



Report of the Director of Environment and Neighbourhoods

Executive Board

Date: 15th December

Subject: Solar Photovoltaic Panels Initiative

Electoral Wards Affected:

All



Ward Members consulted
(referred to in report)

Specific Implications For:

Equality and Diversity

Community Cohesion

Narrowing the Gap

Eligible for Call In



Not Eligible for Call In

(Details contained in the report)



NOTE ON EXEMPT INFORMATION

The Access To Information Procedure Rules allow exclusion of certain categories of information (exempt information). Paragraph 10.4.3 refers to a category covering information relating to the financial or business affairs of a person (including the Council). A condition of the exemption is that in all of the circumstances the public interest in exempting should outweigh the public interest in disclosing. In the Council's judgment, the commercial information relating to this proposal should not be disclosed for two reasons. First, disclosure may prejudice negotiations yet to be concluded between the Council and CES. Second, CES's commercial interests could be prejudiced if these financial terms became available to their competitors. Therefore, the financial information is contained within Exempt Appendix 1.

EXECUTIVE SUMMARY

1. The Government Feed In Tariff incentive now provides a significant opportunity for the council to generate an income stream from installing small scale renewables, particularly solar photovoltaic systems.
2. A proposal has been received from a social enterprise called CES which offers to install a minimum of 1,000 solar photovoltaic systems in council housing at zero capital cost to the council. This would:
 - Generate an index-linked income to the council, as defined in Exempt Appendix 1.
 - Provide free daytime electricity to tenants worth £108 pa to each tenant and collectively £2.71m over 25 years.

- Produce 1,668 MWh of clean renewable electricity pa, reducing CO₂ emissions by 872 tonnes pa.
3. Alternative offers and alternative delivery arrangements have been modelled but due to time-pressure to install systems and the council's relative inexperience in this area, in the short-term the CES model offers the highest value.
 4. In the longer-term, a council run model may offer greater benefit, but would be strengthened by initially operating a joint project to build skills.
 5. Legal, procurement and finance colleagues have been consulted and no barriers to progressing with CES have been identified.
 6. It is recommended that Executive Board agree to form a partnership with CES to install a minimum of 1,000 systems by March 2012 and that income generated is used as collateral for prudential borrowing for the free private sector insulation scheme.
 7. Installing 10,000 solar PV systems would provide sufficient revenue to cover the cost of borrowing to fund a free insulation scheme that would:
 - Provide cavity wall or loft insulation to 64,500 private sector homes.
 - Save householders £11m on their fuel bills per annum.
 - Reduce CO₂ emissions by 68,000 tonnes per annum.

1.0 Purpose of this report

- 1.1 To seek endorsement from Executive Board to develop a scheme to install a minimum of 1,000 solar photovoltaic (PV) systems on council housing at zero capital cost, which will generate a significant income over 25 years.
- 1.2 To seek endorsement to use the income from this trial and subsequent roll-out as collateral for prudential borrowing to run a private sector free insulation scheme.

2.0 Background information

- 2.1 In April 2010 the Government launched a new incentive called 'Feed in Tariffs' (FITs) to encourage people to generate their own electricity from renewable energy sources. FITs are paid for every unit of electricity generated, with the rate paid varying according to the type of technology used. The most generous payment is for solar PV, which receives 41.3p per unit, with payments index linked and guaranteed for 25 years.
- 2.2 A clause in the legislation allows people to voluntarily assign FIT payments to a third party. Effectively, this allows the Council (or another investor) to pay the capital cost of installing renewable energy in homes, in the knowledge that FIT payments will recoup the capital investment.
- 2.3 The Environment and Climate Change Working Group (a cross-party member group chaired by Cllr David Blackburn) has a role to "...develop and promote initiatives which will contribute to the achievement of the carbon reduction targets set out in the climate change strategy and action plan". The group has focussed on the opportunities provided by FITs.
- 2.4 A number of organisations are already marketing PV offers which tend to be heavily weighted in favour of the company. The Council has been approached by Community Energy Solutions (CES – a not-for-profit social enterprise based in Leeds) who are proposing a more equitable option. This is differentiated from other companies in that they offer a profit share approach, to share benefits between the Council, tenants and CES.
- 2.5 CES have presented a proposal for a minimum of 1,000 homes. The Council would be responsible for providing roof access agreements, consulting with tenants and identifying a list of potentially suitable properties. CES would source capital finance, install the solar PV panels, monitor electricity production and maintain them for 25 years.
- 2.6 Using the CES model (scenario 1) installing 2kWp of solar PV panels per home on 1,000 homes, at no capital cost to the authority, would:
 - Generate an index-linked income to the council¹ for 25 years, as defined in Exempt Appendix 1.
 - Provide free daytime electricity to tenants worth £108² pa to each tenant and collectively £2.71m over 25 years.

