

# **Kirklees Warm Zone**

# Final Report 2007-2010



Bill Edrich, Kay Beagley, Phil Webber & Sally Kelling



#### **Executive Summary**

The Kirklees Warm Zone (KWZ) was a Kirklees Council initiative, which began in the autumn of 2005 with initially modest aims of installing loft and cavity wall insulation and maximising grant support for central heating in a more economic efficient manner. Ultimately it became an internationally recognised (from North America to Eastern Europe) award winning scheme that has transformed the ambitions and horizon of what can and should be achieved in reducing fuel poverty, carbon emissions and increasing prosperity through creation of jobs and reduction in fuel bills.

This document aims to capture the principal learning, experience and history of the Kirklees Warm Zone (KWZ) to enable other organisation to build upon our experience and develop similar projects suitable for their area and circumstances. The report highlights how some of the key elements of KWZ differ from other domestic insulation approaches and how it has influenced government thinking. The programme has provided valuable learning for the role of local authorities in delivering the Green Deal.

Between 2007 and 2010 KWZ was the largest local authority home insulation scheme in the UK and the first to offer free loft and cavity wall insulation to every suitable property in Kirklees. The Warm Zone aimed to improve the thermal comfort and energy efficiency of homes over a three year period. In terms of resident engagement and insulation measures delivered it exceeded expectations:

- 133,746 homes assessed
- 51, 155 homes insulated
- 64,472 insulation measures installed
- 45,875 Households requested support from other partner agencies
- 105,913 MWh projected energy saving for households each year(assumes 50% potential savings taken in comfort rather than actual energy reduction)
- £732,669 confirmed additional benefit claims secured for residents.
- 126 direct FTE jobs created.
- £249 million net economic benefit calculated.

The following were key to the success of the Kirklees Warm Zone:

- The strength, commitment and quality of the partnerships developed, which resulted in delivery of the programme of work on time and very close to budget.
- The all party political support in Kirklees built up over a number of years prior to the instigation of the Warm Zone, which saw political parties keen to secure ownership and funding for the work.
- The availability of capital funding in Kirklees Council partly fortuitous in relation to the sale of the Leeds- Bradford airport.
- The one- stop shop approach saw multiple partners wanting to work with the programme.
- The offer of free measures ultimately ensured the Warm Zone surpassing the target engagement with Kirklees households.



The potential for job creation though the green agenda has been clearly demonstrated, as has value for money carbon reduction and the ability of local government to lead in delivering effective partnership working on this agenda. The programme of work has generated interest from around the country – from central government to climate change charities to all shades and sizes of local government. The Kirklees Warm Zone team hope that you enjoy reading about it on the following pages.



#### **Table of Contents**

Executive Summary	
1.0 Introduction and Background	6
2.0 Programme Development	7
2.1 Business Plan	7
Table 1 Kirklees Warm Zone Projected Targets	7
2.2 Member Support	
2.3 Procurement Process	
2.4 Partnerships and Additionality	9
2.5 What was offered?	10
3.0 Management and Programme Delivery	11
3.1 Governance	11
3.2 Managing Agent	
3.3 Marketing	
3.4 Doorstep Assessments	12
3.5 Contractor Delivery	13
3.6 Delivering on Referrals	
4.0 Achievements and Outputs	15
Table 2 Final Outputs achieved by KWZ	15
4.1 Economic Impacts	17
4. 2 Recognition and Influence on Policy	17
5.0 Key learning points	19
5.1 Involvement of Partners	19
5.2 Establishing Partnerships	19
5.3 Marketing a Free Scheme	19
5.4 Achieving Assessments	19
5.5 Data Management	19
5.6 Uptake of Free Schemes	20
5.7 Mop-Up Phase	20
5.8 Contractor Skills	20
5.9 Sustainability of Contractor Capacity	20
5.10 Partner Outreach	20



	5.11 Customer Expectations	20
	5.12 Value for Money	21
	5.13 Community Cohesion	21
	5.14 Evaluating Outcomes	21
6	.0 Conclusions	22
	6.1 The KWZ Model	22
	6.2 Other Models and Funding Delivery	23
	6.3 Lessons for Design of the Green Deal	. 24



#### 1.0 Introduction and Background

Across the UK, prior to the Kirklees Warm Zone home insulation had on the whole been delivered in relatively small scale areas with a householder contribution except for those meeting certain benefits criteria. The Warm Front offer (boiler/heating system/insulation) has been and continues to be delivered by a range of contractors in a scatter gun approach and customers complain of unclear pricing. Householders could achieve improved home insulation via a range of contractors but take-up was relatively poor and patchy. Home insulation remained low on the list of most people's home improvement list.

