

Kirklees Council - Warm Zone

Leading carbon emission reduction projects by setting an example

Overview

Kirklees Council has consciously been reducing its carbon emissions since 1992. In 2002, uniquely, it signed up to challenging reduction targets, through the UK emissions trading scheme. It began by cutting the Council's own emissions. The resultant cost savings have funded a wide range of initiatives. New initiatives include free insulation to households, local solar and wind power which have combined with other council activities. The council has achieved environmental, health, safety, poverty reduction and job creation benefits - securing cross-party political support, and a 34% reduction in emissions.

If climate change is to be tackled effectively it needs inspiring leadership. With this in mind, Kirklees became the first (and only) local authority to join the newly created UK emissions trading scheme, in 2002 – with legally-binding targets to reduce carbon emissions by 30% over 5 years. At the same time, it also wanted to address high levels of fuel poverty and health problems associated with carbon monoxide poisoning.

The council implemented changes, including establishing the largest local authority solar energy project; installing wind turbines on its own buildings; and a mentoring and training programme. The Kirklees Warm Zone offers free insulation to homes, regardless of their financial means, and a new scheme Re-Charge, which offers interest free loans to home owners to install small scale renewable and low carbon technologies on their properties. Householders are also given access to partner services - including benefits checks and home safety checks.

The scheme has delivered environmental, health, safety, poverty reduction and job creation benefits. In the first eighteen months it has stimulated 46,290 assessment forms to be completed, resulting in 10,520 loft insulations & 5,858 cavity wall insulations. The estimated carbon dioxide reduction from the first year is 10,537 tonnes CO₂/pa. Its success has generated cross-party support across the political divide.

Summary

- In 2002, Kirklees joined the UK emissions trading scheme setting challenging carbon reduction targets.
- 26% of its households experienced fuel poverty; and there have been a number of cases of carbon monoxide poisoning.
- Kirklees launched the Warm Zone project in 2007 to both tackle these and contribute to further reduction in emissions.
- The project offers free insulation to every suitable house regardless of the means of the householder. They also receive access to other Council services, and a new loan scheme Re-Charge offering interest free loans to home owners to install small scale renewable energy technologies.

- Substantial new funding has been invested to deliver the Warm Zone.
- The Warm Zone has delivered environmental, health, safety, poverty reduction and job creation benefits

Background

Kirklees is the third largest metropolitan district in the UK, with a population of 390,000 and annual CO2 emissions of 3 million tonnes. Kirklees Council has a long commitment to tackling climate change, with targets for reducing its carbon footprint in place for over 15 years.

By 2005, the council exceeded its own target of 30% to reduce CO2 emissions from its 1990 levels. It achieved a 34% reduction through saving energy and using renewables in its own buildings and buying green energy from the grid.

In March 2002, the Council became the only local authority to join the newly established UK Emissions Trading Scheme. It signed up to legally binding targets to reduce emissions, by 30%, over a five year period. Three years later, in 2005, the Kirklees 'Environment Vision' set a new carbon reduction target of 30% by 2020, and furthermore, in 2008 a 3% annual, district-wide emission target was agreed.

Fitting insulation and encouraging energy efficiency in all homes was seen as an opportunity to tackle climate change, health and poverty simultaneously - gaining several benefits in one go. To complement the extensive activity already in progress Kirklees launched the Kirklees Warm Zone in February 2007. This was a 3 year programme with £20m investment. It offers free loft & cavity wall insulation and low energy light bulbs to all households regardless of income.

Improvements to heating systems are available to eligible households and competitive prices for boilers and central heating are also offered for customers who are able to pay. The project also offered a golden opportunity to link up to other services. As such the project offers: benefit checks, fire safety checks, free carbon monoxide detectors and water conservation advice, in tandem with other agencies.

The Project

Before focusing on the residents' projects, Kirklees instigated major changes to its own energy consumption to create costs savings for further investment in carbon savings in the council. Other measures include:

- 1) Setting up a Renewable Energy Fund. The fund has enabled around £4 million of additional funding to be raised from the EU, UK Government and private investment. A Sustainability Fund has also been set up to fund emissions reduction initiatives in other Council projects
- 2) Implementing one of the largest local authority solar energy projects in the UK (Suncities), involving 500 households, resulting in 5% of the total UK photo-electric generation in 2006. Six Council care homes and three local schools also have solar panels. (Further details are set out in the Reference section.)

