

# **Kirklees**

*A lonely solar pioneer*

## **A Learning history**

**Issue VWS – Workshop**

*Nr. 4 in a series of learning histories on the subject of “Innovation for Carbon Reduction” in or connected with Local Authorities.*

**October, 2007**

*A jointly told tale*

**Margaret Gearty** (University of Bath)

Based on the perspectives and recollections of

**Jimm Reed** (Yorkshire Housing Group)

**Richard Garner** (Kirklees Neighbourhood Housing)

with added perspectives from: ()

## **Document History**

A learning history is never complete. Some however are more complete than others. Those conducted early in the series have been read more often, commented upon and in some cases have had perspectives added.

Those later in the series are freshly completed in time for the workshop and have only just finished the first checking stage.

The document history below gives an idea of where in the process this history lies. Though the workshop draws the line under this particular learning history, that should not be mistaken for the 'history' being complete. Much more could be added about each one.

<b>Version</b>	<b>Date</b>	<b>Comments</b>
Draft_v2	November 2007	Draft version sent to Richard and Jimm for checks
Draft_v3	December 2007	Formatting changes
Draft_v4	February 2008	Updates based on checks from Richard and Jimm
Issue VWS	February 2008	First issue version Straightaway used at workshop

## **Note on Learning History.**

### **What is a Learning History?**

This document is written in the style of a Learning History, an action research approach to learning that seeks to bring analysis and story together in a way that has value for those originally involved in the case as well as those seeking to learn from it. The approach was originally developed by researchers, Roth and Kleiner from MIT's Society for Organizational Learning and was further developed by Hilary Bradbury in her doctoral work (Roth and Kleiner 1998; Bradbury 2001). Roth and Kleiner coined the term 'learning history' describing it as a way to get past listing best practice and more into the '*thinking, experimentation and arguments of those who have encountered the situation*' (Roth and Kleiner 1998). The learning history has been used to good effect in many settings in the industrial sector (e.g. at a large US auto manufacturer) and the social sector (e.g. at The Natural Step).

A learning history has, to-date, mostly been applied within one organisation and in the private and NGO sector. By contrast, in this research, learning history is being applied across 5 different organisational settings within Local Government in the UK. The examples being charted are where innovative carbon reduction has taken place. They involve low-carbon technologies in some way. This Learning History then is just one of in a series. The individual histories may be partial – sometimes not fully describing all aspects of the innovation in question. However the totality of the series aims to paint a picture of how innovation for carbon reduction comes about across different contexts. It seeks to present this picture in a way that increases the potential for learning and action.

### **Differences from a Case Study**

A learning history is different to a case study in a number of ways. Firstly, as an account it really tries to get into the individual human story of what happened. It aims to present perspectives on a case rather than synthesizing several accounts into one dominant researched 'truth'. So the ups and downs of individual experience are charted starting with perspectives from just one or two people close to the case. Their accounts are not presented as definitive or authoritative. Naturally there will be gaps on detail; certain events will be emphasised - others maybe not. Over time I hope to balance and enrich that by inviting, comments and stories from other people who were involved in the case (see "Participating Readers" below). This multiple perspective approach is taken in the belief that human stories add accessibility to and demystify the happenings in a way that can be more empowering for the reader.

Secondly it is a multi-levelled account. Alongside the story that is presented chronologically, quotes are included from those involved, together with researcher reflections and thematic analysis. The purpose here is to create a lively account but also to derive a history that works at different levels. The thematic analysis that is

run alongside the story provides the potential for more conventional theory building to play its part in the research. Sometimes theory links are made.

Finally, by using an action research approach, particular attention is paid to there being value for the various stakeholders in the research. These stakeholders range from those directly involved in the original learning history, to those with a different set of similar challenges elsewhere who seek to learn from it, through to other interested parties including academic audiences or those working in entirely different settings who might also find insights in the history here presented. In short this is not extractive research and the learning history is not an ‘output’ but a point around which the research hopes to gather interested parties. With this in mind, workshops, online support and other forms of engagement are being considered.

### **How is a learning history produced?**

A learning history is described as a ‘jointly told tale’ (Van Maanen 1998) between outsider (researcher) and insider(s) (protagonists). Starting with a tangible happening or outcome, in this case, Kirklees’ success with solar energy, an interview is carried out with one or two people close to the happening. This is taped and transcribed. The tape transcripts are read through systematically twice and themes are annotated on the second read through. The researcher adds too any thoughts or reflections as they occur. Drawing on this annotated transcript and on other web-research and supporting materials, the researcher then develops a storyline that emphasizes a set of key chronological moments or phases. This account is then textured by presenting it alongside some of the key themes and reflections that have been identified together with some of the key quotes from the interview. This is a play with the form of presentational knowing<sup>1</sup> but also borrows from ideas of presenting a learning history (Bradbury and Mainemelis 2001; Roth and Bradbury 2008 (in preparation)) as well as some aspects of narrative inquiry (Connelly and Clandinin 1999). The history of the learning is presented in a way that hopefully allows further learning on behalf of the reader and *on the reader’s terms*. The reader, be he or she the original protagonist (e.g. Jimm, Richard), an academic at Bath University or an environment officer seeking innovation in his or her own locale will have different learning agendas after all. We cannot encapsulate learning in a one-size fits all step-wise account.

### **Links to Theory**

Links to theory are made in places where it is deemed relevant. These are very provisional and relate to the theoretical territory that the researcher has been covering. They are mainly offered as an aid to reflection on the piece. A reader may wish to skip them if they break up the narrative. In the next stage of the research some of these links will be developed more fully. Themes that arise directly from

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<sup>1</sup> Action research (AR) places a value on different ways of knowing other than the usual conceptual-theoretical knowledge associated with academia. Different ways of presenting knowledge via story, drama art and other forms of representation is a key element of AR.

analysis of the transcript are summarised at the end of the learning history. Some links to other learning histories might be mentioned. These will be more fully worked at the next stage of the research where common themes across the learning histories will be developed.

### **How to read this account.**

The intention of this account is to ‘invite’ readers into this learning history and to participate with what has happened. In the research, two particular kinds of readers have been identified to aid this process and some guidelines are offered below if you have been invited to read the learning history in this way.

The **active reader** is someone exploring the value and relevance of the History for their own learning. They are particularly invited to find meanings pertinent his or her own context and experience. Read the account through being watchful of your own responses to the Learning History: Note any events, themes or reflections that seem to resonate or be familiar to your own setting. Note too anything that triggers your interest in some way. Preferably mark these up in some way on the learning history. Then, periodically revisit the learning history (weekly, fortnightly or monthly) and your mark-ups and ask yourself has the learning history come to mind or influenced your actions in any way in the intervening time and if so in what way.

The **participating reader** is someone who was been directly or indirectly involved in the history that is presented here and has been invited to comment.

A **direct participating reader** will have been directly involved in some of the events described in the learning history and, with their consent, may be named. You will likely have been invited by the researcher to add your perspective to the account presented here. Such readers might have many responses to the Learning History, ranging from thorough enjoyment through to outright dismay at how events are represented. Whatever it is your response is invited. There is no onus on these readers to check this account though factual corrections are very welcome. If you can add a story that fills in a gap, that adds to the drama, or that casts a different light on things described here then this is of particular interest. The emphasis is on adding perspectives rather than removing parts of the story. The learning history as it stands will not be reworked – however a multi-perspective version will be prepared which will include inputs from participating readers (in “more about” boxes for example). This will hopefully help to create a richer, more filled-out account.