By 2005 Kirklees Council had over the previous 12 years already established a strong commitment to energy and environmental matters and KWZ did not arise out of a vacuum. By 1995 the Council had formed an Energy Team in its social housing management organisation and an Environment Unit within Environmental Services. The energy team had carried out considerable energy efficiency and heating up-grades to the Council's housing stock by 2000, while the Environment Unit had established a not for profit company regional energy agency supported by EU SAVEII funding. In the summer of 2000 the Labour shadow cabinet decided to take a motion to full Council requiring the Council to address fuel poverty within private sector housing. Over the subsequent years this was supported by the employment of a full-time member of staff and capital finance for energy efficiency and heating improvements to vulnerable households. By the summer of 2005 the Council through the Environment Unit had a budget of around £250,000 for insulation and a further £100,000 for heating and a dedicated staff resource. These levels of funds were supplemented by regional housing monies and energy supplier obligations making the total spend circa £1m pa.

During the summer of 2005 the Council had a discussion with the Director of National Grid's Affordable Warmth Programme who suggested that a Warm Zone approach might achieve greater outputs. A meeting was arranged for the Liberal Democrat Deputy Leader to visit the Newcastle Warm Zone in September, which subsequently led to the agreement of the development of the KWZ business plan starting in November 2005 supported by a part-time accountant paid for by National Grid.

In 2006 it was estimated that there were around 35-45,000 homes in fuel poverty in Kirklees. In setting up the Kirklees Warm Zone, the Council aimed to establish a one stop approach to improve the domestic energy efficiency of housing across the local authority. This challenge was the primary call from the development of the Kirklees Affordable Warmth Strategy in 2006, nine months of consultation with 40 stakeholder organisations across Kirklees, which clearly wanted to see a more co-ordinated approach to support offered to Kirklees residents.



#### 2.0 Programme Development

#### 2.1 Business Plan

The business plan was designed to build on the targeted grant insulation and heating schemes for low income and vulnerable residents which had been delivered in Kirklees in the previous five years. The Kirklees Warm Zone would allow Kirklees to bring a number of key partners together to

- Offer energy efficiency measures to all homes across Kirklees
- Reduce the incidence of fuel poverty
- Deliver a low carbon Kirklees, part of the Council's Green Ambition.
- Improve the uptake of state benefits for those who were eligible.
- Stimulate jobs and increase disposable income through reduced fuel bills.

KWZ offered a low cost "hassle free" insulation solution for the able to pay households in addition to priority residents (targeted by government and energy customers for free insulation measures) and including a range of other services such as benefit and debt advice, water saving measures, energy advice and fire safety checks.

Work on the business case began in late 2005 and there were a number of work streams: finance, additional services, partnerships, procurement and governance. Of the five works streams the finance and procurement ones were the most straight-forward. A series of take-up and assessment financial scenarios where developed on the basis of projections on house types in Kirklees and known and assumed existing insulation levels.

The business case brought together a number of existing council funding streams for targeted insulation measures as well as projections on utility match funding and potential council capital required depending on the offer to be made to residents. The latter was initially pitched at a price of £99 for insulation measures for able to pay customers.

Targets were produced in the business plan based upon the best information that we had available at the time and the support that we received from other Warm Zones particularly Newcastle and Gateshead was invaluable, and gratefully received in developing the business plan and targets. The initial expected targets and outcomes were as follows.

Table 1 Kirklees warm zone Projected Targets	
Number of household assessment completed and energy advice given (70%)	119,429
Number of properties completed with a measure	70,645
Number of cavity wall insulations installed	34,787
Number of loft insulations installed	53,519
Reduction in CO <sub>2</sub> emissions per annum	35-55,000 t
Amount of increased benefit drawn into the Council area	£12,443,000

#### **Table 1 Kirklees Warm Zone Projected Targets**



By the autumn of 2006 the business plan had been completed and was in the Council's budget process.

#### 2.2 Member Support

Whilst the initial commitment for a Warm Zone approach came from a Liberal Democrat /Green alliance, cross-party unanimity on the approach quickly followed. Early in 2006 the Conservatives took over the Kirklees administration, at a time when there was increasing national support from Conservatives for the wider green agenda. The Conservative, Liberal Democrat, Green alliance was supportive of the KWZ and wanted it to be the cheapest able to pay price and opted for a £65 contribution request from householders. Over the ensuing couple of months there were discussions between the Conservative administration and the Green group in the Council, which resulted in a free for all insulation scheme being announced at the full Council budget meeting in spring 2007, along with inclusion of free carbon monoxide monitors for all homes!

The Kirklees administration reverted to Labour control in 2009 (initially with Liberal Democrat support) and has continued active support of the programme, including ensuring that any additional funding requirements to allow free insulation for all Kirklees homes could be met and ensuring council support to maximise benefit advise to residents.

#### **2.3 Procurement Process**

Kirklees Council's legal team advised that the Council was required to procure for both the supplier obligation, at that time called Energy Efficiency Commitment (EEC), which in 2008 became the Carbon Emissions Reduction Target (CERT), and also for the insulation contractor. It was decided early in the business planning process that the Council wanted to secure both the contractors and supplier support directly and manage the scheme, because it had the human resources and experience to do so and offered the council best value for money.

