Where is housing heading?

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CIH begins a new series of policy discussions on the key issues facing housing over the next five years

Two years after the coalition government published its housing strategy *Laying the Foundations*, and 18 months ahead of the General Election, CIH is taking the opportunity to pause and consider developments since 2010: where we have ended up, what's worked, what hasn't, what we've learnt about the policy positions of the main parties and where things might be heading next.

We've commissioned a series of leading commentators to give us their views on these and other issues across different policy areas over the coming months. In this fourth essay, John Perry, policy adviser at the Chartered Institute of Housing, argues that the government’s changed approach to climate change is failing, and that there is no time to lose for the housing industry to start fighting back.

We hope you will enjoy the essays and that they will stimulate debate over the critical period we are about to enter.
4. If we don’t put the environment high on our list of concerns, it will

Since it was elected on the promise of becoming the ‘greenest government ever’, the Guardian’s green-o-meter has been monitoring the coalition’s progress. Back in early 2011, it was still doing pretty well, but by late last year it had swung right round the dial to become the ‘greenest government never’. Something similar has happened in housing, where green issues were rising high in the wake of the 2006 Stern Review on the economics of climate change. Nicholas Stern argued that it made economic sense to aim to avoid the worst effects of climate change, and both the UK government and the housing sector seemed to agree. By the time CIH published its book Housing, the environment and our changing climate in 2008, there was plenty happening. Two years later, CIH was still able to talk about Greening your housing organisation and find numerous examples of social landlords who aimed to do just that.

The nadir of the ‘greenest government ever’ came with the Sun’s allegation last November that advisers had been told to ‘get rid of all the green crap’ because it was pushing up families’ energy bills. But in fact the Chancellor had already said two months earlier that he didn’t want the UK to be at the forefront of tackling climate change. By the end of 2013, Stern’s economic case had been pushed aside. Policy had shifted decisively away from direct investment in greening the housing stock towards incentivising households through the Green Deal, and social landlords and tenants were increasingly left in the cold. Not surprisingly, many housing organisations have reoriented their policies and their spending, as other concerns (such as new build or tackling welfare reform) demand greater attention.

Stern argued that the task was urgent: ‘Delaying action, even by a decade or two, will take us into dangerous territory’. Eight years later, the UN’s Intergovernmental Panel on Climate Change (IPCC) is said by the New York Times to be about to warn that nations ‘have so dragged their feet in battling climate change that the situation has grown critical and the risk of severe economic disruption is rising’. It adds that another 15 years of inaction could mean that climate change runs completely out of control. The warning could hardly be more dire, yet the rest of the media seem to have ignored it.

Why do we respond to such a perilous situation like rabbits caught in a car’s headlights? The novelist John Lanchester said in the opening chapter to CIH’s 2008 book that we simply don’t want to think about it: the problem is just too big, we can’t cope. He quotes James Lovelock, the 94 year-old scientist who developed the ‘Gaia’ hypothesis about how the planet works, who said it reminds him of the threat of war in 1939: we know something bad is about to happen, but instead of trying to stop it we play for time. In 2014, with the warnings coming thick and fast, we appear to have shifted from playing for time into a state of complete denial. This has been aided and abetted by the climate sceptics, whose business has been to sow doubt, and who have been helped by an often gullible media and sometimes by inept actions by climate scientists who weren’t used to the glare of publicity. As Michael Mann says (he’s the scientist behind the ‘hockey stick graph’ which shows how the planet is warming), it’s time for scientists to fight back and engage in political debate. They have the ammunition to do so, because the predictions they started making more than twenty years ago have now been shown to be remarkably accurate.

In the short space of this essay I want to argue why we still have to take climate change very seriously, how the government’s changed response is failing, and why we in the housing sector should be ‘fighting back’ too.

What climate change will bring

The warning from the IPCC and the vast majority of the world’s climate scientists can be stated succinctly:
1. The climate is warming - not just the atmosphere, but also the oceans, which are rising; polar ice is melting. 2013 was the fourth hottest year since measurements began and nine of the ten hottest years ever have occurred since 2000.

2. Overwhelming evidence points to recent warming as ‘very likely’ due to emissions of greenhouse gases by human activities.

3. Future warming could be huge. Over this century, if we continue with business-as-usual, the IPCC projects global temperatures could rise by 2.6-4.8°C. Even energy company BP thinks that emissions will rise by a further 29 per cent by 2035 unless we act soon, which would mean we could no longer keep temperature rises to under 2°C, the current consensus threshold for the onset of ‘dangerous’ climate change.