Those not mentioned directly, but nonetheless impacted in some way by what is described in the learning history are termed **indirect participating readers**. Such readers may well know of the innovation described, but will likely be less familiar with the more human story that lies behind it or have seen it presented in this way. They can offer an interesting perspective on what this innovation has meant for them

– or in the light of the learning history what they have found interesting or how it might have shifted the view they held.

In general the invitation extended to participating readers is more in the spirit of a group gathered sociably around a pub table recalling an event of which they were a part, rather than, say, a University debating team trying to determine the exact chronology of events or the importance of such events' impact.

## Key

**Theme:** This is a theme occurring at this point in the history – may refer to themes in other learning histories.



*These are 'Researcher Reflections' that are included through the learning history to draw out themes or point to interesting areas for discussion*

### **PRESS RELEASE**

18 July 2006

These sections include third party information about the case that is in the public domain. They include press releases, website information and general public commentary.

*This is a quote from elsewhere: either from the public domain or from another interview regarding the case.*

**A. N. Other 28.11.06\***

*R: These are inputs from the researcher taken directly from taped transcripts.*

*These are quotes taken directly from interview transcripts. Where initialled they refer to whomever gave the perspective. Where not initialled they are from the original interviewee.*

**More about:** .....Something in the history

**Related Section(s):** whichever section in particular it pertains to

**Time Period:** 2006-2007

**Added by:** a participating reader

This is an **extra perspective** on the story added by someone who has read it and is filling in a missing gap in the story or sharing their memories of a particular event of which they were a part.

## **Important Disclaimer**

This document was written by a researcher and is based predominantly on just one or two interviews with people close to the event/happening together with information available in the public domain. Its purpose is to stimulate discussion and learning about low carbon initiatives in or close to local authorities rather than be a definitive account. It does not set out to be an exhaustive case study that highlights all the contextual factors or ramifications connected with the example. Rather it intends to present to the reader an account that is accessible and understandable and hopefully resonant in a way that enables them to learn whatever it is that might be relevant to their own circumstances.

The author is aware that there may be different versions of the story given here as well as different perspectives on the overall example of innovation discussed. Such alternate or further perspectives are invited.

Finally there are actors mentioned in this paper who, in the story told by the interviewee, have played a significant part. Their actions are in places described and these descriptions are important to the learning history. As a default, 3<sup>rd</sup> party names are made anonymous. However where it is judged appropriate by researcher and interviewee(s), and this is often the case, consent is sought from some actors to use their real name. This is done in the interests of giving the learning history a reality as well as to acknowledge the part other people have played in what has happened. In all cases efforts have been made to ensure that those included in the story are handled with due care, respect and sensitivity. However readers should remain aware that descriptions pertaining to third parties are developed through the lens of the interviewee rather than via the third party themselves.

**For further information/comment or otherwise please contact  
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# Kirklees: A Lonely Pioneer

## Clean, green and lean

Kirklees council's award-winning 500-home solar energy project is the largest of its kind in the country. And it's very popular with the tenants, reducing electricity bills by up to £50 a year

**Elaine Knutt**

**Wednesday September 20, 2006**

Excerpts from [The Guardian](#)

Domestic solar heating panels installed by Kirklees metropolitan council in West Yorkshire represent around 5% of the total amount of solar electricity generated in the UK.....

....The 500-home installation is the largest domestic establishment of solar power in the country. At Kirklees, a one kilowatt photovoltaic (PV) installation generates 20% of a typical home's needs. A three square metre (sqm) solar thermal system is even more efficient, generating 60% of a home's hot water requirement. Across 500 properties, that leads to a saving of 175 tonnes of CO2 emissions a year.

....The council's commitment to solar began in the early 1990s, when it created a 19-strong environment unit, installed the first solar energy systems and set up a sustainable energy fund. But the programme stepped up a gear in 2000 when Kirklees was invited to partner Dutch and German municipalities in a pan-European bid for funds under the EU's SunCities programme. This encourages councils to make sustainable energy part and parcel of their sustainable community strategies.....

....But despite the need to cut carbon emissions by 12.5% from a 1990 baseline to fulfil the UK's Kyoto commitments, Kirklees is **a lonely pioneer**. Solar power is a proven technology and is the most cost-effective option in the renewable energy menu open to housing providers - it has a better ratio of kW/h generated per pound spent than wind turbines, ground source heat pumps or fuel cell technology. But installation is expensive and there is no obligation on landlords to take action.....

Downloaded on 3 Oct 2007 from:

<http://society.guardian.co.uk/communities/story/0,,1875903,00.html>

## Introduction

As the article opposite describes, Kirklees has become well known for solar energy in recent years. In some of the least well-off parts of the northern English town of Huddersfield, the sight of solar technology atop new and old council houses alike has an immediate visual impact.



**Fig 1: Solar arrays on the new eco-council flats in Primrose Hill**



**Fig 2: New and old solar powered (PV and Thermal) council houses in Primrose Hill**

[All photos of primrose hill: courtesy Yorkshire Housing]

In Primrose Hill, over 50 council homes now use solar power for hot water and/or electricity. Across Kirklees, other solar installations are also to be found in residential care homes, a further 148 council homes as well as luxury apartments at Titanic Mill. With almost 5% of the installed solar energy in the UK<sup>2</sup>, Kirklees has been fairly described as a solar pioneer.

The striking roofscape at Primrose hill can be understood as having resulted from a broader and long-running initiative within Kirklees Metropolitan Council to address fuel poverty and social regeneration that has converged with a growing awareness of the importance of tackling climate change. It is thus that a street in Primrose Hill that formerly was known as “Death Row” due to the murder rate there is now the main artery in what the council has latterly labelled proudly as its “Solar Village”.

Kirklees was an ideal candidate for this research. It had achieved tangible reductions in carbon through the direct use of solar technology. And beyond the obvious innovation that was happening here lay some very interesting questions. How, out of all the places in the UK, did Kirklees become the UK’s SunCity? The simple answer one hears in the field is “because they got lots of EU money”. But even if so, why did they get that money? Why was there such an emphasis on Solar? How relevant was climate change and the technology here? And why, despite the successes here, does it remain something of a lonely pioneer?



**Figure 3:** "Death Row" before development



**Figure 4:** Same street after development.

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<sup>2</sup> Based on 2006 figures: Estimated total of 351kWp of solar electricity as well 63 solar thermal systems Source Kirklees Council case study: downloaded on 2 Nov 2007 from: [http://www.kirklees.gov.uk/community/environment/renewable/2006\\_SunCitiesCaseStudy.pdf](http://www.kirklees.gov.uk/community/environment/renewable/2006_SunCitiesCaseStudy.pdf)

