmental identities

The primary reason why members indicated there were motivated to join ECOE was to support renewable energy projects - 85% of members 'strongly agreed' with this motivation (see Figure 6 below). However, other motivations were also frequently indicated, notably tackling climate change (73%) and supporting local ownership of renewable energy (65%). There was greater variability in relation to the motivation to gain a financial return, with 17% indicating 'strongly agree' and 15% indicating 'somewhat disagree' or 'strongly disagree'. This suggests that ECOE members encompass those for whom a financial return is extremely important to them, and those for whom it is much less important.

Analysis of correlations showed 3 discrete clusters of motivations:

- a. Local sustainability: this is reflected in strong associations between the following motivations:
- To support local ownership of renewable energy
- To strengthen the local economy
- To build a sense of community
- To support the cooperative business model
- To produce a fund for broader community benefit

- b. <u>Global sustainability:</u> this is reflected in strong associations between the following motivations:
- To support the production of renewable energy
- To tackle climate change
- c. <u>Financial gain:</u> this is solely represented by the item concerning financial return on investment.

The pattern amongst these motivations is of interest for several reasons. First, it shows to what extent these motivations are separate from each other or are overlapping amongst themselves. This can inform Directors whether ECOE members largely draw on related motivations and values, or quite different ones. Second, analyses can show patterns between motivations and other indicators, which provide us with a more detailed understanding of members' interests and activities. Correlational analyses were used for this purpose (see Box 1 for an explanation of these statistics).

A moderate strength, statistically significant and positive association was found between local sustainability and global sustainability (+.247, p<.014), as might be expected since these issues are quite similar. However, no association was found between financial return and both sustainability motivations. This suggests diversity - for some members, local sustainability and financial return may be consistent with each other, but not for other members, for whom they may be contradictory or completely unrelated. It is also notable that these motivations are associated with 'environmental identity' (see section 3.1 above) in different ways. While global sustainability significantly correlates with environmental identity (+.450, p<.000), the other motivations for joining ECOE were unrelated to this indicator. This suggests that motivations to join ECOE vary across environmental (i.e. global sustainability), social (i.e. local sustainability) and economic (i.e. financial return) dimensions. These have different implications for how members see themselves and construct a sense of personal and social identity (see also section 3.3.4).

Box 1: Correlations explained

The correlation is a statistical test that compares the strength of association between two indicators or variables. It is measured on a scale from 0 to 1. There are three things to look out for in correlations. First, the closer the correlation is to 1, the stronger the association is between the two indicators. Second, the sign is important - if it is positive, then a high score on one variable is associated with a high score on the other one; if is negative, then a high score on one variable is associated with a low score on the other one. Finally, the p value tells you whether the association between the two variables is likely to have occurred randomly. Generally speaking, if the p value is less than 0.05, it is taken to be statistically significant. This means that it has less than a 5% chance (or odds of one twenty) of occurring randomly.

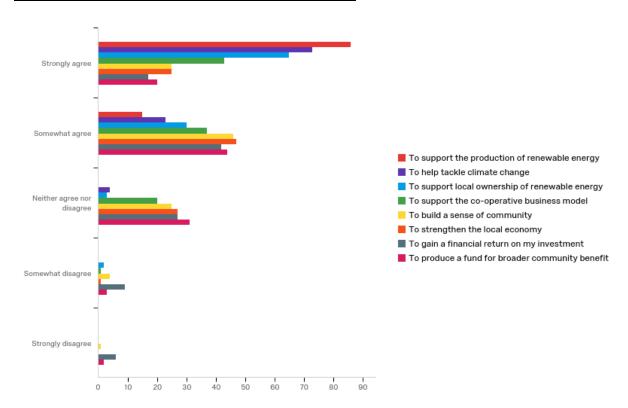


Figure 6: Motivation to become an ECOE shareholder

3.3 Opinions of the organisation

3.3.1 What does ECOE mean to members?

A word association task was used as an open-ended method for capturing what ECOE means to members. This involved writing down the first things that come to mind in response to ECOE and is a useful method because it allows members to choose how they wish to respond. Findings show that ECOE was associated with words like 'community', 'sustainable' and 'local' as well as characteristics such as 'tenacious', 'ambitious', 'enterprising' and 'organised'. The responses are illustrated in the word cloud below that represents the size of words as a function of their frequency of mentioning.