4. The effects include not only higher temperatures, but more frequent extreme heat events, changes in rainfall distribution, rising seas and the oceans becoming more acidic. Among other impacts, those on coastal cities like London, on food and water supplies globally, and on migration, are among the most significant.

Extreme weather conditions have recently caused havoc in the UK along with droughts in Australia, California and Argentina. There are rapidly melting glaciers in places as far apart as the Arctic, Antarctica, the Andes and the Himalayas. There have been unprecedented typhoons in the Philippines and elsewhere. Growing numbers of extreme weather events match the predictions that climatologists have been making about how the effects of climate change will be felt.

From a housing perspective, simply adapting to these climate effects is going to need significant investment. To actively help slow down climate change, we’ll need to do much, much more.

**How did policy change and why is it wrong?**

Climate change (at least on the scale that we are experiencing it) is caused by burning fossil fuels, which largely means the petrol burnt in vehicles and other machinery, and the gas and coal used in power stations or in domestic heating. The prices of all fuels have been increasing since early 2010, but while this could have been an incentive for stronger green policies (such as promoting far greater energy efficiency) the government has often opted instead for short-term palliatives (e.g. postponing increases in petrol duty).

A large proportion of power generated is used in homes, either as heating or lighting, or indirectly in appliances. We’ve seen the UK market for power generation and supply increasingly dominated by the ‘big six’ firms who have been accused of price-fixing. Fuel bills have increased by ten per cent over a period when inflation has only been a quarter of that. Energy companies have blamed this on green levies, but the evidence is that these account for only one sixth of the increase.

Faced with public anger over energy prices, the government backed-tracked on its ‘costly’ environmental policies. Yet only in December DECC published figures showing our gas prices per unit, including taxes, are
among the lowest in Europe, despite recent increases. This strongly suggests that a big part of the problem of high fuel bills is unnecessarily high energy consumption in leaky homes. But drastic cuts in government funding for carbon-saving and solid wall insulation have now led to insulation schemes being stopped, so far affecting 54,000 homes which would otherwise have benefitted. There will be even more severe consequences over the coming months. This is not only an absurd step backwards in mitigating climate change, but also acts directly against helping those in fuel poverty. The new target of insulating 25,000 solid-wall homes per year compares unfavourably with the 80,000 delivered in 2012 alone. The cuts have also further undermined confidence in green investment and damaged the insulation supply industry.

At the same time, the government has turned to ‘fracking’ of natural gas, tax breaks for North Sea oil wells and subsidising nuclear power, while reducing its support for onshore wind energy. The government argues that fracked gas is a green fuel, despite the fact that it emits almost ten times the amount of CO₂ than is allowed by the government’s own 2030 targets. It also believes that it will transform our energy supplies, when the evidence for that is disputed. While experts say we have to leave up to 80% of known fossil fuel reserves in the ground if we are going to keep temperatures from rising more than 2°C, governments and the big oil companies are busy trying to extract them as fast as possible (Shell have just spent $5 billion fruitlessly exploring the Arctic for oil). In response to the changed priorities, energy companies such as RWE have cut back their investment in wind power, and in Scotland investment in offshore wind is reported to have halved.

Worryingly, there appears to be no plan to ensure the security of energy supplies despite severe risks of insufficient capacity, dependency on imported fossil fuels and vulnerability to price shocks or international incidents such as what is happening in Ukraine. According to DECC, household gas and electricity prices are likely to rise by 12 per cent and 30 per cent respectively up to 2020, even without any new price shocks. Yet we are currently backing future fuel sources that have uncertain prospects or (in the case of nuclear) won’t deliver for another decade, while at the same time suppliers close ‘unprofitable’ power plants and National Grid warns of potential blackouts.

Looking at an even bigger picture, the recession has pushed into the background calls for our whole approach to economic growth to be recalibrated. It seems that not only do politicians and perhaps the electorate want to put climate change on the back burner, but we also now want to return to growth based on more and more consumption of material goods. Yet even if we could do that without irreparably damaging the climate, we know it’s unsustainable in lots of other ways. We already use the resources provided by 1½ Planet Earths each year and, of course, if everyone lived like we in Britain do, the planet would need to be more than three times its present size.

**How do we shift the argument?**

Nicholas Stern’s main case was that investing in measures that help to fend off climate change is good economics, not a waste of money. Practically all the steps we need to take make sense anyway, regardless of whether they help in the wider task of reducing our damage to the climate. We are living in a time of
rapidly growing fuel demand, so switching to renewable alternatives and investing in energy-savings measures are both in Britain’s economic interest.