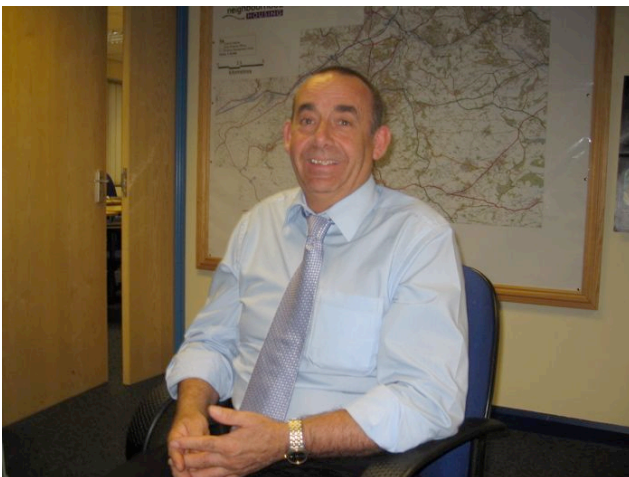


## Researcher Comment

Understanding who to speak to and managing to speak to them was an immediate challenge with this learning history. Starting with the Kirklees Environment Group, I found that gaining access to those there who were originally involved with the project was not going to be easy. Some of the original team had dispersed – those who remained were very busy. Unlike other places I had visited, there wasn't a champion in place stoically responding to researcher requests and though I explained this was different kind of research, engagement still proved difficult. This was to be reflective not just of the timing of my request but also of the nature of the project(s) I was seeking to chart. It was necessarily a dispersed, multi-agency effort. Eventually after negotiation with my contact in the Environment Group it was agreed that my request would be put out to a number of people who had been involved in different ways in the projects at Kirklees. Finally I was able to set up meetings in June 2007 with two people involved in different ways: Jimm Reed from the Yorkshire Housing Group (a registered Social Landlord) and Richard Garner, from Kirklees Neighbourhood Housing – an arm's length management organisation for the council's social housing.



**Figure 5: Jimm Reed of Yorkshire Housing**



**Figure 6: Richard Garner of Kirklees Neighbourhood Housing**

Yorkshire Housing builds and manages affordable housing across the Yorkshire area. Jimm had project managed the new build of Eco-houses and council flats at Primrose Hill, whilst Richard had worked with tenants there and elsewhere on addressing fuel poverty. This included consulting with them on the installation and maintenance of the solar technology. The two perspectives were very different, from organisations responding to different drivers. Notably too there was an absence of a perspective from Kirklees Environment Unit itself.

Yet these difficulties, these holes in the story serve to make this learning history interesting. It is built at one step removed from the Local Authority and hopefully this will give an insight into how multiple agencies worked together and managed different priorities, to get something done. The learning history focuses in particular on what happened at Primrose Hill. I start with some of the wider background that is essential to place that example in the context of the wider initiatives of which it is a part. However this broader context is necessarily sketchy as I did not speak to the many people who were intimately involved at this stage. This early stage draws particularly on Richard's accounts of his work pushing through home improvements to address fuel poverty. This leads to a description of a project at Primrose Hill where solar panels were retrofitted on council houses. With a change of voice the story then starts to focus in on Jimm's story which is particularly the account of the new build at Primrose Hill. Quotes from Richard are initialled; all other quotes are from the interview with Jimm.

In this history I will be more explicit than normal in pointing out into the gaps, inviting others 'into' the story to help fill it out with their own stories and perspectives.

## **Phase 1: Sketchy Prehistory 1 – Creating Capacity at Kirklees Council**

**When:** 1989 - 2003

**Where:** Area of Kirklees

**What:** Capacity building in Kirklees Council

**Who:** Andrew Cooper – Housing Officer, Kirklees MBC (now Green Councillor for Yorkshire and Humberside)



*This early history is sketchy. It is pieced together from some of Richard's comments and info in the public domain. It would be great to get a perspective on the setting up of the environment unit and the motivations at that time*

As with Nottingham and Barnsley, Kirklees' achievements today build on years of capacity building that started back in the early 90s. There was already strong political interest in 'green' issues and this was expressed when Kirklees Environment unit was set up in 1991. A year later the council was the first to issue a 'state of the environment' report. At that time, Green Party member Andrew Cooper worked in Kirklees Council as a housing officer. He was keen to push energy efficiencies and renewable energy and to address this he set up an Energy Team within housing. The team would look at improving the efficiency of the council's own housing stock as well as start considering renewable energy.

**Theme: as with Nottingham, some very active Green-minded champion(s)**

The first solar thermal installations took place then as far back as 1992. At the same time a programme of loft and cavity wall insulations started to be undertaken by this team. The Kirklees Housing team was what later would become Kirklees Neighbourhood Housing (KNH). Their primary concern was their tenant's wellbeing and at that time their main agenda was to address fuel poverty.

*– the way we look at it is, we don't go and tell everybody It's going to save the planet, we do it, I call it, the ASDA way – its how much I can save you – and you get more response and by the by you're saving the planet (RG)*

**Theme: Convergence of fuel poverty agenda as per Nottingham and Barnsley**

Insulating the homes and achieving a base level of warmth was the first priority. Of their some 32,000 homes, the majority at that time were heated by a coal fired back-boiler and basic heating. The Energy Team started working to replace these with central heating<sup>3</sup>.

In this time then an experience-base on how to bring in funding for home improvements and on how to consult with tenants was starting to be developed. There was an awareness too of renewable energy and a developing understanding of which sites were suitable for solar energy.



*This is similar to Barnsley in terms of building an experience-base (albeit a different one) for addressing energy efficiency. It echoes too how Local Agenda 21 work in Nottingham set the scene for further initiatives in early 2000.*

**Theme: A long phase of capacity building sets the scene.**

In 2002, the housing group, including the Energy Team, was moved out from the Council to the newly formed arm's length housing association called Kirklees Neighbourhood Housing.

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<sup>3</sup> Largely with funding from the Coalfields initiative which also stipulated that in moving from coal some renewable sources of energy should be included.

## **Phase 2: Sketchy Prehistory 2 – Parallel Initiatives**

**When:** 2000 - 2003

**Where:** Area of Kirklees

**What:** SunCities and Decent Homes initiatives,

**Who:** Kirklees MBC and KNH

By 2000 the scene was set to capitalise further on the achievements to date. An opportunity to create a recycling fund for investing in green energy was seized by the council<sup>4</sup>. And around this time Kirklees Council were invited to join Dutch and German partners to bid for funds under the EU SunCities program. This was to be a significant boost to the solar agenda in Kirklees as well as an important source of funding.

The SunCities project started in 2000 with an aim to produce 400kW solar output within 4 years. This project preceded and then ran parallel to a wider-ranging Decent Homes programme run by KNH that started in 2003 and that aimed to bring all council homes up to a basic level of comfort. This set a standard for heating homes effectively and also required more general improvements to homes such as an elimination of damp, and achieving a generally good state of repair.

As part of this program, and no doubt dovetailing with the SunCities project, solar thermal installations as well as Solar PV for electricity were proposed for certain council buildings. These included solar thermal installations at care-homes at Newsome and Lepton and Solar PV on council houses at Fernside and as well as both thermal and PV at Primrose Hill.

### **Invitation to readers to add stories here:**

This part of the Learning History is thin and as such doesn't cover the human story of these early achievements.

Do you have a story from this time? How did the Kirklees Environment Unit come to be set up? What was it like at that time? How did Kirklees get involved in the SunCities program? Was it through personal contacts? Was there luck and timing involved in how these initiatives started? How did the recycling fund get started – were there key moments/events/meetings in making that happen?

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<sup>4</sup> When the climate change levy was introduced on non-domestic fuels, national insurance payments were reduced to compensate. This resulted in a surplus of funds for the council which was diverted into the energy efficiency fund.

### **Phase 3: Decent Homes – Working with Tenants**

**When:** 2003 onwards

**Where:** Primrose Hill

**What:** SunCities and Decent Homes initiatives,

**Who:** Kirklees Council: BE, KP, TO

KNH – Richard and others. The Tenants.