¹ The income will be received by the Local Community Vehicle (see 4.3) and will be reliant on generating sufficient electricity (see 3.12)

² Assuming production of 1668 kWh pa, half of which is consumed on site (each kWh is worth 13p or £108.42pa) and half of which is sold by CES (each unit is sold for 3p or £24pa)

- Produce 1,668 MWh of clean renewable electricity pa, reducing CO2 emissions by 872 tonnes pa³.

3.0 Main issues

- 3.1 **Reduction in FIT levels.** Government had published FIT payment levels up to March 2020⁴ but the CSR announced that “Feed-In Tariffs will be refocused on the most cost-effective technologies saving £40 million in 2014-15. The changes will be implemented at the first scheduled review of tariffs [post March 2012] *unless higher than expected deployment requires an early review.*”
- 3.2 CES presented a detailed timeline (shown in Appendix 1) that would enable a launch in March as long as a decision to proceed was taken in December 2010.
- 3.3 Therefore the Council should aim to initiate a scheme by March 2011 to complete by March 2012, or earlier if possible.
- 3.4 **Alternative scenarios.** In addition to the proposal from CES (scenario 1) three further scenarios were considered:
- **Scenario 2:** The Council obtain finance and procure a company to install and maintain the PV systems on its behalf, but the Council retain the full FIT and use this to cover the cost of borrowing.
 - **Scenario 3:** An in-house scheme, including sourcing finance, procuring equipment, installation and maintenance, retain the full FIT and use this to cover the costs of borrowing.
 - **Scenario 4:** Use a different commercial offering.
- 3.5 Legal advice received stated that no formal procurement exercise is required for scenario 1, as the Council would not be purchasing anything.
- 3.6 However, scenario 2 would require a full EU Procurement because of the costs involved. In order to progress scenario 2, the Council would need to undertake the majority of tasks identified in the CES timeline. In addition, the EU procurement exercise would add at least 6 months onto the timescales, even if some tasks could run concurrently. Therefore, assuming a decision was taken to proceed in December 2010, the earliest the scheme could realistically be expected to commence would be October 2011, giving less than 6 months to complete installations.
- 3.7 The much longer lead-in time to build the level of technical competency required to run scenario 3 (installing and maintaining the system in-house) coupled with the EU procurement process, has led to scenario 3 being discounted for the time being.
- 3.8 Market sounding has been undertaken to identify alternative commercial offerings to allow scenario 4 to happen. No other options with zero capital cost that generate income streams from year 1 to year 25 have been identified. The nearest alternative was from a utility where an upfront capital part-payment was required, then partial FIT income was paid from year 11 to year 25, but crucially the panels would be off-balance sheet.

³ Assuming this offsets grid electricity, with an emissions factor of 0.523 kg CO₂/kWh

⁴ For PV the rates are 41.3p to March 2012 then decline by approximately 10% pa for new applications.

- 3.9 An outline financial model has been set up to understand the likely benefits of scenarios 1, 2 and 4 minus the cost of capital and any project management costs. Full and summary details are shown in Exempt Appendix 1.
- 3.10 Negotiations continue with CES and an improved offer may be available, particularly if more than 1,000 properties are included.
- 3.11 A target to install circa 1,000 systems is the preferred approach to keep the project size manageable and to ensure that there are still roofs with potential for inclusion in a subsequent Council operated initiative.
- 3.12 However, it must be noted that under all scenarios, the payment is not guaranteed. It is reliant on each system operating to the design parameters and having very few periods when it is not exporting electricity. Good design, selection of roofs and monitoring should minimise the risk of underperformance.
- 3.13 To avoid the risk of missing the most generous FIT payments the Council should pursue scenario 1 for a minimum of 1,000 ALMO properties in partnership with CES subject to agreement of final terms and conditions.
- 3.14 Additionally, operating a scheme such as this will require the Council to develop a range of skills, so a partnership with CES to March 2012 would allow the Council to gain experience and develop skills and assess whether to operate an in-house scheme from March 2012 onwards.
- 3.15 The Council should use the period working with CES to gain experience that would allow an in-house scheme to operate from March 2012, if deemed more advantageous.
- 3.16 **Social housing provider support.** This initiative is reliant on the support of social housing providers in order to make available roof-space and liaise with tenants. Strategic Landlord, has been engaged in scheme development, undertaking stock analysis and checking financial issues.
- 3.17 **Technical.** Properties can only benefit from solar PV systems if they meet some basic technical pre-conditions. These relate to the pitch of the roof, the angle the property faces, the condition of the roof, the condition of the wiring and the type of electricity meter. Blocks of flats complicate the provision of electricity to tenants, but for larger blocks, PV can be used to generate electricity for communal areas.
- 3.18 Solar PV systems are now classified as permitted development, except in conservation areas or on listed buildings, forming another pre-condition. The Council, as local housing authority, will use reasonable endeavours to assist CES in minimising the costs of any planning applications.
- 3.19 The scheme is reliant on a low level of down-time, when no electricity is generated. Therefore, a monitoring system will be in place to remotely assess generation and identify any technical failures early so that they can be corrected. To guard against any interference with the inverter (essential for generation) will be insured and installed either under the eaves or in a loft-space.
- 3.20 Ideally, to learn about the relative benefits to different property types, the initiative would be deployed in 4 areas with circa 250 properties in each. To ensure that the benefit to tenants is maximised, the initiative will be delivered in areas classified as CESP eligible (the 10% most deprived Lower Level Super Output Areas nationally).

