

SMART ENERGY GRID – BUSINESS CASE AND EUROPEAN REGIONAL DEVELOPMENT FUND UPDATE

To: **Commercial and Investment Committee**

Meeting Date: **15th December 2017**

From: **Executive Director - Economy Transport and Environment**

Electoral division(s): **All**

Forward Plan ref: **N/a** *Key decision:* **No**

Purpose: **A timetable to secure European Regional Development Fund Grant (ERDF) funding has been agreed with DCLG for February 2018. An updated business case and agreement the Council will match fund the project must be submitted. The business case reflects the changes and opportunities arising on the project during the last year.**

Recommendation: **Committee is asked to:**

- **Approve an additional £362,453.50 investment by the Council towards the updated business case as summarised in section 2.2 for the extended Smart Energy Grid project.**
- **Approve the Council's overall commitment of 50% match funding for the Smart Energy Grid to draw down the ERDF grant.**
- **Delegate to the Chief Finance Officer in consultation with the Chairman of Commercial and Investment Committee, the detailed negotiations and contracting with all parties involved to ensure the overall parameters of the business case, agreed in section 2.2, can be brought together and closed.**

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1. BACKGROUND

- 1.1 Cambridgeshire County Council submitted an outline application for ERDF in August 2016 for a Smart Energy Grid Project at the St Ives Park and Ride site. On approval of the outline application a full application was submitted to the Department for Communities and Local Government (DCLG) in March 2017.
- 1.2 A timetable to secure the ERDF grant funding has been agreed with DCLG for February 2018. To deliver to this timetable the Council needs to finalise costs of the Smart Energy Grid; confirm Committee agreement to the total match funding; negotiate the State Aid position with DCLG; discharge planning conditions; and obtain the title of the land that has been purchased.
- 1.3 At its 16 September 2016 meeting, the Assets and Investment Committee gave delegated decision making powers to the Chief Financial Officer in consultation with the Chairman of Assets and Investment Committee to enter into a construction contract for the smart energy grid. This would be subject to the project meeting minimum financial returns of 17.43 year payback and a cash return over 25 years amounting to £806,000. In that paper, the maximum cost of the project was forecast as £2.9M including development costs, the capital project costs, the business support programme and ERDF contract management and administration.
- 1.4 The Smart Energy Grid will combine solar panels installed on canopies over the car parking spaces, with battery storage to power the site after dark or when there is insufficient sunlight. The electricity generated will serve all the electricity demand of the site and all excess electricity will be sold to local industrial customers. Additional electric vehicle charging points will be added which will also be powered by the low-carbon electricity generated.

2. MAIN ISSUES

- 2.1 The original business case for the Smart Energy Grid (SEG) is now a year old and has been updated to account for changes arising from market pricing, discharging of planning conditions and new business opportunities. These are summarised below:
 - 2.1.1 Solar module prices have fallen, resulting in a cost saving to the project.
 - 2.1.2 The park and ride site was built on a former landfill site. To address the potential environmental risks, significant sections of the car ports have been redesigned which has added approximately £100,000 to the costs.
 - 2.1.3 The Smart Energy Grid will now look to sell electricity to more than one main customer. The additional cost of the new connection is approximately £300,000 plus supplementary enabling works. The additional cost will allow an increase in the total amount of electricity sold.
 - 2.1.4 Provision for electric bus charging infrastructure is now included in the business case at an additional cost of £220,000. The infrastructure

would charge electric buses on the guided bus route into Cambridge. This is the subject of a feasibility study being commissioned by the Greater Cambridge Partnership, City Access Team.

- 2.2 To reflect the above changes, Bouygues have updated the business case which is attached in a confidential **Appendix A**. The additional cost of the scheme is £724,907. This means the Council will need to invest a further £362,453.50, as the project expects 50% match funding. The business case figures are valid for 3 months. If we are unable to give notice to proceed to Bouygues within the 3 months, exchange rate and inflation changes could apply. As a result of the factors referred to in paragraph 2.1. The overall impact on the business case of the changes is summarised below.

