

## **CORPORATE ENERGY UPDATE**

### **Report of the Head of Digital Transformation and Business Support**

#### **1. INTRODUCTION**

- 1.1 The new Corporate Energy Manager met with Members earlier this year and discussed his role and the Council's objectives in terms of corporate energy savings and renewable energy production. Members expressed an interest in receiving a report in 6-9 months' time to provide an update on the achievement of these objectives.

#### **2. ENERGY PERFORMANCE**

- 2.1 The council's total annual energy consumption<sup>1</sup> for the financial year 2015-2016 was 17% less than in the financial year 2012-2013 (from the commencement of DCCs current Energy Policy). DCC's energy costs also reduced, with the costs of energy in the 15-16 financial year being 19% lower than in 2012-2013.
- 2.2 DCCs Estates Strategy (2012 to 2017) has successfully delivered a reduction in energy consumption by 29% for DCC owned and leased properties from 2012-2013,. This has reduced the authority's spend on energy by 33% since 2012/13, representing a budget saving of £686,000 since 2014-2015 and a total of £2,581m since 2012/13 which has contributed to the reductions in overall budget that the Council has had to achieve over this period..
- 2.3 This reduction has been a result of on-going property rationalisation as part of DCCs Estates Strategy including the disposal of energy intensive properties such as former Care Homes as well as the introduction of energy efficiency measures in retained properties.
- 2.4 Measuring energy performance against the number of employees or the size of the estate also provides a good indicator for energy consumption (known as 'normalised energy consumption') In 15-16, energy use per employee was 8% lower than in 2012-2013. DCCs target is a 25% less energy use per employee by 17-18.
- 2.5 The amount of energy consumed by DCC coming from renewable energy sources was 3% in 15-16, remaining the same as the previous financial year. This is largely due to the reduction in incentives (Feed in Tariffs) making the market for renewables less conducive and the income and payback potential less attractive.
- 2.6 DCCs ability to progress large scale solar PV will be determined by the timescales to increase grid capacity (through Western Power) in the South West, which is currently not likely to increase until 2020 at the earliest.

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<sup>1</sup> Total consumption is made up of DCCs property portfolio, street lighting, travel & transport, and water supply & treatment.

- 2.7 The Corporate Energy Manager is in the process of drafting a renewable 'Energy Strategy' to achieve the long term 2030 target of 30% of energy consumed from renewable source.
- 2.8 In the short term the Corporate Energy Manager has been working with Councillor Croad to lobby for improvements in the renewable legislative area and working to secure funding and alternative deployment methods.(detailed below).

### **3. PROGRESS AND ACHIEVEMENTS**

- 3.1 At County Hall, Estuary House and Great Moor House (3 of DCCs Strategic Centres) Building Management Systems (BMS) which control energy consumption have been reviewed resulting in timing and control adjustments to reduce consumption.
- 3.2 The roll out programme for LED lighting in DCC buildings, which commenced in 14/15 continues (10 buildings have been completed to date), with a further programme planned in 17/18.
- 3.3 Feasibility work is underway to consider Energy Performance Contracting (EPC): (third party-financing of energy efficiency and/or heating and cooling measures), working with Royal Devon & Exeter Foundation Trust and Exeter City Council to collaborate on a joint-EPC The EPC would reduce energy costs on buildings by at least 5%
- 3.4 Early in 2016 150kWp of solar PV was installed at Great Moor House and Exeter Library in partnership with Exeter Community Energy (ECO) and Libraries Unlimited South West. DCC now purchase renewable electricity for the installation on Great Moor House at c. 50% less than the current cost of energy from the grid with no DCC capital outlay. A proportion of the income from ECOs installations goes to a community fund to support measures reducing fuel poverty.
- 3.5 Funding has been secured for the Zero Energy Building Catalyst (ZEBCat) project which will result in £200,000 of capital funding and revenue funding of £16,000 per year. The project aim is to reduce greenhouse gas emissions from a corporate estate building by 60% with subsequently a similar reduction in energy consumption.
- 3.6 The University of Exeter have secured funding of £20,000 to work with DCC on developing effective strategies to improve staff behaviour in relation to energy consumption.
- 3.7 The Corporate Energy Manager is supporting the Dextco (set up to deliver a District Heating Network across Exeter) and Exeter City Centre heat networks project until February 2017. This has enabled a strategically important project to keep moving forward during a critical phase.
- 3.8 Two funding bids (Interreg Atlantic and Western Power Distributions Innovation Fund) have been submitted to explore energy storage at DCC properties.
- 3.9 DCC are working with a renewable energy company to explore the potential and viability of solar PV on DCC assets.

### **4. SUMMARY**

4.1 Through the implementation of a number of energy efficiency measures, the continued reduction in DCCs property portfolio and a dedicated resource to focus on energy management the authority has made significant progress in this area and are able to evidence both a reduction in consumption and resultant costs savings.

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