Figure 8: Associations with ECOE

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organised
                  Ambitious
                                              entrepreneurship
                   renewable local Active Renewables
                          benefits Innovating something thinking
                  Doing
       co-operative assistance change save
                                    Clean Environmental Environment
                          production
              Awesome Environmental Sunshine make support
 Happy future
         supply generation panels economics awareness fields
                                things Carbon idea
                  think green
                professional energy integrity communities details
     Volunteering
                                                     good trustworthy
         power
        community-owned believe friendly getting
                                                   Solar words
                        opportunity stuff
Enterprising
                                            based
             Successful project organisations
                                                     saving
 meaningful shares
                                                     more
            small Democratic innovative Exeter-area
                 vague Community underresourced Shillingford
      heating
                                             harnessing
            Great grass-roots
                                 going
                                                   Exeter
                             planet
           fantastic
          self-sufficiency Wonderful environmentally Environmentaly
                         Helping Sustainable
          re-balancing
```

3.3.2 Satisfaction with ECOE

96% of members indicated that they were 'extremely' or 'somewhat' satisfied with the way ECOE has developed. No respondents indicated any degree of dissatisfaction. Open-ended questions revealed why this was the case. Responses suggest several reasons for member satisfaction:

a. Actions, not words

This was suggested by remarks including the following:

Done what they said they would do,
Got on with it
It done what its said
Done what they said they would do
Basically, ECOE has walked the walk rather than just talking the talk etc.

b. Professionalism

This was suggested by remarks including the following:

Everything has seemed to run smoothly,
I have been kept informed throughout the process
ECOE seem to be professional in the way they go about things. No hippies.

Quite simply, it seems to be a well led, dynamic organisation which is fulfilling its projected aims.

There were a very small number of less positive comments, which referred to issues such as how well known ECOE was across Exeter as a whole, how well defined and ambitious its future aims were, and how accessible the Directors were perceived to be, for example:

Not well known across Exeter. Mission rather ill defined. Needs a high profile project rather than 'just a few more solar panels'

3.3.3 Trust in ECOE

84% of participants said that they trusted ECOE (i.e. willingness to defend your interests) 'a great deal' or 'a lot'. No respondents indicated low or absent levels of trust.

3.3.4 Feelings about ECOE membership

Three items probed how members felt about being a part of ECOE, a process referred to in previous research as 'social identification' (Bauwens, 2016). 91% of members responded 'strongly agree' or 'somewhat agree' to the statement 'I feel proud to be involved in ECOE'. 13% indicated 'strongly agree' and 40% indicated 'somewhat agree' to the statement 'Being involved in ECOE is an important part of who I am', a statement for which 40% also responded 'neither agree nor disagree'. This pattern of responses may reflect levels of participation in ECOE (see section 3.5 below) and/or high levels of membership of other organisations. 48% indicated 'neither agree nor disagree' to the statement 'I have a lot in common with other people who are involved in ECOE'. This may stem from low levels of familiarity amongst ECOE members, and the majority of respondents reported never having attended events or the AGM. Collectively, these items suggest that ECOE is associated with very positive feelings, but also shows relatively weak social ties amongst the members.

These processes are insightful since they are associated with variables such as motivation and engagement in different ways.

First, both 'pride in ECOE' and 'important part of who I am' are strongly and positively associated with motivations of global and local sustainability. Feeling that you have 'a lot in common with other members' is only strongly associated with 'local sustainability' (+.366, p<.000). None of these feelings about ECOE membership are associated with the motivation of gaining a financial return on investment. These findings suggest that how members feel about ECOE depends on their specific motivations for becoming a shareholder. Pride in ECOE is most strongly related to global sustainability motivations. Feeling part of a collective is most strongly related to local sustainability motivations. What is less clear from this analysis is whether feelings about ECOE are related to the motivation of financial investment. It may be that the relation between this motivation and pride in ECOE becomes stronger at some point in the future when financial returns to members increase in scale and become more visible.