3) Installing a biomass boiler to the Titanic Mill luxury office and apartments development

4) Installing wind turbines on council buildings, including the first two 6kW wind turbines ever installed on the roof of a council building in the UK, and two 15kW wind turbines at the Deighton Centre.

5) Delivering the Climate Champions project in Kirklees schools one of which installed their own 15kW wind turbine.

6) 220 solar electricity panels and 48m² of solar thermal panels on the main Civic building in Huddersfield.

7) Delivering a mentoring and training programme to housing associations and public sector organisations aimed at increasing their capacity to deliver local sustainable energy projects.

8) Planning applications for the installation of renewable technologies are considered free of charge as the fees have been waived.

The Council have invested approximately 50% of the 'Warm Zone' funds from its own capital investment programme with a further 50% match funded from Scottish Power. National Grid also contributed start up finance, advice and officer time.

The three year Warm Zone Project commenced in February 2007 to#

1) Significantly improve the domestic energy efficiency of the housing stock and meet the Council's wider objective for tackling climate change.

2) Tackle the wider problem of fuel poverty and meet the Council's Affordable Warmth Strategy's objective of lifting households out of fuel poverty.

It was the only scheme in the country offering free insulation to all households, regardless of income levels, solely dependant on the suitability of the home. The target for this £20 million project is to retrofit 50% of Kirklees' 172,000 homes by 2010, so saving up to 55,000 tonnes pa of CO₂ (2% of district emissions).

The project also uniquely offers, free carbon monoxide detectors and support from a number of partner agencies. Taking an integrated, multi-agency approach delivers wider environment, regeneration, health and economic benefits across different Council departments.

Warm Zone activities include:

- A two wards 'zipper' approach – the Warm Zone team works in the least and most deprived wards at any one time – to ensure an even workload for assessors and contractors.
- Leaflet drops to every household in the target wards - Followed up door knock visits by Warm Zone uniformed and badged staff to discuss resident's interest in insulation and other services

- Households also have the option to complete a self assessment form
- Technical assessment of properties and fitting of cavity wall or loft insulation by contractors, Miller Pattison.

These activities also provide a golden opportunity to introduce additional services by other agencies including:

- Benefit checks through Citizens Advice Bureau, Benefits and Revenue Service, the Pensions Service, Kirklees Benefits and Advice Centre.
- Fire Safety Checks through the West Yorkshire Fire and Rescue Service.
- Water conservation advice and offers on water conservation appliances (eg water butts) through Yorkshire Water.

From August 2008 the RE-Charge initiative will offer interest free loans to Kirklees home owners of up to £10,000 to install small scale renewable energy on their property. £3 million of capital funding has been made available from the Council's capital plan over the next 3 years to fund this scheme.

For the future Kirklees Council's District Emissions Reduction Plan sets targets of 3% pa CO2 reductions for 3 years. Further investment is planned for: biomass wood fuel and boiler installations, a District Heating network and small scale hydro. As in the past, this will be part funded from savings the Council makes from reducing its own energy, waste and water consumption. The Council recognizes there is still a long way to go in tackling climate change. The next phase will mean getting others – businesses and the public sector – to take their own practical measures.

The Impact

This programme delivers across the sustainable communities agenda and is a great example of Local Strategic Partners working in an integrated way. As well as environmental benefits, it is delivering health, safety, poverty alleviation, neighbourhood regeneration, local jobs and skills. As a result the scheme has strong cross-party backing from Conservative, Liberal Democrat and Green elected members and has been able to secure mainstream budget funding and lever in external funds.

After its first eighteen months of operation the Warm Zone has:

- Door knocked 78,172 households
- Completed 46,290 assessment forms
- Referred 28,768 to Miller Pattison for survey and insulation measures.
- Installed Loft Insulation in 10,520 and Cavity Wall insulation in 5,858 properties; 35,596 households requested energy saving light bulbs
- Estimated carbon dioxide reduction from the first year's installations is 10,537 tonnes CO2/pa (against its 55,000 tpa target by 2010)
- Benefits advice requested by 16% of households, increased uptake projected by £0.44 million
- CO monitors requested by 40,915 households
- Created 84 FTE jobs for the whole programme
- Resulted in the opening of a new local insulation depot and a training centre to address limited local fitter capacity

On the renewables front Kirklees has:

- Developed the UK's largest solar village on 5 locations involving around 500 householders and accounting for around 5% of the domestic solar PV installed in the UK in 2005.
- Reduced tenants' fuel bills - solar installations provide about 20% of electricity needs and 50-60% of hot water.
- Increased the Council's capacity to deliver large scale renewables initiatives on domestic properties
- Developed local skills in Modern Methods of Construction
- Achieved Ecohomes 'Very Good' and 'Excellent' status for new build elements
- Supported Decent Homes energy efficiency improvements on existing social housing
- Reduced CO2 emissions by over 50 tonnes pa at Primrose Hill

A major factor in the success of these projects was the ability of the Council to access and co-ordinate several funding streams (European, national and partners) to finance the capital measures. Savings made from energy and water efficiency measures are reinvested in efficiency measures in other buildings therefore giving a continuous funding stream to help the council meet its own CO2, waste and water reduction targets.