Though surveying suitable sites for solar installations and making budgets balance is all part of KNH's work, it was clear to Richard Garner and others at KNH that tenant consultation was vital to the success of any of the

improvement initiatives. The government-funded home energy scheme had been stopped in the authority due to shoddy workmanship and the team had complained vociferously to central government about how poorly it served tenant's needs.

*BE and TO went down to London with 6 A4 files full of complaints and just dropped it on minister's desk and said 'there you are' and went off to see Deputy Prime minister to say 'what are we going to do about it?'*

**Theme: Risk, Prepared to challenge Central gov - that relationship less important than common sense and tenant well-being?**

For the decent homes initiative Richard worked closely with the tenants at Primrose Hill and elsewhere, finding ways to communicate with them in a way that would be relevant to their own lives and concerns.

The benefit of the move from coal-boilers was translated into the money that would be saved on the heating bill. And to convince them of the benefits of central heating, Richard described to older tenants how they would no longer need to fetch coal on freezing nights or run through a cold house to the loo during the commercial break of their favourite TV program.

*The classic one for the elderly 'you don't have to run to loo in middle of Coronation Street on a cold winter's evening' and it's surprising how many of them do. If its cold and they're rushing, there are more accidents. (RG)*

**Theme: Here KNH act as knowledge brokers translating from the technology to the user domain.**



KNH's approach is relentlessly practical and tenant-focussed. Information about changes is never just imparted – imaginative ways are always being thought of to ensure it has been understood. Fridge-magnets with boiler service information were issued. Magazines were published with information. Potato sacks have even been filled with balloons to demonstrate the amount of CO<sub>2</sub> saved by using low-energy light bulbs.

*So if we can get them a decent wet central heating system in with condensing boiler and with controls and show them how to use it – not just put it in – this is where a lot of people have slipped up – we actually go out and show people: we run training courses and visit tenants in their own homes. (RG)*

RR

*Here the 'technology-in-use' is being strongly considered. This is essential to facilitate changes in technology that bring with them changes in user practices, billing and so on. This kind of facilitating agency is completely missing from private sector housing*

And all this is supplemented with visits and real support.

KNH did paperwork for tenants with new heating systems to claim cashback on fuel allowances. This very hands-on approach led to 95% take-up of the proposed Solar installations.

At Primrose Hill this drive included solar installations that were part of the SunCities initiative. Convincing tenants to go for this completely new technology was approached in much the same way as the other improvements. Training days explained the new technology and after installation visits continued to check how it was going and to ask if there were any problems. An element of neighbourly competition helped the process along. The good work paid off: most of the homes suitable for Solar thermal<sup>5</sup> and/or Solar PV<sup>6</sup> agreed to have the systems bolted onto their homes.

*When they find out that their neighbours are having it – there's a lot of one-upmanship. 'Oh, if they're having it, I'm having it' (RG)*

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<sup>5</sup> 63 solar thermal systems out of a possible 68 were installed providing 50-60% of hot water needs

<sup>6</sup> 49 solar PV systems out of a possible 56 providing 20% of electricity needs.

## **Scene 4: A well timed meeting**

**When:** July 2003

**Where:** Kirklees

**Who:** KNH – JB and other(s)

Kirklees Strategic Housing group – JK  
Yorkshire Housing – Jimm Reed

Largely unaware of all this activity on decent homes and energy efficiency, in the summer of 2003, Jimm Reed was invited to a meeting with council representatives to discuss a potential regeneration project for Primrose Hill that at the time was in one of the 10 most deprived wards in the country. Social problems in the area were rife and were particularly associated with some properties, along Ridge Street that were beyond repair.

*There were properties all boarded up, my boss has a story about talking to one of the local people and asking them how they like living here, And she said it's fine as long as you avoid the needles on the ground and that. And he saw 2 dogs walk past and the lady commented 'even the dogs walk together round here for protection'*

**Theme: Opportunity arising out of a really bad situation where the stock (in this case housing) needs to be renewed.**

At the meeting the group seem to have quickly reached a collaborative view on how to address the problem: instead of parachuting in another scheme to replace the old

*I recall the meeting quite well actually –we were sitting in a meeting room having walked around the estate and really it was a case of sketching something on a piece of paper and saying 'we could do this' .....–but really just a very quick sketch that I did seemed to get everybody very excited and from that point the project jumped forward.*

one, they would set about creating a 'sense of place' that would fit with the overall regeneration of the estate. By encouraging a mix of tenancies – including families and creating jointly owned spaces, social issues might be addressed through design. There was a keenness too to work with the idea of a sustainable community and this included building the houses and flats to meet high EcoHome<sup>7</sup> standards.

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<sup>7</sup> The assessment criteria preceding the more recent code for sustainable homes. Level 4 is the highest level achievable.

**Theme: A shared vision of change driving a group to collaborate**

*Yes I think the personalities clicked*

At the meeting there was a lot of enthusiasm and a mood to 'go for it'. Something needed to be done and there was a more than palatable solution on the table. There was some luck too. Yorkshire Housing were due to put in their 2yearly funding bid that Autumn. There would be enough time to write up the scheme for the bid.

RR

*From the description, It feels like the scene was set and that everyone was on side about this at the meeting. Agendas, whatever they were, ...seem to have been convergent. Why are some meetings like this and others not?*

**Theme: Lucky timing.**

### **Invitation to readers to add stories here:**

If you were part of that meeting, how did you perceive it? What perspective can you add to the different agendas at that time?

## **Phase 5: Consolidation and Consultation**

**When:** July 2003 – Dec 2004

**Where:** Primrose Hill

**What:** Consultation

**Who:** Yorkshire Housing, Residents of Primrose Hill

Yorkshire Housing quickly recruited an architect to work on the scheme. By Autumn a funding bid was submitted that included a new set of Eco-homes along Ridge St together with a circular shaped apartment block with an interior common space.

Solar energy was considered early on as a way of symbolically as well as practically helping to realise the idea of a sustainable community.



*It's interesting to look at the reasons why people adopt solar – here as elsewhere its symbolic value as a beacon of sustainability was important. However even at the start practicalities were being considered.*

Early designs already included the saw-toothed roof design on the Eco-homes that is now emblematic of the area. The purpose of this design was to get a south-facing mono pitched roof that would be optimal for solar energy<sup>8</sup>.

### **Theme: Solar as a symbolic as well as practical solution**

On the circus solar panels would be attached to the roof for hot water and PVs would supply electricity for the communal areas. Renewable energy wasn't the central driving focus of the design at this stage for Yorkshire Housing. It just fitted the overall thrust of the project which was to create a sustainable and *integrated* '*sense of place*'.

Integration within the estate was of prime importance. Gates suggested for security reasons were vetoed. And a consultation with local residents was run in November. Sketches and drawings were shown to and discussed with local residents.

*We got a big yellow bus and drove round the estate for a couple of days, knocked on doors and got people to come into this bus in the middle of November, freezing cold days, got people to come onto this bus, gave them a cup of tea.*

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<sup>8</sup> The street ran north-south which is not ideal for solar power as standard roofs would face east/west.

This consultation went well. But it was hard to get objective feedback from residents – many said of Ridge Street in particular: *'I don't care what you do, knock it down, build something else – anything you do is going to be better than what's here'*

The transition from a socially deprived area to a sustainable community was clearly not going to be easy.