The effects of climate change on the economy are much wider too. At first, warmer temperatures were beneficial to farming, but we’ve now reached and passed the tipping point where the effects have become negative and will get steadily worse. For example, the global struggle over water supplies, threatened both by higher temperatures and by population growth, has already begun. Migration has already increased as people move to escape the effects of drought and other consequences of a changed climate. As if by a quirk of fate, it turns out that the poorest countries, least responsible for carbon emissions, are the ones most vulnerable to the effects of climate change.

It should therefore be obvious that taking a narrow view of how much we can save if we ‘get rid of the green crap’ is not only short-sighted but dangerous. While most people agree that we have to put some limit on levels of national debt because we are simply passing the cost on to future generations, a very similar argument applies to irresponsible use of fossil fuels and dumping massive amounts of carbon dioxide into the atmosphere. By neglecting the consequences, we simply load real and much bigger costs onto future generations, as Stern showed. Unlike an increase in the national debt, however, which might be used to create assets (such as homes) that will benefit the future generations who will be involved in paying back the cost, greenhouse gas emissions exclusively benefit today’s population leaving future generations with nothing but the climate chaos that results.

In the wake of recent flooding, government has been criticised for neglecting flood defences. The analogy with defence is a powerful one that could be used to make a wider argument. Isn’t it just as important to defend vulnerable coastlines and floodplains from climate change as it is to defend them against any other form of attack? Shouldn’t we take a long-term view of the risks, as we should in judging how to deploy other defence resources? Given that fuel supplies are vital to life, shouldn’t we make sure they are resilient and sustainable, and less dependent on overseas suppliers over whom we have little control?

We also have to face the argument that anything Britain does is insignificant in the global context. But this ignores two important points. One is a moral obligation: we are one of only seven countries responsible for nearly two-thirds of the 0.74°C rise in global temperature that took place in the past century. The other is pragmatic: we know that if one or two leading countries make a stand, it will be far harder for the big polluters like the US and China to ignore the need for action.

How do we need to change the policy framework and how would that affect the housing sector?

As a start, we need to wind the clock back at least to restore the investment levels being made before the Chancellor’s 2010 Spending Review. They reflected the goals that were set out (and still apply) in the Climate Change Act 2008. Recent debate over the ‘green taxes’ on energy companies was a distraction: the measures needed to achieve the act’s targets have got to be paid for, and we have to find the most effective way of doing so.
We then need to make realistic commitments to face what is a very long-term challenge. The chops and changes we have seen in green subsidies have done enormous damage, throttling the growth of the renewable energy industry and of insulation suppliers. So as well as the resources, we need a long-term programme. The government says it’s serious about meeting its Carbon Budgets; if so it should produce a costed plan of how it is going to achieve them. We need this to be sustained over a period of years so that industry and housing providers have confidence in it.

Insulating the housing stock to a high standard has to be a key part of this, because housing contributes more than a quarter of Britain’s total emissions, and more than half the heat losses from homes are from space heating. It’s been said often enough that to meet our long-term targets, every minute we have to insulate one more house to very high standards, across the UK. That’s a staggering 625,000 per year, as the graph shows (it’s from Andrew Eagles of Sustainable Homes). Needless to say, at the present time we aren’t achieving anything like the right pace or the right standards. This is a double failure: we’re both wasting energy and using more of the sources that are most damaging to the climate (like coal-powered electricity generation).

Here’s an example of the gap between goals and reality: the Committee on Climate Change trajectory for solid wall insulation was to complete 130,000 houses in 2013; in fact less than 25,000 were actually done, of which only 260 were via the Green Deal. So much reliance has been placed on the Green Deal as the centrepiece of government environmental policy that the extremely low take-up now presents a major obstacle. But could this be turned into an opportunity? The Green Building Council has called for a revived and revamped Green Deal, that could be much more attractive to householders if it offered lower-cost finance. The essence of any change must be to create a Green Deal Mark II that’s ‘too good to miss’, just as the feed-in tariff for solar PV was when it first began.

While the Green Deal is relaunched, we also need to revamp the Energy Company Obligation (ECO) so that it reaches many more homes and concentrates both on the fuel-poor and on hard-to-treat properties. This was what happened under the ECO’s predecessors such as CESP. Leicester used CESP to comprehensively insulate a low-income estate of over 1,000 houses, including right to buy properties. Such schemes make a huge difference to residents because they deliver high standards and hence real savings in fuel bills, not
the marginal effects that often come from (say) only doing roof insulation, which is where ECO now focuses. We badly need to tackle hard-to-treat homes such as those with solid walls. Over seven million households live in such homes, and this includes half of those affected by fuel poverty. The much-reduced ECO creates a huge gap in the programme needed to meet government targets: it urgently needs to be refunded and replaced.