Procurement documents were released to the energy industry in January 2006 and to the insulation contracting industry in December 2006. Scottish Power was selected to be the energy supplier as they were prepared to support an in-house managed scheme, provide match funding for measures installed by external contractors, and also provide considerable managerial experience to the governance and operational guidance of the programme. Kirklees Council and Scottish Power already had a good, established working relationship having worked together on a number of earlier energy schemes over the preceding years. In 2008 Scottish Power out-sourced the delivery of their CERT delivery to eaga Ltd, which resulted in all Scottish Power CERT funding being negotiated with eaga for the remainder of the programme, though critically with the same individuals working with Scottish Power previously.

Miller Pattison were successful as the sole insulation contractor, not only having offered the most competitive pricing structure, and considerable expertise but also uniquely made the offer of establishing a local depot and recruiting local employees to deliver the scheme. Initially at the



point of procurement the Council was faced with between 10 to 15 submissions short-listing these to six for interview. After the interviews Miller Pattison stood out as the clear winner in terms of price and approach. However this did raise concerns as to the risks of having a single contractor, such as capacity to deliver, ensuring standards of work were maintained, price pressures, etc. In the end the Council decided that it would appoint just Miller Pattison and implement a risk strategy which was managed throughout the scheme.

#### 2.4 Partnerships and Additionality

As this was the only scheme where the Council would visit all householders individually the Council wanted to ensure that it maximised the impact, particularly for vulnerable residents. Discussions were held as part of the wider Affordable Warmth partner engagement and as part of the KWZ business plan development to agree where partnership working could deliver most additional value to residents.

The inclusion of additional services was a little more difficult to achieve mainly because potential partners initially did not believe the size of the scheme proposed, (the Council had not attempted anything on this scale before) and partners had not been previously engaged in the energy field. Potential partners were concerned about the volume of possible referrals to their business and the impact this would have on their existing business, and finally the availability of financial support to increase their staffing levels to meet the increased volume of work.

From earlier Warm Zones it was clear that benefits advice could add considerable economic value to the outputs of the programme. Uniquely four benefits agencies – two within the council – Kirklees Revenue and Benefits and Kirklees Benefits and Advice Service, and two external to the council – Kirklees Citizens Advice Bureau (CAB) and The Pensions Service agreed to work together to provide a co-ordinated approach to offer benefits advice to residents. The CAB took the lead in terms of initial re-contacting and advising all residents requesting support, before referring to other benefits partners for particular advice. Dedicated staff for these referrals were recruited, the CAB and council having secured funding through energy trusts and supplemented with secondments from the council Revenue and Benefits Service.

Working with the Fire Services was explored from the outset, building on the experience of other area based initiatives where fire officers had been successfully recruited to help carry out doorstep assessments. However it was also clear that the Warm Zone could be used to identify residents at risk of a home fire who could then be referred onto the Fire Services for a fire safety check.

Within the council the Warm Zone was seen as an opportunity to identify homes with other significant non-decency issues and offer low-income households a regional Home Appreciation Loan. The council Carers Gateway team, also became a partner offering support to residents who



identified themselves as long term carers. Lastly Yorkshire Water, the regional water utility agreed to offer water conservation advice to any residents who wanted this information.

#### 2.5 What was offered?

To this effect the KWZ offered the householders a wide range of services these were:

- Free cavity wall insulation.
- Free loft insulation.
- Four free low energy light bulbs.
- Free carbon monoxide detector (this was a local issue related to gas safety due to the recent Dominic Rodgers fatality).
- Free benefits advice check provided by either the CAB, Kirklees Council or The Pensions Service, coordinated by the CAB.
- Free debt advice by the CAB.
- Free home fire safety check delivered by the West Yorkshire Fire and Rescue Service.
- Free water saving advice supported by Yorkshire Water.
- Access to central heating up-grades through the Government's Warm Front scheme and Council resources grants through local and regional funding.
- Free energy saving advice pack supported by the Energy Saving Trust.
- Access to home improvement loans supported by Kirklees Council's Private Sector Housing.
- Advice and support for carers from the Council's Carers Gateway.

Additional support such as new loft and eaves hatches, scaffolding, checks on possible asbestos and loft emptying for vulnerable customers were also offered for free to facilitate installation of insulation in as many homes as possible.



#### 3.0 Management and Programme Delivery

#### 3.1 Governance

Kirklees Council set up a KWZ board so that all key players maintained a strong strategic oversight to ensure that the overall strategy, delivery and meeting of targets remained on track through its 3.5 year lifespan. The Affordable Warmth Strategy steering group met every two months so that other partners were kept informed and helped to promote the scheme. The Warm Zone board reported at regular intervals to the Council cabinet with sets of key statistics, Affordable Warmth Strategy updates were reported to the council's Local Public Service Board for Adults and Healthier Communities, which also co-opted a senior manager from Warm Zone Ltd to the board, and the Kirklees Partnership also asked for summary reports of progress as the scheme progressed ward by ward.

Importantly for its success, the KWZ was managed against a series of challenging targets. These were to reduce excess winter deaths, fuel poverty and carbon emissions. These targets were translated into clear operational targets: to achieve a 70% assessment take up rate and a stretch target of 80% (81% was achieved); to insulate over 55% of all houses in Kirklees (including homes already insulated); to report on carbon reductions monthly against the installation level completed.