*So support, as it stood then, was mostly negatively motivated. There must be a real challenge to move from that kind of despair to a positive sense of community. Involving local people in proposed plans seems a vital first step in this. Yet how often is this overlooked?*

## **Phase 6: Solar moves up – agendas come together**

**When:** End 2003/Early 2004

**Where:** Kirklees

**What:** Series of meetings.

**Who:** Kirklees Environment Unit - RC

ESD – JM , Yorkshire Housing – Jimm

Jimm was informally aware of the council's interest in solar energy and in particular the Decent Homes work that had just started at Primrose Hill. By the end of 2003, as the technical and funding realities of fitting solar energy to the new design were starting to be addressed in detail, he started to meet with the Kirklees Environment Unit more formally to discuss how the two projects might overlap and work together.

*It was a no-brainer really - they were saying – we're doing all this, we've got some funding potentially. And we're saying – we'd like to use some solar power. So from that very early thing it was – how do we make it happen?*

**Theme: Luck and Timing.**

**Theme: Multi-partnership working – coalition forming.**

The principle of working together was sound. By combining the two projects there would be more of an economy of scale – installation costs and subcontractors could be shared. Most importantly, by jointly bidding for funds for the solar installations, the scheme could be made more affordable for everyone.

*obviously these two [projects] chime very quickly and we were both very interested in taking it forward on what would obviously be a big scheme for Kirklees and a very big scheme for us.*

The solar aspect of both projects would now be supported by the Kirklees energy group and with this came an increased commitment to solar energy. External consultants ESD<sup>9</sup> were appointed to help with facilitating relationships externally and internally. This coming together of the projects in Primrose Hill was significant and indeed essential. However both projects had different timescales and emphasis and the practicalities this implied would later add quite significantly to the complexity of the project.

RR

*Everything seems quite inevitable – there was a 'buzz' around solar and connections seem to have been in place to allow that to scale-up quite readily into something bigger.*

**Theme: The evolution of a brand “Kirklees as a Solar hub” starts to drive actions and decisions and evolving over time.**

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<sup>9</sup> Stands for Energy for Sustainable Development

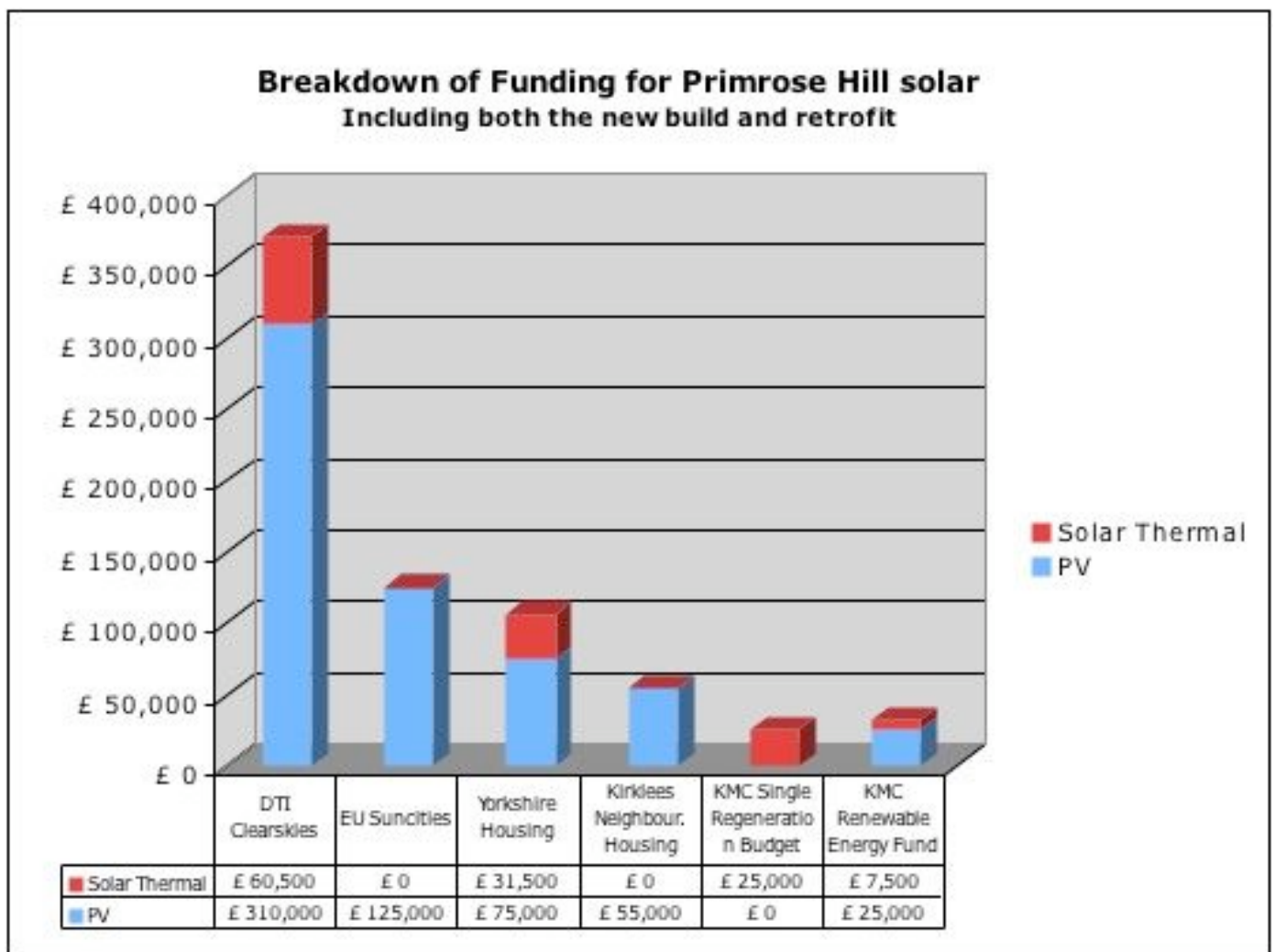
## **Phase 7: Realities of Funding and Design: A boulder starts to roll.**

**When:** Early 2004 – October 2005

**What:** The long process to getting on site.

**Who:** Kirklees Energy Group, Decent Homes people, Yorkshire housing, ESD

Any scheme of this nature requires a vast amount of detail to be tied down before getting on site and this project was certainly no exception. Funding, planning and design considerations all need to be worked through. Several streams of funding needed to be brought together to finance the solar installations. Ultimately 80% of the Solar PV costs on the new scheme were met from external funding.



**Figure 7 Funding streams for solar at Primrose Hill** (source: Kirklees Council Website)



*It's interesting to see how much money came from the DTI even though a common perception is that Kirklees went solar because they got "shedloads of EU money". Was the significance of the EU Suncities more relating to kudos and vision than it was to money?*



For Yorkshire Housing the scheme was one of the biggest and most expensive they had built in some time. And as such it was a risk.

*I remember taking board members around the estate before and the expression on some of their faces of 'what have we bought into here' 'why are we risking our money in this area'. Credit to the directors – they backed me up in doing the scheme –*

Jimm refers to a sense of bloody-mindedness that kept him going whilst pointing out that projects like these are *"like a boulder at the top of the hill; They take a hell of a moving but once they start to be honest you're either on for the ride or your not"*

**Theme: Risk – financial and reputational – here, after a certain point, running with the risk.**

The director's long faces were justified. As this was the first solar project of its type design and cost details were hard to anticipate. Costs started to spiral. The angle for the solar panels at the circus wasn't acute enough – a secondary raised roof needed to be built to accommodate them (see opposite).

