Agenda Item No: 8

PROGRESS REVIEW OF THE ENERGY INVESTMENT UNIT'S BUSINESS CASE

To:	**Economy and Environment Committee**
Meeting Date:	**9th February 2017**
From:	**Graham Hughes; Executive Director, Economy, Transport & Environment**
Electoral division(s):	**ALL**
Forward Plan ref:	**Key decision: No**
Purpose:	**To review the progress of the Energy Investment Unit's (EIU) five year business plan and future skill requirements, as agreed by the Economy and Environment Committee in March 2015.**
Recommendation:	**Committee is asked to:**

note progress of the EIU's five year business plan as set out in Section 2.1 and Appendix A

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1. BACKGROUND

1.1 In March 2015, Members agreed to use some of the ongoing returns from the investments made into Energy Performance Contracting to fund the development of further energy projects, to bring financial and policy benefits to the County Council and maintain capacity and capability for the future.

1.2 Three key areas for development that were agreed were:

- extending the energy performance contracting project to benefit further schools and public buildings;
- develop other more profitable and wide ranging energy projects that could generate greater revenues in the future; and
- develop a European Regional Development Fund (ERDF) proposal to access low cost capital and revenue funding to support broader energy project investments in Cambridgeshire.

2. MAIN ISSUES

2.1 **Progress against the business case.**

The financial modelling undertaken in March 2015 (Appendix A: Table A) identified that an energy investment team could be supported by the profit made from school energy investments. This was without the need for additional revenue budget, and would be reviewed by March 2017. A review of the business case in October 2016 (Table B), identified:

- Overall profits from school investments has increased from £1.7million to £2.2million – this is partly due to cuts in loan interest rates post Brexit, but also owing to growing the project pipeline;
- The difference of £182,381 between the income on Table A and Table B (in year 1, Sept 15-March 2016) is owing to the following assumption. At the start of the programme it was anticipated that all loans issued in year 1 would occur at the start of the year, and bring a ‘repayment holiday’ benefit for the first year. In reality, this is not what has happened. Loans are drawn down across the year, often to the end of the year, hence this benefit is not fully realised. Therefore, in Table B, we have subsequently assumed loans will be issued at the end of the financial year (the ‘worst case’ scenario).
- The forecast returns for years 15/16 and 16/17 are lower than anticipated. This is mainly owing to schools taking longer than anticipated signing work completion certificates creating a cash flow delay – this issue has been resolved and the cash flow will pick up in subsequent years;
- The revised forecasts in Table B for 16/17, 17/18 and 18/19 provide more realistic and accurate income projections than those made at the start of the programme as these are based on an active pipeline of projects, rather than assumptions;
- To date, 43 schools are in contract, including 14 secondary schools and 29 primary schools with a total value greater than £9million;
- On current income forecasts, the EIU team can be supported for a further 3 years at current staffing levels, with no additional revenue budget required from the County

Council. This is because there is sufficient cumulative income that will be generated over time; and
- Beyond 2020, additional income from projects will need to be generated to support the team at its current capacity, although there would be sufficient budget to manage the existing contracts, with reduced staffing, even if no further income were generated.

2.2 In addition to the schools programme, the Energy Investment Unit has led or supported the delivery of the energy projects listed below, at no cost to the Council. These projects directly benefit the Council's wider budget through income generation and revenue savings:

- £350,000 p.a. income for services from the Soham Solar Park (from December 2016) rising to over a £1million p.a. when the initial capital is repaid. Cambridgeshire County Council is the only local authority in the country to receive finance incentive through the Government's 'Contract for Difference' auctions for renewable energy projects;
- £47,000 p.a. revenue savings and income from energy generation for seven County Council office and library buildings (from September 2016);
- £806,000 potential income over 25 years for the Smart Energy Grid Demonstrator Project with the view to replicate this project over a further six sites when the learning from the project is complete; and
- £250,000 p.a. savings on residents household energy bills through running six collective switches during 2014 to 2016 to switch to cheaper energy tariffs and save money.

2.3 **Building capacity and capability for the future.** Members have been keen to develop energy skills in-house to help facilitate investment into larger projects that generate bigger returns for the Council. During the last two years a secure base of energy skills across finance, legal, sales, technical, contract and project management has been built. Moving forward, there is significant change ahead in the energy market. For example, Government's Electricity Market Reform (EMR) in tandem with technological innovations is shifting the Country's electricity infrastructure (see diagram 1) to a more dynamic system where consumers play a much bigger role. This will bring opportunities for the Council.

2.4 The key benefits will come from generating and selling energy locally and helping to manage local supply and demand for energy. In anticipation of this change, the EIU expanded its work during 16/17 to develop a smart energy grid demonstrator project at the St Ives Park and Ride. The aim of the project is to establish proof of concept, but also to understand the business case revenues for the supply and demand for electricity to a customer, and how this informs the negotiation to sell energy via a power purchase agreement. Importantly, this project is furthering our knowledge and skills to support the Council's ambitions that include delivering larger energy opportunities for generating and selling local electricity, and heating, to our communities.