For the first year, weekly operational meetings were held (the council representative meeting with the contractors Miller Pattison, KES the managing agent and Scottish Power), reducing to bimonthly to monitor the assessment and insulation progress and address any operational issues as they arose. Formal monthly operational meetings between the key partners, chaired by the Council, were also held to ensure that all aspects of the operational programme remained on target. The Council also met with benefits partners on a bi-monthly basis to help ensure flow of information and resource issues were addressed.

#### 3.2 Managing Agent

The day- to day management of the KWZ was delivered by Kirklees Energy Services (KES), a not for profit organisation established by the Council in 2000, (since 2009 Yorkshire Energy Services, cic). The utilisation of KES by the Council offered an opportunity to secure the Council's corporate objectives through a company that it was grant funding and enable it to second key human resources to deliver what was becoming one of the Council's major projects, thereby managing financial and reputational risk. The KWZ began in February 2007 at a time of major re-structuring and staff recruitment at KES. Over the first 18 months of KWZ delivery, considerable community engagement, operational and marketing support was given by the Council and Scottish Power.

#### 3.3 Marketing

KWZ was a ward by ward, street by street, door by door approach and the initial approach to marketing was in line with this strategy. Localities were warmed up with postering of the area,



contacting local community and voluntary groups, talking to people and attending events. Each resident was then sent a flyer in the shape of a glove – The KWZ hand – a symbol used on all marketing materials, followed by a letter explaining the programme of work and what was on offer, before an assessor called. This strategy was also proposed to stop a massive raise in expectations in areas which were further into the programme and prevent the council and KES from being swamped by enquiries.

However a number of concerns resulted in a change to the Warm Zone marketing approach after the first six-eight months. These included:

- 'Competition' from other contractors (working on behalf of central government Warm Front and other energy companies) who tried to piggy back onto the early months of the Warm Zone programme resulting in confusion on the doorstep, residents potentially missing out on a lot of additional KWZ support and some mis-selling of insulation to unsuitable homes.
- Disbelief that the insulation really was free for everyone, the feedback being 'nothing is ever free' and every other scheme was targeted as those meeting certain eligibility criteria.
- A need to get brand recognition, that the work was backed by Kirklees Council, KWZ was coming to everyone and offered a lot more than just free insulation.

Kirklees Council then undertook an extensive marketing campaign including signage on roundabouts, the back of local buses, radio weather straplines, the council magazine and web pages, and many other ideas.

#### **3.4 Doorstep Assessments**

The Council has 23 electoral wards which were ordered according to a number of deprivation factors, this produced a list of the most deprived wards first and most affluent last. The Council then "zipped" up the list so that the programme ran with the most deprived ward followed by the most affluent to relieve pressure on referrals to our partner services such as benefits and debt advice etc. One modification was made to this list to maximise capital availability in one regeneration area. However no councillor queried the ward order. In addition very few householders sought to jump the queue. To ensure concerns raised by Affordable Warmth partners around vulnerable residents, working with partners particularly Kirklees NHS and benefits agencies we developed a simple priority referral mechanism to allow residents with exceptional health issues to be leap frogged ahead of time into the system.

The first assessments on the door step started in February 2007 with an initial team of four fulltime assessors. By June 2007 it had become apparent that the volume of assessments required per week to meet the April 2010 deadline was not going to be achieved by full-time employed staff. Therefore, a radical change in approach to assessments occurred and the KWZ moved to utilising free-lance assessors being paid £4 per completed assessment. This increased the number from around 300 per month via employed assessors to 1,500 by August and 2,200 by the autumn and



up to 6,600 per month in the summer of 2008. In the end the Zone employed somewhere between 200 to 250 freelance assessors over its life-time. In addition to employing freelance assessors the Warm Zone team also increased the time of the project by adding six months onto the end and calling it the mop-up phase. In hindsight this was a brilliant device as the mop-up phase clearly picked up residents from the first wards who had been suspicious of the scheme, who had dropped out at some stage or never engaged – there was a clear end-point to the programme.

The assessment teams had their areas defined by 'patch books'. The ward was spilt into patch books with a map and address list of around 200 properties, free-lance assessors were allocated a patch book to be completed within three weeks and returned when they were then allocated another patch book. This ensured that no assessor strayed onto another assessors area, householders were not randomly engaged by multiple assessors and enabled the assessment coordinator to know where the assessment period was at any given time enabling future work load planning. All homes were door knocked three times before leaving a self assessment form if there was no contact. The KWZ utilised paper assessment sheets that were then scanned.

#### **3.5 Contractor Delivery**

The management of insulation installations raised a number of topics that would be good to share. During the contract phase the key issue that arose was the lead in time between the volume of assessments being produced relatively quickly once the free-lance assessment team was in place and the time it took for Miller Pattison to scale up in terms of equipment and personnel to meet the volume. The contractor needed to be sure that the volume of work proposed was actually going to materialise and with the KWZ being the first area based, free to all scheme nobody had any experience of the possible up-take by householders.

Kirklees Council were also keen to engage with Miller Pattison's offer to establish a local dept at Cleckheaton and recruit staff locally, however this also had repercussions in terms of the initial delays in meeting installation timelines. The recruitment and training of local teams could not keep apace with the increased level of assessments after the first six months. Issues of lack of capacity in the insulation industry in insulation teams and capable surveyors were also apparent early on.

