#### Community Energy and the dynamics of inequality

### Summary

This paper considers the extent to which the growing community energy sector in the UK can be seen as part of the transformation to a more sustainable economy. Community energy institutions are viewed as attempts to transform the economic system whilst surviving within it. This pragmatic approach means that the transformational potential of the intervention is limited by the constraints of the wider system. This paper focuses on ways in which the community energy sector attempts to disrupt the systemic increase in economic inequality, and barriers to doing so. Issues identified so far include the relative legitimacy of local authority or 'community' action, the return on investment required to attract sufficient capital for large projects, the personal resources required to be able to participate, perpetuating social inequalities of privilege, and the procedural inequality issues associated with allocation of community benefit.

# **Abstract for Ecological Economics Conference**

The growth of the community energy sector in the UK in the past five years has been enabled largely by the Feed in Tariff, which has made investment in small scale renewable energy financially attractive to community groups. Whilst individuals involved have a wide range of motivations, this research considers the crafting of new community institutions as a potentially transformative challenge to the existing economic system. It pays attention to the ways in which different structures are produced which lead to environmental restoration and increasing equality, and how the systems set up are reliant on or perpetuate an economics that requires growth in GDP for stability.

This paper presents preliminary findings of an action research project in a city in the UK.

This paper assumes that the provision of renewable energy is a positive action towards a more ecologically sustainable energy system, part of a multi-scale approach to dealing with climate change (Ostrom 2010). The focus is therefore on the social side of sustainability, with particular consideration of the ways in which the crafting of new local energy institutions can contribute to greater procedural and distributive equality, or reproduce the patterns of systemic increase of inequality present in our economy.

In the city where the research takes place, like many UK cities, the local authority has ambitious plans to set up a local energy company and to invest in renewable energy generation directly. At the same time, a community energy group, invests in the development of renewable electricity generation, primarily solar PV on the roofs of homes and community buildings in the city, although there are ambitions for larger projects.

There are a number of areas where both distributional and procedural inequalities are relevant. There is not space to describe all of these in detail, but initial observations highlight some key issues: legitimacy and accountability, who participates and is able to participate, distributional effects of return on investment, allocation of value between different parties, and procedural and distributional effects of disbursement of community benefits.

# **Procedural equality**

The local authority has legitimate representational democratic authority, whereas the community group consists of selfnominated individuals. The cooperative structure of one member, one vote provides both accountability and an equality for members, and anyone is welcome to join in with voluntary activities. However, many of those who do participate draw on resources not available to everyone, including education, skills, social capital and time. Equality of access to participation is not always at the top of the agenda for stretched volunteer run groups. Some groups in other parts of the country which have done particularly well on inclusion have done so based on funding to support this, rather than as part of the viable business model of the social enterprise.

Some of the income from the renewable energy projects is allocated to a community benefit fund. It is not yet clear what process will be used for allocating those funds, and who will be able to participate in making those decisions. The Joseph Rowntree Foundation (Cowell et al. 2012) suggest that community benefit allocations from wind farms should be

invested in making those communities more resilient in the long term, through investing in community owned energy which will provide a source of income, and in energy efficiency for homes that will reduce energy requirements.

# Distributive equality and allocation of value

The income to renewable energy projects comes from Feed in Tariffs, an incentive that is taken from everyone's energy bill. This is justified by the government due to the global value of renewable energy generation through reduction in greenhouse gas emissions. The community energy group has choices to make about the allocation of the financial value, which is shared between the original investors (interest to members), the value of cheaper electricity for the buildings where the renewable energy is installed, a community fund, and payment for the work done to develop the project. The rate of interest offered to members has a substantial effect on the value remaining to be allocated to other parties. This interest is a return on capital, and as Picketty (2013) has shown, if this is above GDP growth rates, this tends to systemically increase inequality, due to the correlation of GDP growth with income. The community energy group has previously offered a 4% return in investment, equal to the rate of interest on prudential borrowing that the council is able to access for their direct investment. However, as it develops increasingly large projects, aiming to raise millions rather than hundreds of thousands of pounds, it is perceived to be necessary to raise the level of interest in order to attract sufficient investment, at a loss to other beneficiaries of the value of the project.

It may be possible to achieve greater levels of investment for lower interest rates if members were able to directly purchase the electricity at a reduced rate. This would make the vision of community energy projects as transformational institution with resilience to degrowth much more of a reality. The 'commons' of the electricity infrastructure owned by a cooperative could be brought to the service of providing for members' basic needs in times of reduced resource availability. However, direct supply of electricity is prevented by the onerous licensing arrangements for sale of electricity to households. Ofgem, the regulatory body responsible for this licensing, is in discussions about the development of a 'license lite', and 'license local', and some smaller electricity providers such as OVO Energy (2014) are offering community tariffs which aim to partially circumvent these limitations. This would also get around the controversial ruling from the Financial Conduct Authority that investor return is not sufficient member benefit to justify the formation of a bona fide cooperative under this type of business model.

Going forward, the action research project will explore the extent to which the community and local energy developments can be part of a deeper transformation of the economy. This will include a greater understanding of the extent to which actors see such a transformation as desirable, or as part of their work. It will also involve testing the boundaries of what is possible, and the extent to which the wider system sets intractable barriers to achieving these aims. Where possible, the research project will work with others to overcome or change the barriers identified, achieving benefits both at the local and at the wider systemic scale.

# References

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