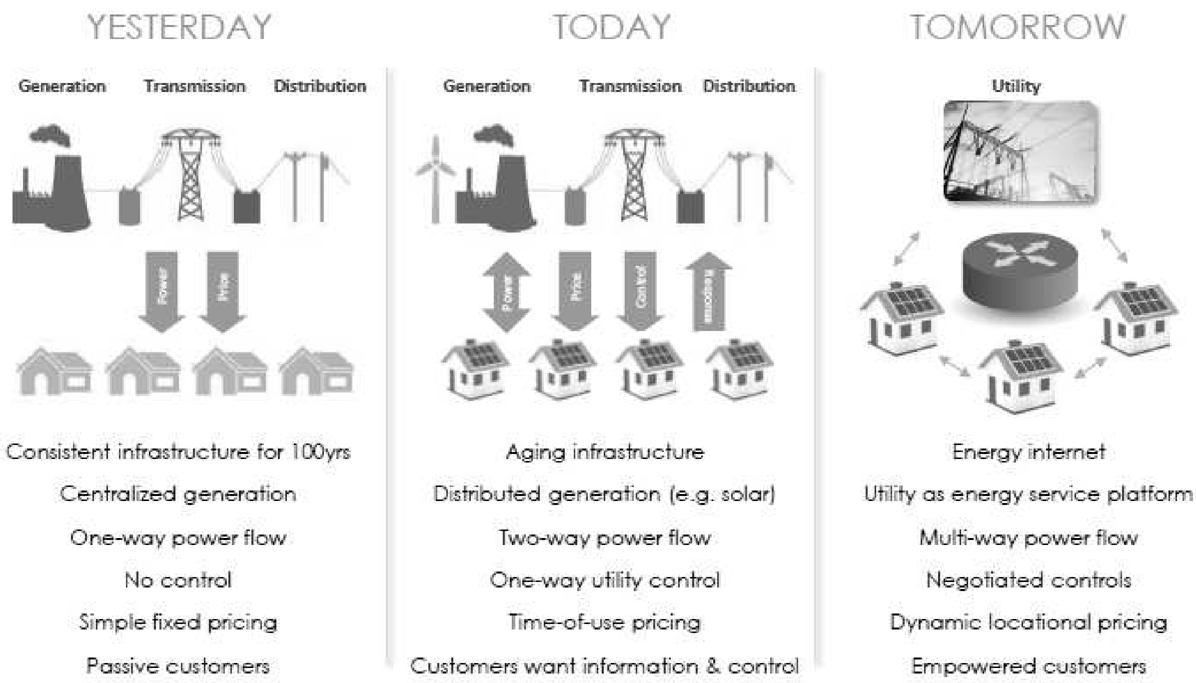

Diagram 1 – Electricity System: Yesterday Today and Tomorrow

2.5 **Future work/Direction**

The EIU needs to continue to deliver energy performance contracting for schools and County Council buildings to deliver forecast incomes up to 2020. In addition, the Unit will submit a Full Application for European Regional Development Fund grant for the Smart Energy Grid Project that could contribute towards EIU staff costs during 2017/18, 18/19 and 19/20. This will be whilst developing additional commercial skills for the selling of energy locally, and replicating the Smart Grid across other County Council assets.

2.6 The draft Corporate Energy Strategy, that is currently being consulted on externally, is a mechanism to facilitate collaboration between asset managers from across the Council, the EIU, finance and legal colleagues to develop new energy projects. This will allow the skills developed internally to be deployed into new projects providing the capacity and knowledge to develop and deliver successful energy projects, and generate income. The costs for the EIU team will look to continue to be recovered through the savings and incomes generated on projects, and will supplement the EIU business case beyond 2020.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

Section 2.3 describes electricity market reform and the changing role of consumers. The transition from a fossil fuel dependent economy to a low carbon economy requires leadership, innovation and demonstrable commitment to change at all levels. The Council can support its communities and businesses by using its assets to generate, sell and save energy which will provide greater economic resilience to future price volatility, generate income for services and help decarbonise local energy supplies.

3.2 Helping people live healthy and independent lives

Fuel poverty grows as energy prices rise. With a doubling of energy prices predicted in the next 10 years, despite current low oil and gas prices, evidence suggests that cold homes will bring greater health risks impacting negatively on health budgets and services. Finding local mechanisms to generate local energy, and sell energy could reduce the impact of fuel poverty and air quality costs to the NHS and others.

3.3 Supporting and protecting vulnerable people

Through using the Council's assets to reduce energy consumption, and to generate, and sell local energy, building running costs could be reduced, and additional income generated to support front line services. In addition, schemes for collective buying of energy help residents and businesses to reduce energy bills, and manage the impact of future energy price rises.

4. SIGNIFICANT IMPLICATIONS

4.1 Resource Implications

Section 2.1 and Appendix A, highlight that the actual and forecast income generation from the schools programme, over its lifetime, can support the Energy Investment Unit until at least 2020 at current staffing levels.