This led to a period from around February to August 2008 in which the scheme was running at its peak in terms of householder contact and the time frames between assessment, technical survey and installation stretched out beyond what was acceptable. Some of these households may have dropped out at this stage but the six month mop-up phase in all areas allowed householders to reengage.

Conversely the ending of the programme has had a negative impact on the workforce at the Cleckheaton depot. The establishment of the workforce and training capability was very focussed



on the delivery of the Kirklees Warm Zone and as a consequence maintaining the whole workforce has not been possible, though the majority continue to work within the industry.

#### 3.6 Delivering on Referrals

The referral process to the various agencies relied upon good information technology and this was built into the scheme right at the start with the IT staff being recruited first. In some cases the volume of referrals were initially too much for some of the organisations and as we progressed through the scheme referral processes were modified and targeted more closely at people who would benefit. An example of this was the number of referrals to the WYFRS, who requested the improved targeting of householders so that it could concentrate on the highest risk and vulnerable customers, typically a lone elderly person with mobility issues, who smoked. However for the Fire Service the very large number of referrals means that there are still residents who have not yet been visited for a fire safety check as a result of the KWZ.

The tracking of actual outcomes as a result of referrals has also been an issue. Sharing of information between benefits agencies because of data protection issues has meant all benefit uptake could not be fully tracked. Tracking of uptake, changed behaviour and outcomes were also an issue for council services and Yorkshire Water as result of the large number of referrals.

One clear winner with the public was the offer of carbon monoxide detectors – 130,000 requested as a result of 133,000 assessments. From immediate feedback from some residents we know that serious injury has been avoided and lives may have been saved where a detector immediately found traces of carbon monoxide. The demand for the detectors was also a cost, procurement and delivery issue for the programme, the offer of detectors was not even on the horizon until the first doorstep assessments were taking place!



## 4.0 Achievements and Outputs

#### Table 2 Final Outputs achieved by KWZ

Item	Total figure	Percentage of the total households visited/ Percentage of Private Sector Homes Assessed	
Households Visited. (Private and social)	165,686		
Assessments completed (Private and social)	133,746	81%	
No response / no contact with householder	23,028	14%	
Householder not interested/refused	8,912	5%	
Households referred to insulation contractor (excluding Council Housing properties, completed under Decent Homes)	111,394		
Households surveyed for insulation measures by contractor	94,788	57%/85%	
Total number of homes receiving insulation	51,155	31%/46%	
Households receiving loft Insulation	42,999	26%/39%	
Households receiving cavity wall insulation	21,473	13%/19%	
Reasons remaining 60,239 private assessed households did not receive insulation:			
Home already has insulation measures	29,185	18%/26%	
Hard to Treat property	12,245	7%/11%	
Technical reasons for not carrying out work	3,036	2/3%	
Cancelled by customer	14,808	8%/13%	
Other reasons	965	<1%/<1%	



### Additional services – based upon the total number of assessments completed (133,746)

Households requesting Benefit or money advice check16,11112%Households requesting a Home Fire safety check26,45320%	
Households requesting a Home Fire safety check26,45320%	
Households requesting advice from Carers3,01223%Gateway	
Households requesting advice on Water17,74513%Conservation17,74513%	
Households requesting a free Carbon Monoxide129,98697%alarm	
Households requesting four free low energy CFL 111,714 84% lights	
Number of households that have had central6020.5%heating installed, via local and regional funding.	
Number of Central heating warm lead forwarded2,0331.5%to the Government's Warm Front scheme1.5%	
Direct employment created (full-time jobs) 106 jobs	
Direct employment created (free-lance jobs) 200- 250	
Estimated amount of new benefits residents £1,648,116 advised that they were entitled to.	
Confirmed new benefits claimed by households£732,669(Confirmation of actual claims difficult)	
Estimated tonnes Carbon Dioxide saved (pa)22,679-23,350 t(two methodolog(assumed 50% savings taken as comfort)CO2/yrused to calcular	
SAP grade increase 5.5 SAP points	
Households taken out of fuel poverty 1,375 homes	
Total Household fuel expenditure saving £3,900,722 /yr	



#### **4.1 Economic Impacts**

Economically it is clear that the Kirklees Warm Zone has had a significant impact in the locality in terms of job creation in a number of partner agencies, householder energy bills, additional income from benefits, health impacts, potential added value to house prices and as a consequence the multiplier effects of increased available income in the locality. External consultants, Carbon Descent, have modelled the direct, indirect and induced economic impacts of the capital spend and job creation estimating a net social benefit of £249 million. The details of this evaluation are separately reported in 'Kirklees Warm Zone Economic Impact Assessment'.

Potential increased benefit uptake was estimated at £1.648 million on the basis of advice and support given to the residents referred. It is difficult to project ongoing increased household income as a result of benefit uptake as householder circumstances change rapidly, however for those advised this amounted to over £1,800 per potential claimant rising to over £2,500 where 287 eligible residents confirmed claims were made.