- 3.21 Initial analysis of stock shows that there are 8,684 properties that have a pitched roof with an expected lifespan of 25 years or more, plus several hundred blocks with flat roofs. This will be refined to include the other pre-conditions, but indicates that there is significant potential.
- 3.22 **Free Insulation Scheme** The Administration is committed to develop and deliver a free cavity wall and loft insulation scheme for all viable private sector properties in the city. It is estimated that this will insulate 64,500 homes, saving residents £11m on their fuel bills annually and reducing CO₂ emissions by 68,000 tonnes pa. The likely cost of this scheme to the Council⁵ is £13m, £1.2m of which is currently identified fenced, leaving a requirement of circa £11.8m. In the event that the solar panel scheme is successful it offers an opportunity to fund the difference. This possibility will be further investigated, with a further report made to Executive Board.
- 3.23 Initial calculations show that if circa 10,000 properties receive free solar PV systems under the CES scheme sufficient income would be generated to cover the costs of borrowing £11.8m to fund free insulation.
- 3.24 **Private Sector Housing.** The CES offer is available for owner occupiers as well as for ALMO stock. Therefore, whilst the trial is being delivered the Council will look to assist as many owner occupiers as possible. As the project is Council backed, a relatively high take up is anticipated.
- 3.25 Additionally, when the Council is promoting free insulation to householders, the offer could be extended to include free solar PV systems. As all private sector households will be visited as part of this initiative, an uptake of just 5% would result in around 12,500 additional installations.
- 3.26 PV systems should be offered to owner occupiers and the profits from these used to repay the finance taken from ALMO installations for the free insulation scheme.
- 3.27 **Additional council and partner buildings.** The CES offer is also open to the Council's corporate buildings and for partners such as RSLs and Universities. The case for using CES is not so clear cut for the Council's corporate buildings, so the relative benefits of using the CES model versus using prudential borrowing and undertaking the work in-house are currently being assessed. Proposals are being developed to install solar PV systems at scale as a priority.
- 3.28 A selection of the Council's corporate buildings will be included in future negotiations with CES, if the decision is taken that this is a better option than in-house procurement.
- 3.29 RSLs and other city partners should be made aware of the opportunity, but effort should focus on progressing a Council initiative.

4.0 Implications for council policy and governance

- 4.1 This has no direct implication for policy.
- 4.2 The CES proposal is to establish a local delivery partnership, to set up the scheme and undertake ongoing management of it.

⁵ The total cost is around £26m and four utility companies have submitted Expressions of Interest, offering to match fund our investment.

- 4.3 CES propose to establish a Special Purpose Vehicle (SPV) to own the assets and represent all partners to the project (the council, CES, the financiers and energy companies). The FIT would be paid to the SPV and open book arrangements used for fund flow during the 25 year operation. A Local Community Vehicle (LCV) would be established to receive the profits from the project and redistribute them to low carbon projects (i.e. the free insulation scheme). The LCV will have strong membership from the Council and it is recommended that the income is used to allow the free insulation scheme to progress.
- 4.4 Although this arrangement would be legally sound given the well-being powers described in paragraph 5.7, the Council will use the negotiating period to explore an alternative and simpler contractual arrangement with CES.