Also, as Affinity Sutton’s Jeremy Kape has argued, the valuable role that social landlords can play in improving the take-up and technical standards achieved by both ECO and Green Deal needs to be recognised by putting them at the forefront of schemes (as they were with the previous Warm Front programme). It goes without saying that most landlords are keen to work across sectors, especially in neighbourhoods with concentrations of fuel-poor households and energy-inefficient homes. Many now have both the technical skill and the customer-facing experience to deliver programmes that work and are cost-effective. They should be seen as a frontline resource.

Social landlords have also shown how they can contribute towards the shift to renewable power sources, particularly through investments in solar PV (such as the 3,000 units installed by Wrexham Council). The irony of the recent failure to set renewable-energy targets for each EU country is that it has just been shown how crucial renewables are to the European economy, helping to reduce fuel imports and save money.

While new build is less important environmentally than dealing with the existing stock, it’s vital that we stop building homes and other structures that aren’t fit for purpose because they burn too much energy. We should move to zero carbon new homes across the industry as soon as possible, especially as the typical extra cost of building a semi-detached house to the zero carbon standard is now down to less than £5,000.

The government must accept that it can’t make progress in achieving greener construction without regulations. As an example, in 2008 the previous government said that by 2019 all non-domestic new build should be zero carbon. But there are no regulations to set out how to achieve this, so nothing is happening. The coalition has carried out a Housing Standards Review, and while we still await the outcome the prime minister has started to make worrying promises about cutting red tape. Yet many submissions to the review made it clear that while there is a case for simplifying standards, there is no case for watering them down if we want future housing to be sustainable. Indeed, one important gap in the proposals is about tackling the supply chain, so that we develop more sustainable sources of building materials (notably cement, which has an enormous carbon impact).

We also need to get serious about adaptation to climate change. We need a national plan to tackle flooding, which will depend partly on building standards (minimising run off, conserving rainwater) and partly on land-use changes such as re-establishing woodland. Houses need to be built or retrofitted to withstand heavier weather and hotter summers. At the same time we need to avoid ‘solutions’ that make the problem worse: for example, air conditioning in the USA now consumes as much electricity as the
entire economy used in the 1950s. Our retrofitting practices also have to take account of flooding and overheating risks, as highlighted by the London Climate Change Partnership.

We have to link our green agenda with our agenda to help those on the lowest incomes, as fuel poverty gets even worse. Government was supposed to eliminate fuel poverty in ‘vulnerable’ households by 2010 and ‘as far as reasonably practicable’ for all households by 2016. The 2010 target was missed and the same will almost certainly happen to the 2016 target, even though some progress is being made. The Energy and Climate Change Committee in a report last year said there is far too much emphasis on short-term help in paying bills, and not enough on proven insulation measures which bring long-term benefits to consumers. It criticises government for replacing the efficient, taxpayer-funded incentive schemes with ones dependent on levies on bills, which can undermine the help given to fuel-poor households.

Finally, as Greening your housing organisation argued, housing providers have a big role in making the case for change. This extends from the most basic level of their day-to-day interactions with tenants about the fuel bills and how they heat their homes, to the installation of new kit like SMART meters that help people understand their energy use, to broader work with residents’ groups and acting as a powerful lobby for action.

Above all, we need a plan

None of these measures are enough in themselves: they have to be combined with others across every sector, and of course they have to be promulgated internationally. The Climate Change Act calls for the UK’s contribution to be an 80 per cent reduction in carbon emissions by 2050. The European Union has just set a target to reduce emissions by 40 per cent by 2030. Next year (2015), world leaders will aim to put together an international agreement that combines these regional targets.

The coalition’s latest (2011) Carbon Plan, aimed at showing how we reach the 2050 target, says this:

‘...if we are to cut emissions by 80% by 2050, there will have to be major changes in how we use and generate energy. Energy efficiency will have to increase dramatically across all sectors. The oil and gas used to drive cars, heat buildings and power industry will, in large part, need to be replaced by electricity, sustainable bioenergy, or hydrogen. Electricity will need to be decarbonised through renewable and nuclear power, and the use of carbon capture and storage (CCS). The electricity grid will be larger and smarter at balancing demand and supply.’

The challenge is mind blowing. It means retrofitting 12,000 homes every week. Starting now. The government’s Committee on Climate Change has already warned that progress is too slow. Rates of home insulation and of investment in renewables are heading downwards instead of accelerating as they need to. We can get back on track, but we don’t have any time to lose. And as we make efforts to do so, the housing industry has a huge role to play.