Savings through household energy bills were estimated using more than one model. For the purpose of final reporting it has been decided to assume that up to 50% of potential energy savings may be taken by householders as increased warmth and comfort and not actually as financial savings. From this Kirklees Warm Zone results in a financial saving on energy bills of £3.9 million/year by the end of the programme which over 40 years would amount to £155 million at current day energy prices, modelled pre-summer 2011 energy prices rises.

Much more difficult to project are the economic impacts of improved health of residents, a number of long term conditions are known to be made worse by cold damp conditions, including mental health. Over 39% of residents assessed reported a condition made worse by cold damp housing. Modelling of the KWZ data by the University of Ulster using two health models indicate potential health benefits of £4.9 million both as a result of improved mental and physical health and reduced injuries from supply of carbon monoxide and smoke detectors. This work is reported in a separate report: 'Kirklees Warm Zone, the project and its impacts on wellbeing'.

The financial benefits of support to long term carers, water meters fitted and resulting financial savings, and any other housing improvements carried as a result of uptake of home appreciation loans have not been evaluated.

#### 4. 2 Recognition and Influence on Policy

The Kirklees Warm Zone has received regional and national recognition and awards for the work carried out including: The Ashden Award for the best local authority sustainable energy scheme in 2009.

Nationally there has been significant interest from central government pre and post the 2010 general election in the programme's approach, the uptake and outputs of the free offer, the



potential for generation of green jobs, the wider economic impacts and the potential for domestic carbon savings. The Local Government Association has recommended that all local authorities take a similar approach.

Both the London Assembly and the Scottish Assembly requested support from KWZ to help develop their own programmes of work. DECC requested information from the KWZ for the Copenhagen climate change negotiations. Local government around the country has asked Kirklees to share its experiences. Non-governmental organisations including Friends of the Earth and WWF have used the KWZ as a model of best practice.

Over 80 case studies have been produced for external organisations and marketing purposes. KWZ has received national media coverage from The Politics Show, BBC Look North, BBC Scotland and an article in The Times newspaper and several articles about Kirklees Warm Zone have been included in various industry, environmental magazines and websites in the U.K. and Europe.

Conversations with individuals such as Lord Stern, the head of major financial institutions such as Climate Capital, a former Government Chief Scientist, and politicians from the Conservative and Liberal Democrat coalition government (sympathetic to addressing climate change), have advocated that as the UK Government is now a major and indeed controlling shareholder and owner of Royal Bank of Scotland and Northern Rock, that Government was well placed to influence the investment decisions of these major banks to invest in a range of green measures, with multiple benefits identified. Whilst there was agreement with this analysis, and many had made similar arguments themselves, individuals expressed dismay that this major opportunity was not being taken up.



#### **5.0 Key Learning Points**

#### **5.1 Involvement of Partners**

One of the key touchstones of KWZ success is clearly linked to the nature of the partnership working which evolved between key partner delivery organisations. The outputs of the KWZ are both a function of partner time and commitment to the programme in addition to the additional funding leverage achieved.

#### 5.2 Establishing Partnerships

Involvement of additional partners took around a year of detailed discussions and we would strongly advise future schemes that it needs this level of discussion so that partner organisations can be comfortable with the proposal and support the project.

#### 5.3 Marketing a Free Scheme

The initial targeted marketing had to be completely re-thought to ensure that residents recognised what the KWZ was offering, that it was genuine and it was for everybody. Considerable efforts were made to deliver consistent branding and utilise partners to promote the programme.

#### **5.4 Achieving Assessments**

A radical re-think was required to achieve the assessment throughput and remain on track to deliver a three year programme of work. Employing salaried assessors could not deliver the throughput. One of the lessons learnt here by KWZ was that it was assumed that people would want a full-time job but actually many people are happy with something that provides supplementary income and allows them to be flexible meeting their day to day needs.

#### 5.5 Data Management

An area based programme on this size generates a lot of assessment forms. The KWZ would recommend a move to the use of PDAs which gives even greater control, reducing input error and costs.

Data sharing and data protection issues were challenging, particularly in relation to tracking outcomes of support from partners, and may continue to be problematic for future schemes. The Council, the contractor, the energy partner, the CAB, the Pensions service all had their own databases. Throughout the programme communication between these databases was fraught with problems and limitations due to data protection legislation, basic incompatibilities between databases and the fact that they stored information about individuals at different stages of a very dynamic process. Continued efforts were made to enable the databases to be reconciled and to compare statistics for accounting and monitoring purposes. Also, where agencies were reluctant to share information due to legal caution, negotiations were held to build bridges. This work was not fully successful.



After the programme was complete and installs had ceased being live, a major effort was then made to reconcile somewhat conflicting findings from the several databases. Hours of work were needed to gradually remove duplicate, ambiguous or erroneous date entries to enable a good correlation between data sets and agree the final statistics about the programme to enable accurate evaluation. The Council would advise the design of a comprehensive, in-house data management system as soon as the business case has approval.