*It was fraught phone calls mostly*



**Figure 8** The raised roof that had to be built to accommodate the solar panels

These kinds of unforeseen problems put pressure on the partnership which had shared goals but inevitably differing priorities. Jimm's priority was to deliver a scheme in which people could live whereas the council's energy group needed to ensure the funding was procured and properly applied. Removing solar panels could not be an option and in the end the council covered the additional costs.

**Theme: Partnership working creates difficult organisational boundaries – having energy separate from the project was difficult.**

### Invitation to readers to add stories here:

Have you any stories of how you experienced the partnership working at the time?  
How you felt with the pressures and the problems?



By Autumn 2004, a planning application was filed and in March 2005 the demolition the existing houses in Ridge St. commenced. There were more fraught conversations as both projects tried to work alongside each other – sharing contractors and even the site compound. At this stage contractor disputes on design and costs delayed the scheme by a further 6 months meaning solar funding deadlines also needed to be extended. Finally in October 2005, with deadlines now looming large, the building could finally begin in earnest.



*There were clearly some very difficult aspects to the project and to the partnership working – however there was no choice but to overcome the various obstacles that arose*

## Phase 8: Building and community reactions

**When:** October 2005 – Opening day in October 2006

**What:** Shifting attitudes

**Who:** Some Local Residents

Once building started the houses went up quickly – at a rate of 3 a week – and as the development started to take shape by early 2006, some of the local residents intimated that they were not at all happy with its proximity and how it overlooked them. This came as a surprise and a disappointment to the Yorkshire housing team.

Throughout the planning stage a high level of community consultation had

continued the extent of which had even been commended by the planning officer.

*We'd done community events, ...we worked with the local tenants and residents association – went to 3 or 4 of their meetings. We held a couple of events down at the cricket club which is just round the corner - one was a summer festival – lots of games for the kids and stands about the regeneration project.*

What stung for Jimm was not so much the complaints themselves, but the fact that residents expressed the view that they hadn't been consulted and that their rights had been violated. The row escalated to the Local MP and government ombudsman and was eventually resolved with some minor changes made to address the concerns about privacy.

*And all their pessimism and anti – against it had disappeared – literally with going into the flats and looking around – and they thought 'these are lovely, these are wonderful' and 'you can't see my back yard from this angle*

**Theme: Genuine commitment to continued and persistent consultation**

Communication with the disgruntled residents continued and on the opening day of the flats a number of them were invited around to see the place for themselves. And in that moment the mood changed to one of support and even excitement. From that time on there were no more complaints. The despair expressed in the early consultations was finally starting to transition to a more positive sense of involvement.

RR

*Consultation is different to participation – going from 'telling' and getting a 'reaction' to really engaging people is something that requires perseverance, particularly at points when the response is difficult to hear.*

*Yes just going through the difficult things of listening to them – and in the end most of what we could do was just to simply listen and nod sympathetically*

## **Phase 9: Reputation, Recognition and Reflections**

**When: 2006 – now.**

**What:** Huddersfield as “SunCity”, Primrose hill as “Solar Village”

As the completed projects at Primrose Hill added to an ever-broadening portfolio of solar installations across the Authority, Kirklees’ reputation as the UK’s premier “SunCity” started to spread. And with that came increasing recognition. In 2006 Kirklees were runners-up in the Ashden Awards<sup>10</sup> and their successes started to be held up as a potential inspiration to others. Kirklees’ groundbreaking success with solar was mentioned in dispatches and several high-profile visits from government ministers through to royalty took place.

*I must admit the whole evolution of this concept of the ‘Primrose Hill Solar Village’ which is the whole thing together – to me that came quite late in the day....*

*That Huddersfield is the British Suncity is a big kudos thing for Kirklees.....*

**Theme: A brand starts to emerge or is actively created: fame attaches itself to the project.**



**Figure 9 Prince Phillip visiting Primrose Hill in May 2007**

Behind the public acclaim some real efforts were being made to understand, judge and learn from what happened here. For as at Barnsley, the innovation here is

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<sup>10</sup> Sets out to reward and acknowledge the best projects for sustainable energy solutions in the UK and in the developing world.

tangible – solar panels are on roofs and they are working. They are saving CO2 and money for the tenants. This suggests replicability in some form must be possible. Funded by Ashden Award money, information days are now being run by the council for other Local Authorities to come and see what was done here. And at KNH people from other authorities often get in contact to learn more.

Learnings are also being linked back into the field of practice.

Emboldened by the use of a new technology and accustomed to working in partnership with the

council, Yorkshire Housing are now looking to new schemes that will incorporate different forms of renewable energy. The funding body for Yorkshire Housing brought together a number of partner organisations to have a look at the scheme. Included were architects and builders from CABA<sup>11</sup> who informally conducted a peer assessment of the project on the coach as they drove around.

*It was quite interesting getting criticism from ones peers - generally it was better feedback than I expected.*

#### **THEME: Success leads to a call to share learnings in many different ways**

Judgement of a scheme like this takes time. CABA specialists and locals alike were unsure about the materials used and in particular the timber look of the houses, Most of the houses and flats are now occupied, However to the team's disappointment some of the shared

ownership homes were slow to sell. The former reputation of Primrose Hill was a factor but the radical appearance and the use of timber have put some people off.

*I think a lot of the intention with design is just to provoke a response, whether it's good or bad. But it does achieve what it set out to do which was to make a sense of place ....I'm not saying it's iconic but you do recognise it and it takes a bit of time for people's ideas of places to bed in*



#### **THEME: Shifting perceptions of an innovation**

Jimm is philosophical about these judgements noting when a *new sense of place* is created, it takes time to be understood.

*Learning from a project like this is not straightforward – there are many levels. Too often it centres around the technology and when other factors are surfaced these serve to make replication seem impossible rather than explain what made it possible here*

RR

<sup>11</sup> Commission for Architecture and the Built Environment .



## **Final Comment: Why a Pioneer? Links to theory.**

### **A pioneer indeed**

The history shows how the conditions that led to this unusual Solar project were indeed complex. The area in question needed to be in a terrible state to open the door

#### **A future for Solar PV?**

*JR: If you look at the comparison [of PV] with solar thermal – the latter is a very proven and a very refined technology and can be installed and maintained pretty much by a traditional plumber and roofer with a bit of training. I think it's hard to square that [with the complication of PV] to be honest and I think if we were looking at this site again especially if that funding wasn't there, I think we would probably be looking at a different renewables mix.*

*MG And I guess that degree of funding isn't going to be available is it? That was a one off?*

*JR Absolutely yes. I can't imagine anyone getting 80% funding on a renewable source in the future, not at all.*

*MG So what is the future for Photo Voltaics in this country?*

*JR Until the price comes down I think it's debatable – very debatable. People seem to love or hate them – I've talked to a lot of sustainability people in the circles we move in, and some people spit feathers when you start talking about PV – they think they are soaking up all the funding – a distraction. I don't know if that is necessarily the case because in terms of the houses on this scheme they do actually save on people's electricity bills.*

for something completely new to be done. The commitment to solar energy needed to already have been there and this had resulted from a long-standing commitment to environmental issues, demonstrated by the environment unit and as important, community consultation, demonstrated at KNH. The capacity to actually do the work and to avail of the funding that at the time was *particularly* supportive of renewable technologies needed to be in place and ready to go at just the right time. This kind of funding is no longer available (see inset) and the high costs of solar technology continue to be a significant barrier to their use. The various schemes needed to dovetail together. And finally there was the sheer momentum of the project that carried it through – once it had started the many problems that were encountered simply had to be overcome.

