



The big society and renewables: 5 measures for delivery.

THE BIG SOCIETY AND RENEWABLES: 5 MEASURES FOR DELIVERY.

**A REPORT FOR REGEN SW BY
CLIMATECHANGEMATTERS LIMITED
8 DECEMBER 2011**

JONATHAN JOHNS, DIRECTOR

TEL: 07831 486987 OR 01392 496864
JJOHNS@CLIMATECHANGEMATTERS.BIZ

Contents	Page
Foreword by Merlin Hyman, CEO Regen SW	1
Executive summary	2
The role of community energy schemes in the Big Society	4
Steps needed to ensure success of the community sector	5
Five measures to benefit qualifying community renewables	7
Jobs created and costs to the taxpayer	11
Protections to prevent abuse and control expenditure	12



The big society and renewables: 5 measures for delivery.

Foreword: Merlin Hyman, Chief Executive, Regen SW

One of the unexpected results of the introduction of the Feed-in Tariff has been an extraordinary flowering of communities keen to generate their own energy and retain revenue to support the economic future of their community. By working together and pooling resources, communities have found they can often achieve much more than individual households.

Their motivations vary from wanting to generate revenue for local projects to improve their communities, to tackling climate change; but together the community renewable energy movement has the potential to revolutionise the way we generate and use energy.

Regen is partnering with Green Trust CIC on a new social enterprise 'Communities for Renewables' (www.communities4renewables.co.uk) to work with communities to support their ambitions and to act as a development partner for larger scale projects by providing finance and technical expertise.

There are also excellent examples of community energy groups with successful business models delivering projects on the ground such as Wadebridge and Ladock in Cornwall; TRESOC in Totnes; and Bath and West Community Energy who have just completed a successful share offer.

However, the reality is we are still at an early stage in the community energy movement and that there are finding major obstacles in the way to getting successful schemes off the ground.

The coalition set out in its programme for government a welcome commitment to supporting community renewable energy. It has announced a number of measures, including access to EIS and VCT tax advantaged investment schemes and a new £15 million fund. However, the sudden cuts to the Feed-in Tariff have caused problems for many community schemes.

Clear and coherent measures are needed to support community renewable energy schemes. Regen, therefore, asked Jonathan Johns at ClimateChangeMatters to propose a package of tax and incentive measures that, taken together, would enable the sector to flourish. The report is an important contribution to the current debate on how the coalition can fulfil its manifesto commitment to community renewable energy and provide the framework to enable this important movement to fulfil its exciting potential.

Merlin Hyman



Executive Summary

Climatechangematters welcomes the Government's increasing focus on community renewables as evidenced by the retention of EIS relief for community renewables FIT schemes¹, the creation of a £15m fund for rural projects, announced in the Autumn statement, and the most recent announcement on 7 December of £10m to help 200 local communities develop energy projects and a further £20m of public sector energy efficiency loans². However there is much more to be done.

If the UK is to achieve the transition to a low carbon economy on the scale that is required, it is vital that there is broad scale community involvement in the renewables sector.

This report makes five key recommendations to further promote the sector, emphasising measures to deliver maximum value for the taxpayer/consumer.

1. Exemption from the 20 per cent deduction in tariff for community multiple site i.e. aggregated PV FIT schemes (and other similar measures).
2. Creation of a small FIT tariff for community schemes between 5 and 10 MW.
3. Allocation of 10 per cent of Green Investment Bank support for community renewables and energy efficiency schemes.
4. Simplification of private wires' regulations and facilitation of remote net metering to join projects with communities so that the retail cost of own generated power is saved (less transmission costs), thus retaining a greater proportion of the financial benefit of own generation³.
5. Creation of a new instrument, the community issued tax-exempt mutual bond, to facilitate flow of capital to the sector at minimal cost to the taxpayer as recourse would only be to project income streams and not form part of the public sector borrowing requirement. The issue of such bonds could be managed by the Green investment bank, allowing it to increase its reach given the 5 year borrowing limits to which it is currently subject.

¹ See further details

http://www.hm-treasury.gov.uk/finance_bill_2012_consultation.htm?utm_source=fb2012teams&utm_medium=email&utm_campaign=draft_fb2012

² See http://www.decc.gov.uk/en/content/cms/news/pn11_107/pn11_107.aspx. There is around £50,000 available for each successful community to be used to help assess the potential for energy efficiency and local renewable energy generation and get things started in local communities. This is a short-term scheme where work will need to be completed by end of March 2012.