#### 5.6 Uptake of Free Schemes

In the end the KWZ achieved an additional 30% increase in uptake on top of normal area –based schemes, which themselves achieve 10% more than traditional marketing routes. The high uptake by residents led to significant efficiencies in the delivery of the programme, for example travel time of the contractor surveyors and installation teams.

#### 5.7 Mop-Up Phase

Ultimately the mop-up phase enabled KWZ to achieve the high number of completions representing 28% of all insulation installations and 17% of assessments during the mop up phase. The use of self- assessment forms was also successful, throughout the programme.

#### **5.8 Contractor Skills**

At the start of the KWZ programme there was a regional and national shortage of key skills – surveyors and installers – even though this is a well established industry. Going forward with the Green Deal this will certainly be a key issue in delivery, particularly looking at less established technologies.

#### 5.9 Sustainability of Contractor Capacity

Whilst the development of a Kirklees depot by the insulation contractors had major economic benefits to the locality – jobs, training, support services to depot, and income into the locality, the medium term sustainability of these jobs are not necessarily secure as regional work and longer term government thinking is still in the pipeline and hence local capacity has not been fully capitalised.

#### 5.10 Partner Outreach

The door-step approach enabled partners such as the CAB and Fire Service to reach customers that they would have not usually seen, in effect the door-step approach reached and engaged with the non- traditional, hard-to reach customer base for the additional services providers.

#### 5.11 Customer Expectations

Customer service and support were time intensive for all partner organisations – with over 2,000 contacts per week being made at the peak of delivery. Complaints handling, whilst less than 1% of the households supported, was particularly time consuming.



A vital element of strong brand awareness is strong trust in the brand. This was achieved by an intense focus on monitoring, analysing (by surveyor, by installation crews etc), through dealing with complaints at a senior level and with urgency thus creating good word of mouth feedback when things go wrong – as they always will – admit and regret the mistakes or damage and redress the damage and make good quickly and effectively. Also KWZ continually strived to reduce the levels of complaints which gradually diminished throughout the process, some upward spikes were seen when additional capacity was required and brought in and before strong management was re-established.

#### **5.12 Value for Money**

The KWZ has been excellent value for money – both in terms of match funding, delivery of services by partner agencies and cost of carbon delivered. The cost to the council was approximately  $\pm 12.50/t CO_2$  saved, this has assumed that 50% of the potential energy savings have been taken as increased thermal comfort rather than actual energy savings.

#### **5.13 Community Cohesion**

The Kirklees Warm Zone directly supported and delivered on the council's community cohesion agenda and delivered across a range of agendas – addressing inequalities, supporting both young and old, providing services that were both effective and productive, and helping to generate jobs, and increased household income.

#### **5.14 Evaluating Outcomes**

The full economic and social impacts are detailed in separate reports – net benefit over the lifespan of measures projected at approximately £250 million, including household energy savings, carbon saved, job creation, impacts on health and value of housing. Many of the softer outputs are extremely difficult to evaluate, but may have some of the longest impacts, such as improved health outcomes for many vulnerable residents, improved awareness of support from organisations such as the CAB and reductions in deaths as a result of fire safety checks in homes most at risk.



#### **6.0 Conclusions**

#### 6.1 The KWZ Model

Although the Kirklees Warm Zone was not the first Warm Zone, it was definitely the largest in value, homes assessed and insulated, and the first free UK offer. The scheme was clearly designed for all residents, it was not driven by a desire to make a profit and a large number of local people were trained and employed in delivering the measures. The range of measures delivered via a one door step visit ensured that the scheme was seen as fair and that there really was something for everybody and that the Council and its key partners really were prepared and willing to go the extra mile to ensure that a service was delivered.

To have any chance of success a scheme of this scale and scope requires detailed levels of management at operational, technical, political, marketing and partnership level. In a local authority the political level is key, as it is at this level that the finance overview is decided and in the case of the KWZ, councillors took a strong interest in the marketing of the scheme.

However, to achieve the huge take up rates of the KWZ, and to deliver at pace and to scale, requires a major capacity building exercise, training of new staff and continued pressure to scale up to full install rates over several months, and continued adjustments to the technical processes, invoicing, customer communication, publicity and managing and meeting key issues. For example large numbers of rogue traders seeking to exploit the genuine scheme with the potential to drastically undermine confidence in it, these were countered by on the ground information and press releases together with information to all the KWZ agencies and police. The management structure must be able to respond effectively and quickly to key events.

The energy field is not well understood by customers, and consumers and customer confidence is low in energy companies. As described a range of complementary marketing approaches were taken to address these. The key lesson here is that even a free scheme needs strong marketing if it is to be understood, and to achieve the unprecedented success of assessment take up rates of over 80% which the KWZ achieved. This means that a funding base is required to deliver this and is a key part of delivering a large scale capital programme.

Community support and acceptance can be strongly assisted by delivery of measures dealing with important social issues (e.g. poor access to benefits advice) and other environmental issues such as reducing bills by reducing water usage. Supporting residents to access advice on government benefits was significant for some people – as much as several thousand pounds, thus in many cases made a very significant improvement to the quality of people's lives. To deliver these benefits is time consuming and requires worker time and follow-up. The local authority, mainly because of the sheer scale of the KWZ was able to free up vital revenue funding to enable two additional workers to support the benefits assessment and access programme.