One might say then that it's no wonder Kirklees is a lonely pioneer. The conditions were so particular as to never be repeated – and this learning history has not even described *all* the particularities.

On the other hand, the example bears some striking parallels to Barnsley in that it illustrates how the drivers in the social housing sector do seem to enable

renewable technology to be deployed more readily than in the private sector. Why is this?

### **Links to theory**

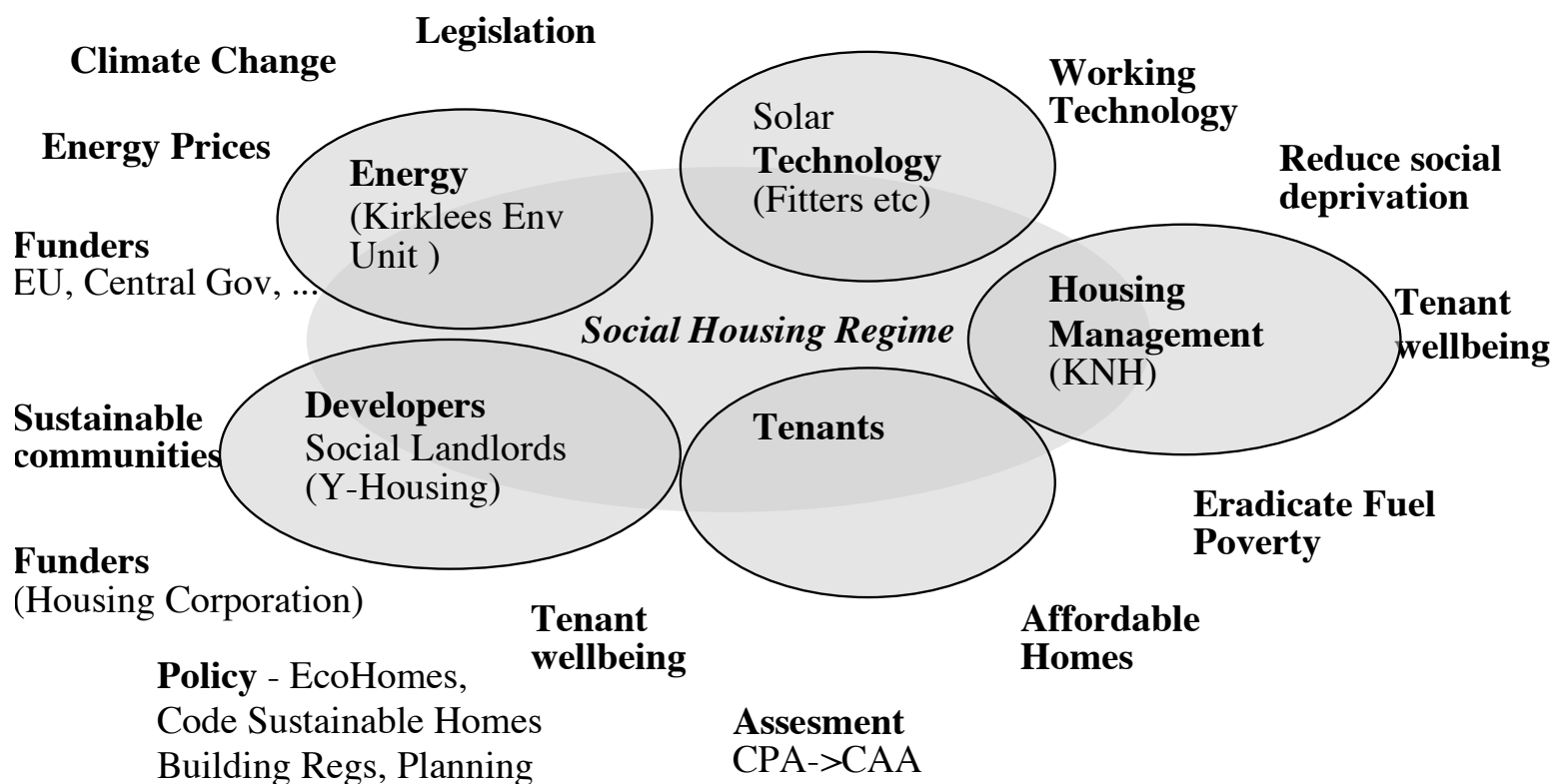
Making a link the theories of socio-technical change can throw some light on that question. In the Barnsley Learning History the notion of a technological regime

(Nelson and Winter 1982) was introduced to explain that a new technology cannot be considered separately to the social setting in which it is deployed. The user practices, the engineering skills, the organisational procedures and so on surround a technology and in many ways guide its success and how it is developed. Further literature describes an even more intransigent regime – the socio-technical regime – where several overlapping regimes - be they social, organisational or political - overlap with the technological regime and fix in place even more rigidly, ‘how things get done’. In Barnsley it was shown how an implicit understanding of this helped breakthrough the existing socio-technical regime of ‘how heating happens’ in social housing there. In Kirklees a number of factors came together in a well-timed way. In both cases though it is worth noting that the social-housing regime was sympathetic enough to allow such breakthroughs to happen.

## The “Social Housing” regime: Sympathetic to innovation

At attempt to show some of the elements of the ‘social housing’ regime in Kirklees is shown in the Figure 10 below together with some indication of the varying drivers behind each organisation. Via the participating organisations, a wide-ranging agenda was brought to the table. Through the execution of the project these varying priorities had to be resolved. A sufficient degree of overlap of agendas appears to have allowed this to happen in a collaborative way. So though solar technology was not the first priority for the developer, the overlap with the energy group ensured it remained on the table.

The tenant is very central in this regime, more so than in the private sector and it is this agenda that drives several parties to persist with consultative and participatory approaches that are key to the success of a new technology. Funding and financing structures are different too. Capital expenditures are often met initially through grants and funding streams rather than via private finance. Returns accrue then either directly to the funder in terms of reduced energy bills (e.g. the council) or indirectly to the management organisation (KNH) and social developer (Y-Housing) in terms of improved tenant well-being.

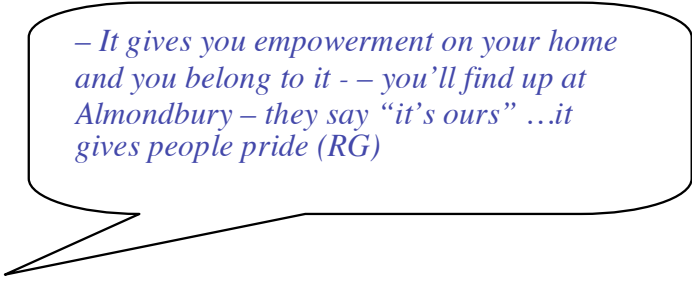


**Figure 10 Social Housing" in Kirklees as a socio-technical regime.**

These kinds of synergies were seen too in Barnsley's social housing regime and doubtless they can be seen elsewhere. What they amount to is a system that shows capability for new technologies to breakthrough and be trialled. In the case of Solar energy the capital investment barriers remain high. In the case of Biomass, as the technology has been proven there is an increasing move to private finance and a greater penetration of the new technology.