5.0 Legal and resource implications

- 5.1 **Legal.** CES have provided outline Heads of Terms for the proposed partnership. Legal advice has been sought and no significant legal barriers have been identified.
- 5.2 A number of contractual issues have been raised and will need to be formally agreed with CES before a final commitment is made. The most important issues, and responses, are:
- **What arrangements are in place to cover the possibility of CES ceasing to trade during the 25 year period?** The assets (the entire solar PV system) will be owned by the SPV. The ongoing liabilities will be to maintain the systems, monitor generation and claim FITs and continue repayments. Empower will remain as the finance partner and will ensure that the SPV continues with repayments. The other aspects would need to be tendered to procure a company to undertake this work on behalf of the SPV.
 - **What is the implication of any homes sold under right-to-buy or similar legislation?** In the event that a tenant wishes to purchase a property there are two options:
 - The tenant signs an agreement similar to the one signed by the Council for the remaining period of the FIT period and continues to benefit from the free electricity from the system.
 - The tenant purchases the system from the SPV when they purchase the property.
 - **What is the exclusivity clause in the contract?** An exclusivity agreement is required solely for the roofs allocated to CES for works. This would allow the Council to allocate 1,000 roofs to CES and to then pursue alternative offers or an in-house scheme for later phases of delivery.
- 5.3 Legal advice was sought regarding constraints within Housing Legislation, particularly property title. Comments were that the draft Heads of Terms require the Council to grant ongoing rights of access to properties for PV assessment, installation, commissioning, maintenance, repairs and meter reading for the period of 25 years. Given the length of this period, and the anticipated funding arrangements for this model, it is likely the Council will be required to grant formal property rights (easements) over its housing stock for these purposes. Under Sec 32 of the Housing Act 1985, apart from granting tenancies the Council can only dispose of its housing stock or housing land with the consent of the Secretary of State. However, the Secretary of State has issued a number of general consents, and under the General Consent for the Disposal of Part II Land 2005, Consent E4, a local authority may grant any easement in or over land held for the purposes of Part II for a consideration determined by the authority.

- 5.4 Therefore, in these circumstances the Council is not required to demonstrate that it has achieved the best consideration, or highest price available in whatever market may exist for the grant of access rights on comparable terms.
- 5.5 This means that theoretically, the Council would be able to grant easements in return for a sum that is deemed sufficient. In reality, the Council wants to ensure that any sale of easements brings the best return, and reflects the true value. Normally, this would be through open competition. However, the value of the easement in this case is determined by the FIT payment which will decrease over an uncertain time period. Therefore, an open competition has a strong risk that the Council will miss the maximum FIT payment period. Without competition, there is a risk that the Council may not achieve the best return.
- 5.6 Market testing demonstrates that, given the potential that FITs may decline well before March 2012, a good balance has been struck between maximising income (no comparative offer has been identified that approaches the benefit of CES) and ensuring delivery before the potential income is eroded.
- 5.7 The Council's legal advice indicates that this will meet the requirements of the Housing Act 1985, and advice from the Council's finance team indicates that no higher value offer is available. The proposals for an SPV and LCV are still subject to detailed discussions with CES, and the precise terms for the Council's participation in one or both of these vehicles will be set out in the legal documentation which will follow on from the Heads of Terms. It is proposed that the legal basis for the Council's participation will be the Council's housing management powers in the Housing Act 1985, and insofar as they are not sufficient, the "well-being" powers is contained in Part 1 of the Local Government Act 2000. Section 2 of the 2000 Act provides that every local authority has the power to do anything which they consider is likely to achieve the promotion or improvement of the economic, social or environmental well-being of their area. This power may be exercised in relation to or for the benefit of the whole or part of the authority's area, or all or any persons resident or present in an authority's area, and in determining whether or how to exercise the power, an authority must have regard to its sustainable community strategy. This power expressly includes power for an authority to "enter into arrangements or agreements with any person", or "co-operate with, or facilitate or co-ordinate the activities of, any person". It is considered that the Council's participation in the SPV or LCV as member, shareholder, or trustee, or the appointment by the Council of representatives on the board of management, or entering into shareholders' agreements will all be included within this power.
- 5.8 There is no comprehensive legal definition of economic, social, or environmental well-being, but the courts have said this power should be construed broadly, as does the guidance issued by the Secretary of State. Recent decisions by the courts indicate that as long as the arrangements for the SPV and LCV are not too speculative and do not expose the Council to undue risk, and as long as the arrangements retain a reasonably well-defined well-being outcome, then the Council can safely rely upon the well-being powers for these purposes.
- 5.9 It is to be noted that there are certain limits on this power. In particular, the power does not enable an authority to do anything which they are unable to do by virtue of any prohibition, restriction or limitation on their powers contained in another Act. In addition, the well-being power expressly does not include the power "to raise money (whether by precepts, borrowing or otherwise)". However, it is considered that this limit refers to an authority using the well-being powers with the sole purpose of

