

Save Money, Make Money, Cut Carbon - Towards Low Carbon Devon

Recommendation:

The delivery board consider:

- i. the initial findings of the Devon Sustainable Energy Strategy and the draft priorities for action;
- ii. the estimated costs of implementing the priority actions, and the significant potential benefits;
- iii. the leadership required to put Devon at the forefront of moves towards creating low carbon economies and communities.

1. Introduction

The Devon Sustainable Energy Network was commissioned by the Devon Strategic Partnership in November 2006 to produce a Devon Sustainable Energy Strategy, as part of work towards developing the Devon Sustainable Community Strategy. The Devon Economic Partnership has identified the switch to a low carbon economy as the number one priority for action for the Devon Economic Strategy. The Network has been working with the Economic Partnership to develop the Strategy, under the strap line 'Save Money, Make Money, Reduce Carbon', supported by research from the University of Exeter's Centre for Energy and Environment. The Strategy's initial, draft findings are summarised here, with a view to informing a discussion of both the scale of the challenge, and the opportunity for significant economic and social benefit for Devon.

2. Devon Sustainable Energy Strategy, initial findings - Summary

- To avoid dangerous climate change global atmospheric carbon dioxide concentrations must be stabilised at 450ppm.
- Concentrations are 381ppm now (2005 figures) and heading rapidly upwards. The pre-industrial level was 280ppm.
- Significantly reducing emissions over the next 10 years is essential, and with more to follow.
- The UK Government interim target is a 20% emissions cut by 2010, from 1990 levels.
- Devon's emissions must be reduced by 15% from now to 2010 if we are to achieve our 20% reduction (5% reduction achieved 1990-2004 by the 'dash for gas').
- The largest, most cost effective reductions can be achieved by domestic and business energy reduction & efficiency.
- To achieve a 20% reduction in these sectors, the 70% of Devon homes that don't have sufficient loft insulation and the 50% without cavity wall insulation need to be treated and householder behaviour changed to switch off, use less etc. All Devon's businesses with 4 or more employees (9,000) need to undertake energy reduction & efficiency programmes.
- If Devon's share of the 2010 SW regional renewable electricity and heat targets are achieved the County's emissions will be reduced by 2.7%.
- If all the above reductions from business, domestic and RE were to be achieved, and transport emissions remain constant, Devon's emissions would reduce by 14.8%.
- The cost (current funding gap) of doing all that would be up to £111m and the big question is where could the money come from?
- If the £111m investment was secured, the economic benefits would be significant, such as:
 - £106m/yr reduced Devon energy bill
 - £510m additional investment in Devon levered in
 - £24.5m/yr reduced primary care costs caused by fuel poverty (a saving of £16.1m/yr could be saved by a £15m one off investment)
 - local jobs, skills and business growth in a number of professions, trades and sectors
 - significant contribution to the Devon 'greenest county' brand

3. Priority Actions 2007-2010 (draft)

Cross Cutting Actions

3.1 Investment Solutions. Creative solutions are required to generate the investment required to deliver the actions below. As well as making the most of Government and EU funds available, local 'invest to save' arrangements need to be developed within the public sector, public/private partnerships with utilities and other companies, new trading mechanisms such as Energy Service Companies that incentivise carbon reduction, and social enterprises that can generate surplus from trading to reinvest in harder to fund emissions reductions.

3.2 Skills and Capacity. Local businesses, including insulation contractors, builders, electricians, heating engineers, plumbers, etc. and specialist renewable energy companies need to be supported to develop the capacity and skills that will be required. Post 2010, small scale renewable energy technology needs to be installed in most properties. The Devon workforce of the future needs to be equipped for the opportunities that will follow.

3.3 Leadership, Co-ordination and Communication. This ambitious programme will require senior, cross sector working and leadership. Delivery activities must be well co-ordinated and consistent with each other. All activities should be identifiable as part of the same programme, and build awareness and recognition across communities. The Devon Strategic Partnership, Devon Economic Partnership and Devon Sustainable Energy Network will be important.

Sector Specific Actions

3.4 Business Energy Reduction and Efficiency.

Approximately £15m over 4 years is required to provide the support needed to 9,000 Devon businesses (all businesses with 4 or more employees) to reduce their bills and emissions by 20%. This would lever in £100m+ investment from the private sector.

3.5 Domestic Energy Reduction and Efficiency

223,000 lofts and 160,000 cavity walls need to be insulated. Draught proofing and use of low energy lighting, together with householder education, needs to be carried out in most of Devon's 319,000 homes. The total cost of these measures would be £128m over four years, £7m of this is direct delivery costs, including marketing, auditing, education, specifying & quality control, the rest for physical works on properties. Approximately £32-53m could be available from existing public grant sources and the energy utilities companies' energy efficiency commitments, leaving a funding gap of £74-96m.

3.6 Devon Owned Renewable Energy Development

There are significant opportunities for large scale grid connected RE developments in Devon, such as wind, biomass and waste to energy, to meet existing targets. With wind developments to date relatively little benefit is delivered back to the local community and the majority of profit leaves the County. There is the opportunity to use social enterprise business structures to develop large scale installations, and then enable profit to be distributed back to the local community, possibly to enable reduced energy costs and carbon emissions, so making the developments more beneficial to the Devon economy and its communities.

3.7 New Development

A range of mechanisms need to be harnessed to ensure that new development is increasingly low to zero carbon, including: the planning process, business development, education and awareness raising, energy and thermal efficient design, integrated renewable energy generation, development of energy service company structures, provision of support services such as Devon Sustainable Building Initiative and others.

3.8 Transport Reduction and Alternatives

The wide range of existing and developing initiatives such as park and ride, car sharing, cycle networks, public transport including rural bus service improvements, tele-working etc. need to continue and be enhanced to limit the growth of road transport, with a view to reduction in the future. Airport growth is a real concern to be addressed.

4. Conclusion - Making it happen

The importance of avoiding dangerous climate change makes the urgent task of reducing Devon's carbon dioxide emissions the most pressing strategic issue for the Partnership. Business and economic development partners have also identified this as the no.1 economic priority for the County, recognising the significant opportunity for Devon to be at the vanguard of the move to a low carbon economy.

The Sustainable Energy Strategy provides a clear analysis of the issues and deliverable priorities for action. The scale of the task is significant and cannot be delivered by any individual organisation or sub set of the Partnership working alone. Strong, ambitious and visionary leadership is required from the Partnership, together with senior individual members taking responsibility for leading task groups to develop delivery of each of the actions above.

Contacts

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