So there are general lessons then that could be taken from this kind of configuration that might be of value in other housing regimes. And some of these lessons are being taken. Social Landlords interact with private sector developers, architects and builders. In this way some of the practices percolate across the public-private sector boundary.

And there are many lessons too to be taken from the specifics of the case. Whilst there may never be a project quite the same again, it has demonstrated that, under certain circumstances, solar energy can make sense not just from a financial point of view<sup>12</sup>



*– It gives you empowerment on your home and you belong to it – you'll find up at Almondbury – they say "it's ours" ...it gives people pride (RG)*

but as part of a much bigger picture of building pride and ownership within a community.

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<sup>12</sup> Estimates on payback times for solar systems vary. On solar thermal the cost currently is approximately £2000. Payback estimates vary from 10 to 35 years when maintenance costs are included. On solar PV costs are roughly double that of Solar thermal. However maintenance costs are less and when electricity prices peak the payback period has been estimated to be relatively short - in the region of 50 years – so the return on investment is higher.





*On a summer's day  
you can see it all  
glistening and I  
say yes British  
Airways pilots  
have asked for  
sunglasses for  
when they fly over.  
(RG)*

**Figure 11 Aerial view of Primrose hill - old and new**

## **APPENDIX A: Themes**

The following themes are distilled from the annotated taped transcript. Where appropriate the themes are compared or contrasted with similar themes arising in the preceding two learning histories.

<b>Theme</b>	<b>Description</b>
<b>Themes arising directly from this Learning History</b>	
<b>High level ‘green champions’</b>	As with Nottingham particularly here there were some active champions in the Local Authority: amongst councillors and executives who contributed significantly to putting green issues on the agenda (next point)
<b>History of Cross Party support</b>	Formerly a Labour council, environmental and social initiatives of the nature described here have had cross-party support. Recently the Conservatives have taken over the majority in Kirklees which has changed the political context.
<b>Long period of capacity building</b>	As with Nottingham and Barnsley what happened here was building on years of capacity building in addressing sustainability issues within the Local Authority and also related areas of energy efficiency.
<b>Opportunity arising from necessity</b>	Housing stock was run down, the social deprivation in the area was appalling – something <i>needed</i> to be done.
<b>Multi partner Working</b> <i>Pros and cons</i> Positive, collaborative Overlapping Agendas Disjointed structures	Several examples in this history of converging agendas creating positive collaboration and a sense of possibility. However this also created artificial boundaries that were unhelpful – e.g., technology external to the build project.
<b>Coalition Working</b> - Task rather than relational	Relating to the previous point: this is a ‘task’ (formal) focussed coalition rather than a ‘relational’ (informal) network described say in the Merton LH. In this coalition there were shared goals but different priorities.
<b>Post Heroic Leadership</b>	Noticeable here, more than any history, the lack of one champion drawing it all together. Achievements are spread across many different actors/agencies as in post-heroic leadership models.
<b>Regeneration by Design</b> <b>‘sense of place’</b> <b>Visioning.</b>	A theme that is very particular here is the idea of creating a ‘sense of place’ and so addressing social issues. There is a visioning aspect “sense of place”

	here that is strong. Links to Barnsley (vision of wood stacked high in European forests).
<b>Differing &amp; Shifting agendas – serving climate change</b>	Sustainability issues were addressed here in the context of other social issues of fuel poverty and deprivation that were also of primary concern. The technology was part of a much broader effort to improve energy efficiency. Links to themes at Barnsley and Nottingham.
<b>Community involvement and participation</b> - tenant centred view	This is a key theme in this learning history. From the two perspectives offered the ‘users’ of the new technologies/improvements were as important as the changes themselves. Relates to <b>“Technology-in-use”</b> theme in Barnsley
<b>Community Integration</b>	This theme ran throughout – and links to other themes. No gates, no separation, fun days, festivals and so on
<b>Risk</b> Risk of a first-time, very ‘different’ project Reputational risk (funders) Funding risk	A risk running through this story is that of a ‘first-time’ project. And the price of doing something different was paid many times over in terms of: underskilled contractors, overlooked design challenges, wary residents and so on. This was aided however by the sense of joint ambition there was around the project. At KNH reputational risk was secondary to using common sense and getting the job done. Financial risks were greatly mitigated by funding (as with Barnsley).
<b>Technology as symbol</b>	Here the choice of solar and sticking with it had behind it symbolic as well as practical motivations. It reflected a desire to <b>show</b> a commitment to sustainability issues – this came up in Nottingham.
<b>Renewable technology needing to be integrated in a broader sustainability agenda</b>	A common theme is that renewable technology cannot be considered in isolation or as an add-on. EcoHomes and Code for Sustainable Homes drivers reflect this.
<b>Creation of reputation and story</b>	As in other histories, success led to the creation of reputation and reward. Here the notion of a ‘SunCity’ was actively created – a brand like ‘The Merton Rule’ and this assisted the spread of success and reputation.
<b>Brand backfilled</b>	Here as in Merton the ‘brand’ emerges later than, or in parallel with the project. It doesn’t precede it.
<b>Communicating about</b>	As elsewhere - quite straightforward models of

<b>success</b>	learning are employed – communication days, visits from interested parties and so on. As with other authorities, success creates a lot of external requests that need to be addressed and adds pressure. Unlike elsewhere there was no obvious ‘champion’ who fields all requests.
<b>Bus Trips for collaborative learning</b>	Conversations on the bus during site visits were very fruitful. This was mentioned too in the Nottingham case.
<b>Unstoppable momentum</b>	The mood of having to deliver something tangible is palpable in this learning history. So whereas it is set against the rhetoric of climate change and other conversations, something has to be built. This reads differently to, say, the Nottingham Declaration. The metaphor of an unstoppable boulder was used often in the interview.
<b>Chance, Openness &amp; Vision</b>	Themes of chance and luck were here – the timing in particular of the funding and the coming together of multiple agendas. Here, as the project started to roll, it was more a case of having to find the luck to make the ‘vision’ happen – there was no choice,
<b>Finance/Funding</b>	Strong reliance on funding to insulate against risk with projects. ‘can do’ approach to funding demonstrated. Idea that the funding is there if you know where to look.
<b>EU Links and Gov. links</b>	Strong outward facing links via the Environment Unit to EU SunCity project and to the DTI
<b>Knowledge and ‘knowing exactly what to do’</b> - translation	There was less a theme of the key technical knowledge being in the right place and vested in the right people. People were feeling their way forward with this new technology. However there was a strong theme of ‘translation’ and brokering knowledge, particularly at KNH: i.e. knowing the language with which to communicate with tenants and being placed to do that.
<b>“It’s simple” /”Obvious” theme</b>	The theme here wasn’t that it was simple – it was more that ‘it had to happen’.
<b>Timing – near &amp; far view</b>	This was here to a degree with the ‘vision’ of creating somewhere different set against the shorter term reactions.
<b>Relationship with Central Government</b>	Not afraid to challenge (see early story about their trip to London). Relates to risk. At KNH the tenant’s

	wellbeing was the primary driver and this enabled them to challenge where necessary.
<b>Institutional Forces –</b>	Influences to/from other local Authorities not strong in this history

**Table 1 List of themes arising in this Learning History.**

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