raising money to be spent across all or any of its various functions. By contrast, the central purposes of these proposals are to encourage the generation of electricity from renewable sources, thereby promoting or improving environmental well-being, and the provision of free daytime electricity to tenants, thereby promoting tenants' economic well-being. In addition, income to the Council from this trial may be used to support a wider roll-out of the scheme. The Council must also have regard to the Secretary of State's guidance about the exercise of the power, and there is nothing in that guidance to suggest the well-being power is not available for the proposals in this report

5.10 **Resource.** In order to effectively run either scenario, a small project team will be assembled. Under both scenarios the following would be required for the period from decision to proceed (December 2010) to completion of installations (March 2012):

- A project manager to coordinate activity between all parties, quality assure the project and report to a project board;
- A nominated liaison officer from social housing providers to consult with tenants and arrange roof access etc;
- Some advice from other services, to cover legal, financial and technical aspects.

5.11 Under scenario 1, once the installation period has finished, the project management requirement would shrink dramatically, as CES would retain responsibility for ongoing monitoring and maintenance of the systems. It may be possible under scenario 2 to procure a similar turnkey arrangement, but a provision has been made for a full time scheme manager in case responsibility falls to the Council.

5.12 Also, under scenario 2, an allowance would need to be made for detailed support to manage the EU procurement process, which it has been assumed to cost £30k.

6.0 Conclusions

6.1 Both scenarios will require some additional project management capacity, but this will be made available internally or via secondments.

6.2 Both scenarios show significant financial benefits over the full 25 year term.

6.3 The requirement to complete all installations by March 2012 means that scenario 1, although not as financially beneficial overall, has a much greater chance of completing more installations, ultimately generating greater benefit to the Council and residents.

7.0 Recommendations

7.1 To approve a partnership with CES to install at least 1,000 PV systems to Council homes before March 2012, subject to successful conclusion of contractual negotiations with CES by the Director of Environment and Neighbourhoods.

7.2 That Members confirm they agree the proposals set out in this report are likely to achieve the promotion or improvement of the economic, and environmental well-being of the whole or part of the Council's area, or all or any persons resident or present in that area, in the manner set out in this report.

- 7.3 To extend the CES offer to private sector households across the city in order to generate additional income.
- 7.4 To explore in principle the use of the income from this trial and subsequent roll-out as collateral for prudential borrowing to run a private sector free insulation scheme.
- 7.5 To use the CES experience to assist in developing a Council run scheme to pick up from March 2012 at the latest to increase benefits to the Council (assuming FIT payments still provide adequate incentives).
- 7.6 To assess alternative options for the Council's corporate buildings and either extend the CES scheme or procure services in-house.

8.0 Background Papers

- 8.1 Anytown Illustration and presentation from CES.
- 8.2 DRAFT Heads of Terms from CES (including the Council's legal comments).
- 8.3 Discussion paper for Environment and Climate Change Working Group (20th October 2010).
- 8.4 Accelerating The Transition To Sustainable Low Carbon Local Economies: The Empower Community/CES Partnership Approach To Solar PV Programmes.

Appendix 1 CES Timelines

Item	Commence	Complete	Responsibility
Sign Memorandum of understanding	Month 1	Month 1	CES/LCC
Identify potential suitable roofs (social housing and other stock)	Month 1	Month 1	LCC/CES
Confirm roof stock that can accommodate PV – estimated investment requirement	Month 1	Month 2	CES
Stakeholder engagement – consultation process with tenants of stock to be included within the scheme	Month 1	Month 2	LCC/CES
Sign Exclusivity Agreement (with appended example schedule of terms for Roof Access Agreement)	Month 2	Month 2	CES/LCC
Verification of sample of suitable roofs (including property surveys followed by design of installations)	Month 2	Month 3	Project Operator
Agree schedule of terms for Roof Access Agreement	Month 2	Month 2	CES/LCC
Establishment of LCV & Project SPV	Month 2	Month 3	CES/LCC
Completed and signed Roof Access Agreement	Month 3	Month 3	CES/LCC
Agree implementation programme	Month 2	Month 3	ECM/CES/LCC/ Project Operator
Financial close	Month 4	Month 4	ECM
Contract delivery – installation, FIT registration and operation of solar PV	Month 5	March 2012 latest	Project Operator/CES/ECM