EXETER CITY COUNCIL

Becoming an Energy Neutral Council

Exeter City Council is a cost efficient, forward thinking Council, working to reduce its carbon footprint and encouraging others to do the same. A new commitment to make real change and deliver Exeter's aspiration to become a lead sustainable authority has been embarked on. The goal is to deliver long term financial and carbon savings as Exeter strives to become an energy neutral council.
This ambition is supported by an innovative programme of energy efficient and renewable initiatives, financially supported and already producing substantial savings.

The City Council's target is to reduce its base load energy consumption, and deliver financial savings, with the added benefit of the carbon reduction. In 2012/13 the Council produced 4500 tonnes of carbon, but through the delivery of the Renewables and Energy Efficiency Programme, a 30% reduction can be achieved by year 3.

SOLAR PV ON COUNCIL BUILDINGS

PV installed in early 2013 to four main Council facilities, the Council's Civic Centre, Oakwood House Office, Materials Recycling Facility, and Museum Store has proved far reaching. To date the PV array has exceeded the Government's performance data by 32%; subsequently the project is predicted to break even within 5 years and will provide an index linked income stream for a further 15 years. During the first full year of operation, the 180kW PV array delivered an income of nearly £48,000 and saved 82 tonnes of carbon.

The innovative Renewables and Energy Efficiency Programme includes further PV installations to Council buildings, including a pioneering Solar Canopy Car Park project (PV arrays to the top deck of the city car parks). Solar canopy when linked to low energy lighting installed in the car parks will provide for a zero carbon parking service.

Phase two of the Renewables and Energy Efficiency Programme looks to develop PV schemes for further Council assets as well as Leisure Centres and other leased properties. Here a Power Purchase Agreement can be utilised, the City Council will become an energy provider and leaseholders can benefit from cheaper energy bills, as well as reduced carbon emissions.

OTHER ENERGY EFFICIENCY MEASURES IN BUILDINGS

It can be see that renewable technology provides for enormous cost savings and delivers long term income. By the same token, key energy saving projects are vital if Exeter is to reduce consumption, associated operational costs, and to make for a sustainable property asset.

An LED lighting project at the Council's main offices has proved extremely effective, reducing consumption by 60%, demonstrating significant long term energy

and cost savings. Additional benefits include reduced maintenance/administration, and improved lighting making for a better working environment. LED lighting has also been effectively installed in city centre car parks, again reducing electricity consumption, in some cases up to 65%. As well as reduced maintenance/ administration costs the lighting is significantly improved, making for well lit and safer car parking. The success of the LED project is shared with residents, featuring in the Council's quarterly newspaper delivered to every home in the City.

Other energy efficiency schemes include removing paper towels and installation of low energy hand driers, replacement of the incumbent oil fired boilers that heat the Civic Offices, and installing free cooling ventilation in the new shared services IT data centre.

Future energy saving measures planned include staff engagement projects to reduce consumption further, to tackle the unoccupied base load of the Civic Offices, utilising low energy kitchen facilities. This will not only deliver a financial return, but make for an improved and more creative working environment.

ELECTRIC VEHICLES

Earlier this year, the Council underwent a fleet review by the Energy Saving Trust. This indicated that savings could be generated by the replacement of life-expired vehicles by electric rather than petrol or diesel versions. Generally our vehicles do not travel beyond our compact administrative area, so the limited range of such vehicles is not an issue. The first phase of a new electric vehicle fleet is underway with electric pool cars and small operational vans already in service.

The above acquisition was made possible by our success with a bid to OLEV in 2013, which has provided for seven twin charging points. The chargepoints are called 'Plug and Park' Stations and the design is a highly visible one promoting Electric Vehicle use. The chargepoints are situated in key city locations, including car parks where they are available for public use. Drivers pay the normal parking charge but do not have to pay for charging.

Turning to a wider perspective, the Council is the author of an Electric Vehicle Strategy prepared for the Low Carbon Task Force (see below). The Strategy aims to promote the use and ownership of electric vehicles, and to encourage a consistent approach to their increasing popularity, across its geographical area, and more widely across the county. Member organisations of the Task Force will increasingly be subject to demands from the public, ranging from a desire for more chargepoints, to granting privileges to electric vehicles such as discounted parking or exemption from traffic restrictions. It is against this background that the Task Force considered it advantageous to have an Electric Vehicle Strategy in place.

LOW CARBON TASK FORCE

The Council is an active member of the Exeter and Heart of Devon Low Carbon Task Force, an association of public and private sector organisations reporting to the Growth Board for the area, including local authorities, Chamber of Commerce, Eon, the University of Exeter, and the Royal Devon and Exeter Hospital (RDE).

The Task Force drives the delivery of a low carbon economy, working to:

- Develop low carbon heating and power solutions in the Exeter and East Devon Growth Point.
- Explore opportunities to develop a city centre heat network.
- Help local businesses to save energy and adopt new technologies.
- Develop Eco opportunities to eco-refurbish homes.

DISTRICT HEAT NETWORKS

The Council is working with key stakeholder and the Low Carbon Task Force to develop goals listed above, including two district heat networks in Exeter. Such a system is already operating in Cranbrook, this takes heat from a CHP plant to dwellings in the town and the Skypark employment area.

A similar scheme is underway for Monkerton, a strategic development area in the east of the city, with a site available for a CHP plant and major landowners having signed up. A further scheme, as part of a city centre regeneration project on the current Exeter bus station site, includes retrofitting some existing large premises such as the RDE, and linking to a new Energy from Waste Plant at Marsh Barton. The Council is working with partners on a delivery model, including an Energy Supply Company with public sector involvement to deliver the city centre scheme.

The Council has used planning conditions and section 106 obligations to ensure that new development in the relevant areas is designed to be compatible with a district heating network, and to connect to such a network when it becomes available. Section 106 obligations have also secured essential financial contributions.

LOW EMISSIONS STRATEGY

In 2013/14 the Council was awarded Air Quality Grant funding by DEFRA to develop a Low Emissions Strategy for Exeter. This is important because the city has designated an Air Quality Management Area where nitrogen dioxide concentrations exceed objectives because of traffic emissions. The strategy will deliver innovative and sustainable ways to reduce nitrogen dioxide emissions, working with key stakeholders to ensure that carbon and air quality policy are mutually beneficial, and improve the health of those living close to the busiest roads.

SUSTAINABLE PROCUREMENT

The Green Accord is a proven environmental accreditation scheme developed by Exeter City Council, Global Action Plan and key local businesses. It has received national acclaim (see national award recognition below), endorsement from the audit commission and is a standard used by other public bodies such as Exeter University and the MET Offce.

The Green Accord is an accreditation that drives sustainability and addresses the environmental responsibilities facing those who procure. It demonstrates best practice and the reduction of environmental impact through the whole supply chain, by demanding practical actions and the instigation of alternative working practices. To date the scheme has helped hundreds of businesses to make efficiencies, improve working practices and reduce operational costs, not only providing for environmental savings but also improved business worth.

SUMMARY

It is clear to see Exeter is fast becoming a lead authority, one that is collectively making ground breaking steps to be a truly low carbon City, and one that sets a standard for all. The Council's aspiration for Energy Neutrality, through investment in renewables and other energy saving schemes, forms an essential cornerstone to achieve a 30% reduction in carbon emissions, whilst at the same time safeguarding public services.