	Cost	Payback, years	IRR	% yield on initial investment	Cash return over 25 years, £	NPV over 25 years *
1. Original approved scheme	Up to £2,900,000	17.43	3.6%	65.9%	£806,000	£53,949**
2. Expected cost of new updated scheme (including EV bus charging***)	£3,624,907	17.37	4.2%	99.5%	£1,803,976	£86,810
3. Total cost to the Council of the new scheme assuming 50% ERDF Match Funding	£1,812,453.50 (an additional £362,453.50 Council investment)	-	-	-	-	-

**based on discount rate of 3.9% (comprising interest rate of 1.88%, which is the cost of a PWLB equal instalments of principal loan for 15 years, and 2% projected inflation)*

***The net present value (NPV) for the original business case has been stated above based on the current discount rate (reflecting some increase in interest rates since the business case was first produced). This shows that the NPV for the original business case would now have given a negative NPV as the discount rate is now higher than the original internal rate of return (IRR). The changes to the current business case have slightly improved the IRR, hence the positive NPV now shown.*

****The EV bus charging infrastructure is the subject of a feasibility study which will determine whether it should remain part of the business case. If it cannot provide an appropriate contribution to the overall SEG business case it can be removed from the scheme without damaging the remaining business case.*

- 2.3 The success of the project is predicated on securing customers for electricity trading for which negotiations are underway.

- 2.4 The submission of the Council's Full Application for ERDF funding, included our position on State Aid, which was prepared by lawyers, Bevan Brittan. The Department for Communities and Local Government (DCLG) is currently assessing this submission to determine eligibility for 50% state aid intervention. There is a risk that the state aid intensity could be reduced.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

As part of the project, a Business Support Program will be delivered to share the lessons learned in developing and designing a Smart Energy scheme. Twelve hours of business support for a minimum of 40 companies will be delivered and this is costed as part of the overall business case. The expectation is that the support will reduce barriers for other companies to develop complex energy projects like this.

This is a demonstrator project to test a new commercial model in areas of significant grid connection constraint and to help build the local market for buying and selling energy.

3.2 Helping people live healthy and independent lives

The project will assist in expanding low-carbon, emission-free electricity generation in the County, as well as paving the way for other similar projects. This is key for tackling air pollution and the causes of climate change, providing health benefits for our communities.

3.3 Supporting and protecting vulnerable people

Supporting the development of local energy markets will help manage the costs of energy in the medium term. It is hoped that local energy markets can benefit the vulnerable in the medium term as this will help manage rising fuel costs.

4. SIGNIFICANT IMPLICATIONS

4.1 Resource Implications

As described above in section 2.2, the ERDF grant is expected to supply roughly half of the overall scheme funding of £3,624,907. The Council will invest in 50% of the project through borrowing from the Public Works Loan Board.

Electricity trading is subject to negotiation with customers. The outcomes of these negotiations will directly impact the business case.

4.2 Statutory, Risk and Legal Implications

Lawyers, Bevan Brittan have prepared our State Aid position. For new innovations, such as Smart Energy Grids, there is a level of interpretation on

the exemptions and state aid intensities that can be implied. The initial risk is around the interpretation of State Aid guidance.

4.3 Equality and Diversity Implications

There are no significant implications within this category.

4.4 Engagement and Consultation

There are no significant implications within this category. Public consultation on the project was held in December 2016 and the St Ives parish magazine published a significant article in February 2017 on the project. Recent publicity stemming from the granting of planning permission includes coverage by BBC Look East on the 6th of July, an article in the Cambridge Independent, an article in the online publication Solar Power Portal and a BBC Radio Cambridgeshire interview.

4.5 Localism and Local Member Involvement

The Local Councillors have been informed of the project. In addition, St Ives Town Council have been updated regularly, and the project has their full support.

4.6 Public Health

There are no significant implications within this category. To the extent the project offsets fossil fuel powered generation, there would be a small improvement in public health.

Source Documents	Location
16 September 2016 Assets and Investment Committee meeting minutes	http://tinyurl.com/yac7g35z

Implications	Officer Clearance
Have the resource implications been cleared by Finance?	Yes Name of Financial Officer: Sarah Heywood
Has the impact on Statutory, Legal and Risk implications been cleared by LGSS Law?	Yes Name of Legal Officer: Fiona McMillan
Are there any Equality and Diversity implications?	No Name of Officer: Tamar Oviatt-Ham
Have any engagement and communication implications been cleared by Communications?	Yes Name of Officer: Joanna Shilton
Are there any Localism and Local Member involvement issues?	No Name of Officer: Tamar Oviatt-Ham
Have any Public Health implications been cleared by Public Health	Yes – no significant implications Name of Officer: Tess Campbell