³ See <http://renewablematters.biz/high-energy-users-and-renewables.php>.



The big society and renewables: 5 measures for delivery.

We estimate that each £1 billion of additional investment in the sector would generate 4,000 localised jobs as well as accelerating deployment of distributed renewable energy (see page 11 below).

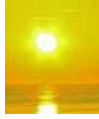
The costs of these measures would be modest but their impact would be great.

Moreover costs could be controlled if there was a rush of demand as has occurred with solar PV (itself a healthy sign of the degree of interest in localised renewables which have a real connection with energy users):

- The cost of the exemption from the PV FIT scheme and the creation of a broader small Fit tariff could be contained if necessary within existing small Fit and RO budgets.
- The allocation of a specific budget from the Green investment Bank would similarly not have a budgetary impact.
- Simplification of the private wires' regulations and facilitation of remote net metering would have no cost to the taxpayer. Indeed it would bring the prospect of cost savings for public sector bodies and businesses participating in community schemes generating local renewable energy.
- The cost of a community issued tax-exempt bond scheme would be similarly modest at £20m per annum i.e. £5,000 per job or £50,000 over a ten year life (see page 11) – as the cost to Treasury is purely the cost of lost income tax on interest received rather than a contribution to capital costs. Furthermore costs of funds to projects are likely to be 4 to 5 per cent rather than the 7 per cent charged by conventional banks.

Even allowing for administrative burden, these costs are below those of the recent grant or loan based measures referred to above. They could usefully succeed grant-based schemes once initial interest has been stimulated, maximising the chances that the interest generated leads to real and substantial deployment, whilst creating sustainable employment. Once established it is not unrealistic for £1 billion of bonds to be issued each year generating 40,000 jobs over ten years.

Jonathan Johns, Director Climatechangematters Limited
9 December 2011



The big society and renewables: 5 measures for delivery.

The role of community energy schemes in the Big Society

Community renewables and energy efficiency entities, such as community interest companies or industrial provident societies (co-ops), offer the prospect of transforming the provision of distributed energy, increasing engagement in energy efficiency measures involving local groups, businesses, local authorities, housing associations and Non Governmental Organisations (NGOs, including charities and the voluntary sector). Properly formulated, they extend across technologies (as appropriate to the community), increase local employment, and assist the fuel poor.

A strong community sector would allow the decarbonisation of Britain's building stock to be accelerated. It will further encourage the democratisation of power whereby consumers also become producers – with locally based energy service companies becoming a real possibility

Community schemes offer the prospect of local businesses, hospitals and schools, as well as the domestic sector, entering into arrangements whereby their power and heat is sourced locally (e.g. from waste to energy schemes, biomass boilers, PV panels and if suitable wind and hydro). Such schemes build an indigenous low carbon capital base, providing for genuine local involvement and jobs rather than the disbursement of funds to external providers through conventional energy production.

In these and many other respects, community renewables press the “Big Society” button, shifting responsibility for provision away from Government and the larger utilities, towards local solutions meeting local needs. It is an approach much more likely to free up the planning log jam and allow the U.K. to achieve the degree of local community and small business led ownership more commonly found in Germany, Denmark and elsewhere.

Community renewables also allow a cohesive local approach to existing measures designed to support low carbon infrastructure: the Green Deal⁴ and Energy Company Obligation (ECO) the Renewable Heat Incentive (RHI) and, if appropriate, larger energy infrastructure able to take advantage of the Renewables Obligation (RO) and its successor the contract for difference Feed in Tariff (CFdFit). Such entities could well, and many are, planning to evolve into energy services companies (ESCOs) providing private wires (and combined heat and power) to local businesses, public sector buildings and local residences. Some may become Green Deal providers in their own right, or in partnership with others, with the precise shape of the provision determined locally.

⁴ The Green Deal has a reference interest rate of 7 per cent, which even with the availability of ECO monies, is likely to restrict the extent of low carbon roll out. This will also be the case if the PV FIT is to be dependant on the adoption of energy efficiency measures as proposed in the recent PV FIT consultation.



The big society and renewables: 5 measures for delivery.

Steps needed to ensure success of the community sector

Significant barriers remain, notwithstanding the welcome measures listed above and other supportive measures⁵.

The business plans of many current or planned, community schemes have been underpinned by the PV FIT, and the availability of EIS relief (which pleasingly is to be continued for community schemes). The direct consequence of the PV tariff cut has been that a large proportion of these schemes have been put on hold, radically curtailed or scrapped altogether. This could be very damaging to the community renewables movement, not allowing many local groups to build the critical mass that would allow them to engage positively with the Green Deal and large-scale energy generation.

