



## Evaluation of the Next Generation programme – testing innovative post-subsidy business models for community energy

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### EXTENDED ABSTRACT

This presentation outlines interim findings from the ongoing evaluation of [Power to Change's Next Generation](#) innovation programme in the UK. The innovation programme funded 11 community businesses to test innovative post-subsidy business models for community energy. While many of the business models are not yet proven, this developmental evaluation has focused on capturing and sharing learning within and beyond the community energy sector in the UK.

### Introduction / background

The community energy (CE) sector in the UK grew strongly between 2012 and 2018/19. With Feed-in-Tariff (FiTs) support, CE groups invested in renewable electricity generation, raising community shares and reducing carbon, as well as engaging local people with energy issues and contributing surplus funds to local community projects. The Next Generation innovation programme was a response to the end of FiTs subsidies, which reduced the viability of existing CE business models, and also to the opportunity for communities to engage with wider aspects of the transition to net zero, beyond generation. Funded by Power to Change, the Next Generation innovation programme supported the testing of innovative post-FiTs business models for CE in England. Through a competition, 11 CE projects were selected for support. The business models ranged from community-led flexibility services to electric vehicles, renewable heat, LED lighting and low carbon housing.

### Methodology

Power to Change commissioned CAG Consultants to undertake a developmental evaluation of the programme, starting in 2018 and running through 2022. The evaluation was based around a programme-level theory of change and used 6-monthly learning cycles to refine successive waves of evaluation research. A learning framework was developed during the scoping stage, setting out the evaluation questions posed by Power to Change. The learning framework, which has been periodically updated, specifies priority topics and indicators on which evidence is sought. This has informed the design of evaluation research and research instruments. Evidence has been collected through review of programme and project-level documentation, through in-depth interviews with programme and project stakeholders and through surveys of CE group members. The developmental cycle approach has allowed details of research to be agreed iteratively with the client and with other key stakeholders, including an external Evaluation Advisory Panel, responding flexibly to emerging learning priorities and evolving timescales. Outputs to date have included two annual [summative evaluation reports](#) as well as a series of [case studies](#), [guidance notes](#), [videos](#) and learning events, shared with the wider energy sector, climate action and community business sector in the UK.

The evaluation has developed and used an innovation scale, adapted from the Carbon Trust's 'four journeys' model (unpublished, 2009). This has been used to track progress, charting the commercial,

organisational, market/technology and legal/regulatory journeys for each CE group and their new business model. The Year 2 evaluation report summarised emerging evidence about the viability of different business models in a draft 'viability map'. This is being developed further during Year 3 of the evaluation.

## Results

At the end of Year 2 of the evaluation, none of the projects had yet reached stage 5 of the innovation model (i.e. 'potential for replicability demonstrated'). While an innovation programme is about taking risks, and some project failures would be expected, this meant that the Next Generation innovation programme had not yet fulfilled its overall objective of developing some replicable, financially viable post-subsidy business models for CE. Some of the business models may yet bear fruit, but further work was needed during Year 3 to resolve uncertainties in the business models and assess their viability in more detail. Key learning points about business models for CE groups, within and beyond the Next Generation programme, were that:

- Business models involving renewable electricity generation were the most familiar to CE groups and the simplest business models to manage. Despite the end of FiTs support, CE groups reported that roof-top solar photovoltaics (PV) or private wire projects could still be viable, provided they offered sufficient scale (e.g. 50-100 kW or more) and sufficient revenue from onsite or local sales via a Power Purchase Agreement.
- While domestic-scale solar PV was reported to be viable when offered by CE groups to 'able to pay' customers, business models targeting domestic-scale solar PV at lower income households were complex and marginal, depending on partnerships between CE groups, social housing providers, energy suppliers and/or credit unions.
- Business models involving investment in heat pumps for community buildings or sheltered housing were found to be currently dependent on subsidies (e.g. the Renewable Heat Incentive).
- Many CE groups in the UK were reported to offer energy efficiency advice to members of their communities, often targeted at those in fuel poverty. The viability of fuel poverty services depended on funding from public agencies or investment of surplus from earlier, FiTs-supported CE investments. Provision of energy efficient lighting to community buildings was, however, found to be viable via a 'pay as you save' model operated by one of the Next Generation groups.
- Installation of electric vehicle (EV) chargepoints linked to community-owned solar PV panels was found to be viable where site conditions were favourable (e.g. low capital costs and high usage of onsite generation). A community-owned EV car club was piloted in a rural area but this was not currently fully viable, being dependent both on external funding for EV purchase and on using volunteers or sharing overheads with other car clubs to reduce running costs.
- The most innovative business models, involving community aggregation of domestic flexibility, or a community-owned energy system for new housing developments, were not currently viable but may offer potential in future. These highly complex and risky models were found to be suitable only for CE groups with significant organisational capacity and expertise.

## Conclusion & discussions

The evaluation found that support and funding from the programme has enabled CE groups to take risks in developing new post-subsidy business models. But most of the new business models, even where viable, appear likely to generate less surplus than earlier FiTs-supported business models. The developmental approach allowed the evaluation to be flexible in responding to programme and project changes, which was important in an innovation programme. It also allowed the evaluation to play a significant role in identifying and sharing learning on emerging business models between and beyond the Next Generation projects and CE sector.