Lessons Learned

Kirklees Council has learnt many lessons from both their energy efficiency and renewables work:

- Develop a strong vision and keep it at the top of the agenda.
- Try and ensure wide based cross party political support.
- Sell ALL of the benefits - Don't be too "green"
- Be opportunistic – if funding is available from mainstream budgets, EU or Central government programmes then tap into it.
- Ensure the right technical support. The Council's 30-strong environmental team has built a strong technical base and is not scared of the technologies. They keep up to date with climate issues, technical developments, funding opportunities and procurement rules.
- Work with a range of partners: An arms length organization coordinates marketing and door knocking; a preferred contractor carries out all installations; other partners follow up on benefit claims, safety, water conservation and housing improvement advice.
- Ensure good baseline and monitoring data to demonstrate achievements.
- Tackle the easy measures first; start with practical interventions which will make a difference
- Keep it simple – the Warm Zone scheme is not means tested
- Offer something for everyone – to ensure the scheme is seen as fair and the uptake by residents is high
- Be pragmatic – go for visible symbols – such as wind turbines on Council buildings - if they raise awareness and interest
- Make sure it is deliverable – careful seasonal planning and ward targeting can help to level workloads
- Build local capacity by working with housing associations, businesses and the voluntary and community sector

Reference

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External links

Other relevant web links and publications:

<http://bise-europe.org/IMG/pdf/Kirklees.pdf>
http://www.strucherm.co.uk/pdfs/case_studies/Fastbuild/A3_Primrose_Hill_V1.pdf
<http://www.kirklees.gov.uk/community/environment/renewable/primrosehill.ppt>
http://www.kirklees.gov.uk/community/environment/renewable/2006_PrimroseHillCaseStudy.pdf
http://www.esd.co.uk/example_projects/TitanicMill-LASP_050309_update.pdf
<http://www.decenthomesstandard.co.uk/>

SunCities project details

Some of the SunCities project sites outlined in the Project section include:

- Primrose Hill - a large new mixed tenure scheme of houses and apartments with Yorkshire Housing as part of a major regeneration scheme. Homes are built to Ecohomes 'Very Good' and 'Excellent' and include high energy efficiency, recycling facilities, cycle storage, good transport links, sustainable materials, water conservation and biodiversity features. Solar PV of 113kWp has been installed on more than 80 new apartments and houses and on over 30 existing KNH houses.
- Fernside Social Housing – a retrofit of 108 kWp of PV panels on 100 existing KNH properties and two schools.
- Sackville Street Social Housing – 40 kWp of PV on 31 properties.

In addition the Titanic Mill project on 130 luxury apartments and offices includes: (50kWp solar PV) - A biomass boiler is planned which will create a carbon neutral development. Mill Energy, a local ESCO, will manage the power supply.

Kirklees Neighbourhood Housing (KNH) has already improved every category of public housing – over 25,000 homes – to Decent Homes standards including insulation, double

glazing and cladding – leading to the largest uplift in SAP ratings in UK. However, an estimated 32,000 - 45,000 of all Kirklees households live in fuel poverty (defined as spending more than 10% of household income on energy bills and closely linked to ill health and low life expectancy).

Prizes and Plaudits

Best UK EMAS - 2006 (and in 2002)

Top UK authority for climate work in 2006 (excluding London)

Green Apple awards and certificates in 2003, 2004, 2005 and 2006 (6 in total)

Ashden Award for sustainable energy in 2006 (with £30k funding)

Premier League in Regional index every year running

Kirklees Renewable Energy Toolkit – Energy Efficiency Product of the Year 2006 UK

Electrical Industry Awards

British Renewable Energy Award 2006

Ministerial Visit by Eric Morley in 2005

EU ManagEnergy Local Energy Action Award 2008 Winner

National, local and regional media coverage including BBC Look North

Guardian December 2005 “Greenest Local Authority in Britain”

Project Images