Second, feelings about ECOE are associated with intentions to engage with ECOE in the future to different degrees. While 'a lot in common' and 'important part of who I am' both correlate weakly with future intentions to engage (+.167 and +.193 respectively), feeling 'proud to be involved in ECOE' correlates much more strongly and significantly with future engagement intentions (+.337, p<.002). What this means is that the more members feel pride at being involved in ECOE, the more they express intentions to take an active role in ECOE in the future (see also section 3.5). There is one methodological point to note – the results may have been

different if the question had been worded 'I feel proud of ECOE' instead of 'I feel proud to be involved in ECOE'. This should be taken into account in future surveys.

3.4 Views about future ECOE activities

There was strong support for ECOE to pursue renewable energy projects in the future. Solar PV was most strongly supported (61% strongly agree), with other forms of renewable energy such as hydro were also strongly supported (46% strongly agree) as well as participating in innovative energy trials (e.g. local power supply - 47% strongly agree). Social and political networking received strong support. 50% of members strongly agreed that ECOE should share expertise and experience with other community groups. 47% strongly agreed that ECOE should lobby MPs for energy policy change. Enabling reduction in fuel poverty and increase in energy conservation received strong support (44% strongly agree). The least supported option was for ECOE to supply electricity to local customers (21% strongly agree). Higher levels of 'neither agree nor disagree' for this item suggests that many members did not have a strong opinion, and may require more information on this issue.

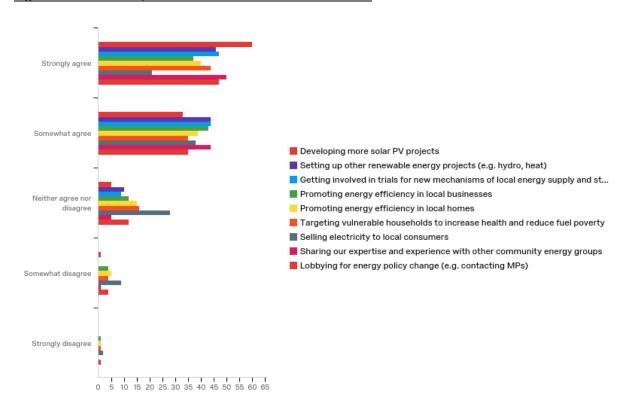


Figure 9: Member opinions about ECOE future activities

Home Energy Efficiency Trial

84% of members indicated some degree of interest in taking part in a trial that would involve installing specific technical interventions in your home (e.g. energy storage). Of these 29% were 'extremely interested' and 24% 'very interested'.

Funds for project development – how ECOE's profits should be utilised

Currently, profit on ECOE's solar PV projects is split between interest for members (at 5% per annum) and donations to a Community Fund. Other community energy groups use some of their profit to provide development funds to scope future projects. With it becoming increasingly difficult to secure grant funding for the development of new projects, we asked members what they think of the idea of diverting some of ECOE's profit to fund project development. The response was positive — 84% indicated that this was an 'excellent' or 'good' idea. Only 2% indicated that this was a 'bad' idea. A follow-up question indicated that members would rather that project development funds were sourced from grant applications than other sources, for example asking members to give up some of their annual interest payments, or reducing the size of the Community Fund. However, it is also clear that some members are prepared to give up some or all of their interest payments and indeed, have already agreed to do so.

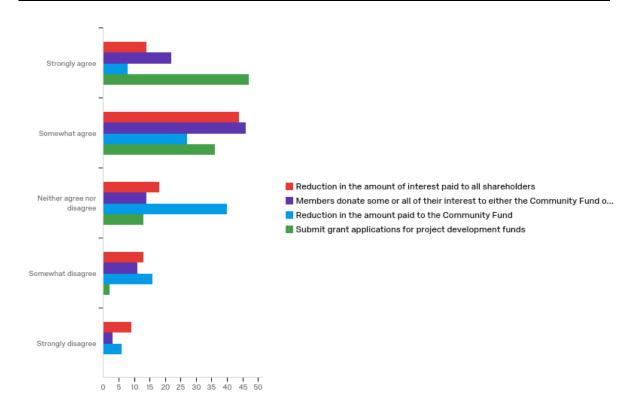
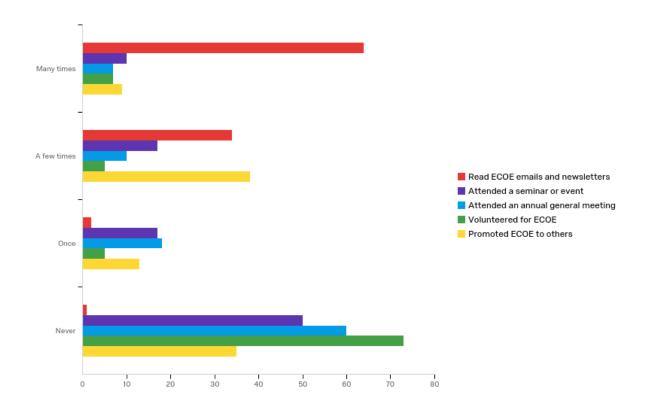


Figure 10: Members' opinions on where project development funds should be sourced from

3.5 Communication and participation

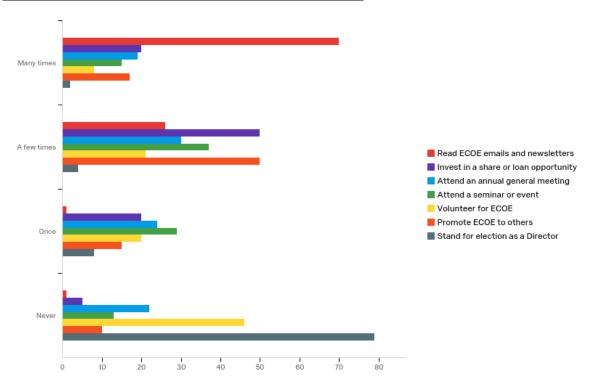
Over 60% of members stay in touch with ECOE using email and newsletters and there was strong support for this to continue as the main mode of communication, with concise updates of news using bullet points highly valued. Few members participate in other ways. For example, more than 60% indicated that they have 'never' attended an Annual General Meetings, which is at odds with ECOE's rules of association, which declares that 'Responsibilities of members include attending general meetings and take an active interest in the operation and development of the society'.

Figure 11: Member engagement with ECOE up to now



Responses suggest that this level of engagement is likely to continue in the future. While 71% indicated that reading ECOE emails and newsletters was an activity that they were 'often' likely to undertake, 48% indicated that they would 'never' volunteer for ECOE and 85% indicated that they would 'never' take on the role of Director.

Figure 12: Member engagement intentions in the future