It is understood that Government is very supportive of a local approach to renewables as witnessed by the measures listed above and the consultation paper relating to the PV FIT cut – which helpfully points out that the Government is minded to consider specific tariffs for community schemes. This is to be welcomed as are the recent announcements of grants to help planning and a rural development fund.

It is important that due consideration be given to community-oriented tariffs (not just for PV FITs).

It is also important that a number of other measures are implemented including:

- The continued availability of EIS for community schemes (which the author understands is likely to be the case following recent Treasury consultation)
- Tariff regimes able to support schemes up to 10 MW, thus allowing greater provision of district combined heat and power schemes and allowing ESCos to source a greater proportion of power locally – facilitating whole town schemes
- The removal of regulatory barriers in relation to the sale of electricity from community schemes to business and domestic users through private wires and ‘remote net metering’

⁵ Measures include the welcome exemption of community interest companies and industrial provident societies from EIS restrictions relating to feed in tariffs and the ability of local authorities to sell electricity; and the creation of a £15m rural fund for community renewables announced in the autumn statement. The ability to reinvest business rates from larger renewable energy projects taken with the involvement of local authorities with access to prudential borrowing and tax incremental funding may assist matters, but there are many other calls on these sources of finance, and to date with a few notable exceptions there has not been large scale local authority involvement.



The big society and renewables: 5 measures for delivery.

- The facilitation of debt finance –at present many schemes are below the threshold at which debt providers become interested with too few banks providing local offers.

This paper outlines a basis for a community tariff and also sets out other measures that would be helpful to the deployment of community energy (namely renewable electricity, heat and energy efficiency).



Five Measures to benefit qualifying community renewables

- 1. An exemption from the 20 per cent deduction for single ownership multiple installation (aggregated) schemes in relation to the PV FIT and any other tariffs where such a condition is considered appropriate.*

The use of an exemption would avoid the difficulty of publishing a separate FIT for community schemes in relation to small-scale renewables and would allow the quantum of the exemption to be adjusted, should it be found that oversubscription is likely to occur. It is accepted that some degree of rationing may be required, whereby a limit is placed on the volume of schemes that can benefit from the full deduction, e.g. 20 per cent of the allocation as suggested above.

Community schemes would be those which qualify for EIS i.e. Community Interest Companies (CICs) or Industrial Provident Societies (Co-ops) and could include trading subsidiaries of charities and other not for profit NGOs, e.g. social housing providers, where proceeds of the FIT are wholly or substantially recycled into other energy efficiency renewable energy and renewable heat measures in the community, using a not for profit subsidiary of the entity concerned. Caps would be set on the return to investors, parent companies or lenders and there would be a restriction on management and fund raising fees. Schemes where a substantial financial interest in the feed in tariff is owned by third parties would be disallowed.

It is recognised that operation of the scheme may require a simple and cost effective pre-screening process, perhaps using planning permission as a precondition, as well as requiring confirmed ownership structure e.g. CIC or industrial provident society, and certification that FIT proceeds and any surpluses will remain within that vehicle and be applied to low carbon objectives or other allowed community purposes. The exempted 20 per cent deduction would reapply automatically and retrospectively should conditions be breached (by way of deduction from revenues from the time of breach).

- 2. Consideration of expanded small FIT volume limits for renewable schemes that would otherwise fall in the RO or CFdfit mechanism. (e.g. up to 10MW).*

Community schemes can find the bank funding of small scale renewables challenging. This could lead to a funding gap particularly for schemes between 5MW and 10MW. Some utilities are withdrawing or modifying the terms for the provision of floor price power purchase agreements (PPAs), which underpin bank funding and it is likely that community schemes will find engagement in the CFd mechanism overly complex. The simplest approach would be to expand for qualifying community schemes the small scale FIT (at appropriate reduced rate) up to a 10MW limit, simplifying the funding process. The removal of market risk (that is inherent in the RO and the CFd element of the newly proposed CFd FIT)



is an important part of improving the availability of bank finance and encouraging NGOs and businesses to finance renewable energy schemes.

The small scale FIT is much less complex and has a greater credit standing than either of these instruments and therefore is more amenable to a more localised approach and less specialised investors.

Consideration could also be given to specific provisions to encourage combined heat and power, including tariffs to integrate RHI and FIT benefits and take into account the capital cost of heating networks.