The KWZ programme evaluation has clearly demonstrated the wide social, environmental and economic benefits of a comprehensive, universally available service to householders covering free home insulation and safety and, to those in need benefits advice, heating upgrades and support from other organisations.

The economic benefits alone far exceed the capital investment required for the scheme within fewer than 5 years. These benefits will continue to accrue over the next 35 years. A scheme of this scale also demonstrated significant price advantages over smaller scale schemes. These findings are a strong argument in favour of further comprehensive programmes across the UK. The remaining question is how best to fund and deliver such benefits.

#### 6.2 Other Models and Funding Delivery

The weakness of other schemes delivered via energy utilities has been that the customer views these as primarily motivated by a desire to make money rather than to genuinely help all residents. This is of course the legal duty of an energy company or a contractor to make a profit for shareholders and the work force may have no association with the local community.

The key lesson from the Kirklees Warm Zone is that a successful comprehensive scheme cannot be left to an insufficiently controlled and regulated market. Strong management and close monitoring of delivery of outputs against targets and of complaints is required. Without strong pressure to achieve challenging targets, companies in the marketplace will deliver at a level that is within their technical and capacity comfort zone. Doing this meets their economic and business interests. These are clear limitations of market and subsidy driven schemes.

As long as the schemes are delivered to deliver a profit motive they can only be as good as the design of the subsidy – this means that the necessary innovation, which obviously will not be thought of at the subsidy design stage, needs separate funding. Government funding (CERT via energy utilities) is restricted and regulated via OFGEM to be only available for the delivery of actual insulation measures, facilitative measures such as cutting loft hatches and scaffolding and marketing and benefits advice are not able to access government funding. This is a key weakness and for schemes completely reliant on the utility subsidy severely restricts the success and uptake of required and desired measures. This makes a strong case for an element of additional funding for general purposes, doing this is a vital part of delivering insulation at scale.

As the benefits outweigh the costs, it can be argued that government should provide the funding for such programmes. Although public finances are very tight, a scheme that pays for itself several times over makes a very strong economic case. Once the social and environmental benefits are considered the case is overwhelming. However, no government appears willing to consider such an investment despite similar arguments being made by Lord Stern in his well known report. Specifically, Stern argued that the costs of not spending on alleviating and adapting to climate change would be greater than using 2-4% of GDP or GVA to undertake the most cost effective



measures. Moreover this is a fraction of the cost to the country to stave off the crisis in the banking sectors. Stern and others also argued the case for a decisive green fiscal stimulus package to deliver the benefits of similar programmes as well as create support for a revitalised economy. The findings of the Kirklees Warm Zone provide strong local evidence for the strength of this argument.

#### 6.3 Lessons for Design of the Green Deal

The ECO needs to be available to subsidise key ancillary facilitating measures including loft hatches, loft clearance and scaffolding. The ECO needs to be far simpler than the graded priorities of CERT and the complicated 'scoring' mechanisms for CESP.

The availability of independent advice is crucial. This advice needs to be seen as impartial, of high quality and to recognise how householders really live in their homes - simple, clear messages with clarity about actions and funding options. Clarity about who will do the work and the guarantees for the work are required. There needs to be consistency across any area to avoid customer confusion and an inability to properly compare suppliers of competing products (a strong local authority could usefully ensure fair communication and quality standards). The report must identify carbon savings as well as cost savings. Monitoring of reality against expectations must be done; new, smart, remotely reading meters will facilitate this.

The Green Deal must clearly relate to the overall legally binding carbon reduction targets and be assessed against this. Regular, accurate reporting of carbon savings using the best knowledge about real savings and compensating factors such as comfort taking is required. Experience shows that as much as 50% of theoretically possible carbon savings are lost through changes in occupant behaviours (for example warmer homes overall) or heat leakage or bridging.

The KWZ was a minimally disruptive scheme. For more disruptive work such as boiler replacement, heating upgrades, roof mounted installations there are key times when customers are more receptive to such measures. Such times are when another refurbishment is taking place – for example of a kitchen or bathroom. Another key opportunity is when a house changes hands. Building regulations could play a useful role here in enabling a clear link to be made between energy improvements and house value and even small percentage improvements in house value will quickly repay costs of energy investments. The potential for wider health benefits of full home retrofits have also been clearly established.

The wider range of measures under Green Deal may require different market segmentation approaches – for example to find those who would benefit from a boiler upgrade rather than the much simpler cavity wall insulation measure.

All technical measures must be backed by the longest possible guarantees and meet the top level knowledge about the longevity and suitability of measures. This will be particularly important for



work on hard to treat homes and measures such as external wall insulation. There is a ready market for products that can treat irregular or very narrow cavity construction types.

For complaints there needs to be a reliable and proactive response. The involvement of the local authority to act as an agency of last resort for unresolved issues, to act as resident's champion and to endorse approved contractors and delivery agencies will significantly improve take up.

The local authority will need to be involved in the design and approval of a local Green Deal Partnership in one or more of these key roles.