Other resource implications are as a result of the work of the EIU include:

- *Making better use of our assets* and deliver carbon emission reductions through the displacement of fossil fuels.

- *Development costs*. The Council will be taking the upfront development risk on larger projects. If a project is successful, development costs are repaid. However, some projects may not get delivered for technical or other reasons despite costs being incurred. However the assumption will be that revenue generating schemes will need to cover all development costs.

- *Public Works Loan Board (PWLB) borrowing*. Financing new energy schemes will require the Council to continue to provide funding, e.g. by borrowing from the Public Works Loan Board. The Council will continue to carefully manage risks to projects

4.2 Statutory, Legal and Risk Implications

- Potential changes to International Accounting Standards could impact our ability to support new Academy schools after 2019 with energy performance contracting. Discussions with the Education Funding Agency will start early 2017 to agree a way forward and any transitional arrangements.
- Policy changes to decrease finance incentives or increase business rates on renewable energy could impact the business cases for some projects.

- Substantially increasing the volume of energy sales from our assets will require the Council to comply with regulatory and license arrangements.

4.3 Equality and Diversity Implications

There are no significant implications for the EIU business case but when individual energy projects are developed and brought forward for investment decision, community impact assessments will be required for those eligible to do so.

4.4 Engagement and Consultation

There is no significant implication for the EIU business case but through the work of the unit, individual energy projects brought forward for construction and delivery will need to undertake community engagement and public consultation and comply with local planning policies.

4.5 Localism and Local Member Involvement

As above.

4.6 Public Health

There are no public health implications resulting from the EIU business case but as a result of its work, fossil fuels will be displaced through clean energy and reducing energy consumption which will bring health benefits through improved air quality and tackling the impacts of climate change.

Source Documents	Location
Economy and Environment Committee, 10th March 2015, Report on MOBILISING LOCAL ENERGY INVESTMENT (MLEI) – FORWARD STRATEGY	https://cmis.cambridgeshire.gov.uk/ccc_live/Meetings/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/285/Committee/5/Default.aspx

Appendix A: Energy Investment Unit, Business Case

Table A: March 2015 Business Case

Energy Performance Contracting Project	**Year (Yr) 1 Sep 15 – Mar 16**	**Yr2 Apr16-Mar 17**	**Yr3 Apr 17-Mar 18**	**Yr4 Apr 18-Mar19**	**Yr5 Apr 19-Mar 20**
*Net income on £5m invested after loan costs	-£226,633	-£26,840	-£48,677	-£70,515	-£92,352
Net income on £4m invested after loan costs	0	-£181,307	-£21,472	-£38,942	-£56,412
Net income on £3.2m invested after loan costs	0	0	-£145,045	-£17,177	-£31,153
Total annual net income after loan costs	**-£226,633**	**-£208,147**	**-£215,194**	**-£126,634**	**-£179,917**
^Annual other costs (staff, legal & consultancy)	£115,227	£172,077	£35,400	£37,269	£38,764
****Annual residual income**	**-£111,406**	**-£36,070**	**-£179,794**	**-£89,365**	**-£141,153**
Cumulative residual income	*-£111,406*	*-£147,476*	*-£327,270*	*-£416,635*	*-£557,788*

The cumulative residual income forecast for schools at year 18 was £1.7million

* If only the £5milion investment is made (line 1) the income over yr1 and yr2 will cover the full costs of an energy investment team until March 2017.
^ From year 3, the skills required to progress this work will need to be reviewed. The current costs from yr 3 are for maintenance of the existing energy contracts only. There is sufficient income overall to bring in further skills in yr 3 to develop more projects.

Table B: October 2016 Review of the Business Case

Energy Performance Contracting Project for schools	**Yr 1 Sep 15 – Mar 16**	**Yr2 Apr 16-Mar 17**	**Yr3 Apr 17-Mar 18**	**Yr4 Apr 18-Mar 19**	**Yr5 Apr 19-Mar 20**
Net income on £4.43 m invested after loan costs 15/16	-£44,252	-£34,439	-£50,675	-£68,391	-£86,109
Net income on additional £1.87m invested after loan costs 16/17	0	_	-£24,727	-£31,261	-£37,794
Net income on £2.52 m 17/18	0	0	-£68,875	-£31,885	-£40,906
Net income on £2m invested over loan costs 18/19	0	0	0	-£52,767	-£21,531
Total annual net income after loan costs for schools	**-£44,252**	**-£34,439**	**-£144,277**	**-£184,304**	**-£186,340**
Annual other costs (EIU, finance legal, LP and consultancy)	£127,910	£182,000	£182,000	£182000	£182000
Annual residual income/expenditure	**£83,668**	**£147561**	**£37,723**	**-£2,304**	**-£34,340**
Forecast ERDF contribution towards staff costs		-£40,000	-£50,000	-£70,000	-£30,000

Cumulative residual income/expenditure	*£83,668*	*£191,229*	*£178,952*	*£94,371*	*-£58,890*

The cumulative residual income forecast for schools at year 18 is now £2.2million

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: Mark Miller
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 Name of Officer: Tess Campbell