3. Allocation of a specific tranche of Green Investment Bank (and Big Society Bank) funds e.g.10 per cent for community finance provision, ideally with further European Investment Bank (EIB) support.

This initiative would be combined with an initiative to encourage high street banks to provide simplified and local banking arrangements to support community schemes. The possibility of the Green Investment Bank acting with the EIB to create a specific fund to assist community projects should be explored. It would also be helpful, if considered in its remit, for the Big Society Bank to consider applications from community schemes favourably.

More localised financing would avoid the costs (and size criteria) imposed by the London-centric project finance market. In other jurisdictions, lending to community schemes is seen more as part of the local business lending function of banks rather than being exclusively in the remit of specialised units. Whilst initiatives by some banks in the farming community have been helpful more assistance is needed in this regard to provide genuine localism.

4. Review and simplification of the regulations surrounding private wires networks and the introduction of new regulations to encourage remote net metering.

Under such schemes, consumers can be linked directly to producers and only pay for balancing and transmission costs, as suppliers would be required at the request of the generator to provide exempt supply services including transmission, the provision of data to the networks balancing, top up and RO sell and buyback arrangements.

In this way a local wind farm, energy from waste and other generating facilities owned by the community could supply power to local scheme member businesses, public sector buildings and domestic dwellings (subject to switching rules) at the generated cost of power less local transmission, rather than being forced to sell it at a discount through the grid and buy it back at full retail price.

Whilst there are some regulatory exemptions to assist such supply, they are capacity restricted and not subject to competition. See the separate report by



The big society and renewables: 5 measures for delivery.

Climatechangematters, which explains how such reforms could help community schemes “High energy users and renewables”⁶.

5. *The creation of a new fiscal instrument: community issued tax-exempt mutual bonds.*

The issue of such non-recourse bonds would be authorised by the Green Investment Bank or other FSA sponsoring/issuing banks. Schemes supported could include community ESCOs, combined heat and power schemes, social housing whole housing retrofits and whole community low carbon schemes.

Qualifying project or portfolio specific bonds would be issued by community interest companies, co-ops and other qualifying bodies investing in renewable and energy efficient infrastructure, using definitions similar to that used in the recent EIS/FIT exemption referred to above. Consideration could also be given to allowing projects with local authority involvement to qualify (on criteria similar to those used for the DECC Salix loan facility).

Bond issuers would ensure that projects met sustainability criteria and manage due diligence and rating processes (ideally using criteria consistent with the Climatebonds initiative). The Green investment Bank (or others e.g. Green Deal providers) would also act as aggregation bodies to ensure that critical mass is achieved for particular issues (e.g. £10m) so that costs are minimised. A pre-condition of such bonds would be that repayment not be guaranteed by the state or any public body, but rather rely on project cash flows and securities alone. This would mean that such debt would not form part of the public sector borrowing requirement.

A critical aspect of such bonds is that the interest paid would not be subject to income tax, providing the bond is issued for spend on qualifying purposes, thereby greatly increasing their attraction to investors. As the state subsidy is restricted to the tax forgone on the interest on the capital, such a measure would offer support to the sector at very low cost compared to other incentives, such as grants.

Some renewable energy companies (e.g. Ecotricity) have successfully raised bonds for their own business, indicating that there is retail appetite for such instruments. Interest on such private sector bonds would remain subject to taxation.

It is suggested that a cap of £1 to £2 billion annually be set initially for the issue of such bonds so that the progress of the scheme can be gauged.

⁶ See <http://renewablematters.biz/high-energy-users-and-renewables.php>



The big society and renewables: 5 measures for delivery.

The use of the Green Investment Bank as a conduit for community issued tax-exempt mutual bonds would help plug a financing gap given that the GIB is unable to borrow for 5 years and has many calls (e.g. offshore wind) on its funds.

Community issued tax-exempt mutual bonds could also act as a substitute for Private Finance Initiative (PFI) style finance, which has been recently been criticised on cost grounds. To broaden the market for such bonds consideration could be given to allowing pension funds to reclaim the tax credit, thereby replacing ACT relief, which was removed by the previous government. Bond interest rates would be subject to caps set to be compatible to national savings rates adjusted for risk.



The big society and renewables: 5 measures for delivery.