There is a strong correlation between past engagement and future intentions (+.775, p<.000). This means that future volunteers are most likely to be those same individuals who have already engaged with ECOE in the past. There is also no correlation between member motivations and either past engagement or future intentions to engage. Whether ECOE membership was motivated by either global or local sustainability issues, or financial return on investment is unrelated to levels of engagement.

Open-ended responses indicate some reasons for these patterns of engagement. Many members indicated that they were interested to participate further, but were prevented from doing so by living at a distance from Exeter (either elsewhere in the UK or abroad - in Spain for example) or other life-commitments. For example:

'I wish I could participate more in ECOE, both by attending more meetings and perhaps by assisting in some capacity. However, my many other activities, including some that are of a voluntary nature currently preclude this. If I manage to free up some time, I will approach you to see if I can provide any input. That is not likely, though, to be in the near future'.

It seems that email and newsletters will continue to be paramount in member communication, and that holding events at the weekend rather than weekday evenings might increase member engagement over the coming year.

4. Discussion

The survey was conducted with the aim of learning more about who ECOE members are, what motivated their membership, how they engage and, crucially, what activities they support ECOE undertaking in the future. Due to a high rate of response, Directors have a robust dataset to draw upon when planning future strategies. Having said that, it is still an assumption that those completing the survey are similar to those who did not. If we assume that ECOE members are as represented here, this indicates some degree of challenge to one of ECOE's principles and values – diversity. While it may be that supporters of ECOE have different characteristics, the findings suggest that there is a need for ECOE to reach out to younger people, those with lower educational attainment and those with right wing political views, if it is to reflect and benefit all local people living in the Exeter area.

There are very high levels of satisfaction and trust in the organisation, as well as positive feelings of pride at being involved. These are very encouraging findings and demonstrate high levels of regard in ECOE as held by the members. One could surmise that members are aware that community energy is a challenging area of practice and that achieving success is difficult. Against the backdrop of policy changes in recent years, there is strong appreciation that ECOE has delivered on its aspirations and worked professionally to make local renewable energy happen.

There is clearly a strong appetite amongst members for ECOE to engage in new renewable energy projects. This supports current work by Directors to develop a range of new electricity generation projects, including new solar and a potential hydro project on the river Exe. It is also clear that members want ECOE to be involved in activities that target vulnerable

households, tackle fuel poverty and increase energy efficiency. Finally, members want ECOE to be a politically active organisation with an impact at local and national levels. This will involve networking to support other community energy organisations and taking action to support policy change. Aside from these ECOE activities, many members, although not all, are interested in participating in innovative energy trials, indicating ways that ECOE can stimulate innovations at both household and community levels.

Even though ECOE is structured as a community benefit society, it's values are similar to cooperative institutions, which presume high levels of community participation: 'Participation by members and the wider community means ECOE is truly a democratic community-led organisation'. These results present somewhat of a challenge to this aspiration towards high levels of community participation, with rather low levels of engagement beyond the activity of reading regular newsletters. Moreover, there is relatively little in the findings to suggest that this is state of affairs is likely to change substantially based upon members' future intentions. However, research on participation in renewable energy cooperatives show similar findings (see Bauwens, 2016 for a study of the members of Belgian energy cooperatives).

To conclude, the findings are very positive and informative and will provide the Directors with a key input into their strategising regarding future directions and activities.

5. References

Bauwens, T. (2016) Explaining the diversity of motivations behind community renewable energy. *Energy Policy*, 93, 278–290.

6. Acknowledgements

The Directors of ECOE would like to acknowledge all members who kindly agreed to participate in the survey research.

7. Feedback comments

ECOE welcomes any comments you might have on this report. If you would like to provide feedback, email Patrick Devine-Wright at the following address: patrick@ecoe.org.uk