Jobs created and costs to the taxpayer

We estimate that each £1 billion programme of community issued tax-exempt bonds with a 5% coupon could generate 4,000 jobs at an annual cost to the Treasury of £20m i.e. £5,000 per job or £50,000 per job over a 10 year loan life⁷. Between 300 and 400 MW of renewable energy capacity could be deployed, depending on the technology used and leave £100 to £200m to spend on energy saving measures⁸.

Even allowing for administrative burden, the costs of all of the measures suggested are below those of the recent grant or loan based measures⁹ and could usefully succeed grant-based schemes once initial interest has been stimulated, maximising the chances that the interest generated leads to real deployment.

Under the auspices of these measures and those recently announced, a community renewable and energy efficiency group could:

- Apply for a £50,000 scoping study under the DECC announced grant scheme
- Create a scheme involving FIT, RO, RHI revenues and Green Deal measures involving businesses residences, the public sector and social landlords
- Raise equity finance from an EIS issue, obtain debt finance from Green Investment Bank and/or community issued tax exempt bonds secured wholly on project cash flows as part of an aggregated process managed by the Green investment Bank or other FSA registered body.

If it is considered inappropriate to support the creation of community issued tax-exempt bonds, then it would be important to encourage existing high street banks to make funds available on a more localised basis using simple procedures. A further advantage of tax-exempt bonds is that debt finance costs to projects are likely to be 4 to 5 per cent, rather than the 7 per cent charged by banks.

⁷ Assumes 4 jobs per £1m of capital expenditure based on Bain study for BWEA 2008 stating 4 jobs per MW of onshore wind installed, adjusted by Climatechangematters to take account of small-scale community technologies such as solar and energy efficiency generating more jobs. See "let the people invest" <http://renewablematters.biz/available-reports.php>

⁸ Assumes a cost per kW deployed of £2000 to £3000 for a rooftop solar installation, for example reflecting the recent large reduction in solar panel costs.

⁹ Recent measures announced in the Autumn Statement and on 7 December 2011 by DECC cost approximately £45m. Removal of aggregated fit discounts and extension of the banding of the small FIT could be accommodated within the existing FIT and RO costs or controlled by competition or limited allocation. Green Investment Bank and the change of regulation to support remote net metering would have no cost implications with the latter likely to save costs for businesses and public sector bodies involved in community schemes.



Protections to prevent abuse and control expenditure.

A number of criticisms have been made (by government and others) of the PV FIT and whilst these may not be shared by all members of the industry, it is important that any policy measures include safeguards against benefits being inadvertently made available to non-community interests for whom they were not intended.

Observations made include that the PV tariff has:

- Been used to provide super-profits to commercial entities who seek arbitrage out of market rates by exploiting economies of scale whilst providing insufficient benefits to building occupants (i.e. just the free electricity generated)
- Subsidised public sector bodies and other institutions with their own existing responsibilities and budgets for fulfilling them.

Given the recent experience of the small scale FIT whereby tariff levels became out of kilter with falling equipment prices, thereby encouraging a gold rush which exhausted available budgets or support, it is accepted by the author that safeguards should be put in place. It is suggested that:

- A relatively narrow definition is established (based on those adopted for EIS relief in the Finance Act) to allow a responsible and sustainable community movement to be established. This would require that FIT and RHI revenues be recycled within the issuing body and used for low carbon investment or other eligible community purposes.
- A proportion of the overall FIT budget be allocated to community schemes e.g. 20 per cent, with the proviso that if unused it should be made available more broadly.
- Projects taking advantage of community issued tax-exempt bonds would be subject to pre-screening and set due diligence administered by the Green Investment Bank or other FSA registered body, confirming that business plans showed that debt could be serviced by project cash flows and requiring declaration of any management fees, dividends or other charges and levies raised by third parties. This would also include a review of the interest charged relative to risk taking into account the tax benefits received
- Communities would also be required to tender for works with some element of local provision



The big society and renewables: 5 measures for delivery.

- It is suggested that an annual cap be placed on the amount of community issued tax exempt mutual bonds (£1 billion in the first year rising to £2 billion thereafter)
- Any scheme would include an express provision allowing loopholes to be closed rapidly so that monies flow to where intended.

Comments

Climatechangematters welcomes comments on this report or any of its other publications which may be found on its resources website

<http://www.renewablematters.biz> please email swellbelove@climatechangematters.biz or contact the author Jonathan Johns 07831 486987

Thought leadership material: not suitable for the basis of any investment decision or action without appropriate professional advice. Whilst every effort is made to ensure its accuracy, no liability can be accepted in relation to the contents of this report by Climatechangematters limited or its officers.