Building New Homes in B&NES: What do residents think about energy conservation and cost?

1. Summary

12,000 homes are scheduled to be built in and around Bath over the next 15 years. The Transition Bath Energy Group carried out a survey with the aim of finding out what the people of Bath wanted to see in relation to the energy efficiency of these new homes, and to assess opinion on some wider questions relating to energy. This report presents the results from this consultation. It is hoped that the results may be used by the unitary authority council, and other interested parties, in taking decisions regarding planning for the building of these homes.

The survey was carried out using *SurveyMonkey* software, to which links were publicised through the Transition Bath mailing list e-mail newsletter, and through both hard copy and online articles in the Bath Chronicle. A total of 167 people competed the survey. between 23rd March and 14th April 2014.

The survey shows that new homes in Bath should be affordable, close to good transport links and have low energy requirements.

People are very much in favour of building new homes in Bath; they expect energy prices to rise and feel that homes should be built to the highest standards of energy efficiency. They feel strongly that B&NES council should require builders to design to the highest environmental standards and 98% feel that government should not remove this right. They also believe that landlords should be required to upgrade the energy efficiency of their least efficient homes, before renting them out.

Survey respondents say they are prepared to pay an additional £6,200 extra on average for a more sustainable property, delivering 75% lower energy bills - equivalent to eight years of savings. Respondents from within the rental sector are prepared to pay an average extra £57 per month in rent for a home that cuts £75 a month off their energy bill.

Although comments revealed a number of concerns with the limitations and bureaucracy of the ECO scheme, by which energy companies have been required to support retrofitting of energy-saving measures to existing homes, there was strong opposition expressed to the government's recent decision to reduce the scope of this scheme in order to reduce fuel bills across the board by £3 a month.

Given a choice of nine energy sources from renewables, through coal to nuclear – there is a strong preference for renewables, with a significant dislike of coal and gas sourced



from fracking. There was also an overwhelming interest (99%) in energy supplied by a community owned enterprise.

Concern over space standards in the home is a frequently mentioned. Fearing that Bath will end up with the smallest homes in Europe, the community needs developers to build homes with sensible and sustainable floor areas.

90% of the sample surveyed had heard of Transition Bath. 60% had heard of Bath Green Homes, 48% of Bath & West Community Energy, whilst only 29% said they were aware of B&NES council's commitments and policy in the area of climate change. 71% were aware of the Green Deal, but only 6% had definite plans to make us of it.

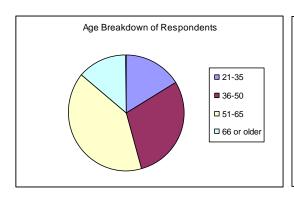
In free-text comments, respondents expressed a view that energy sustainability should primarily be tackled through a reduction in demand, and were looking for increased leadership from both national and local government to do this. Many were attempting to retrofit their own homes, and felt unsupported in this, either though difficulties in complying with planning requirements, or through lack of information or capital.

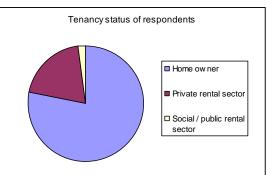


2. The Survey

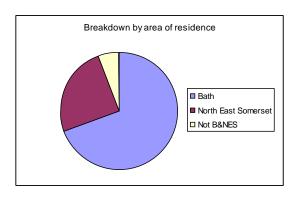
The survey was carried out using *SurveyMonkey* software, to which links were publicised through the Transition Bath mailing list e-mail newsletter, and through both hard copy and online articles in the Bath Chronicle. A total of 167 people compketed the survey.

The breakdown and tenancy status of respondents are illustrated by the figures:





The breakdown according to area of residence was:



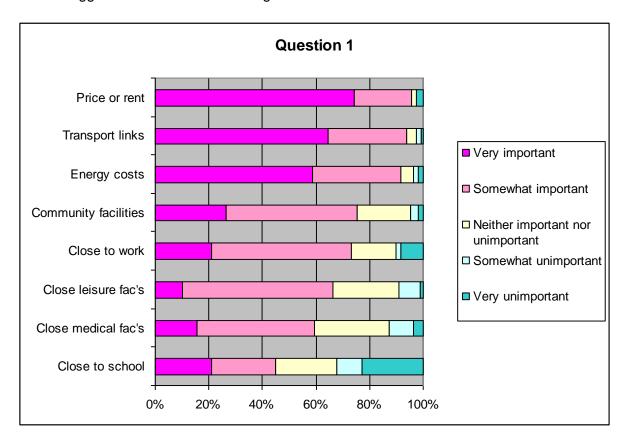
The survey was tested on around 10 volunteers (without any special interest in energy or climate change) before going live, and the questions refined in response to their feedback.

3. The Results

4.1 Question 1: If you were choosing a new home, what would be your priorities?

A number of possible points for consideration when buying a new home were listed, and respondents were asked to rank each of these from "Very important" to "Very

unimportant". All 167 respondents answered this question. The responses for each suggestion were as shown in figure:



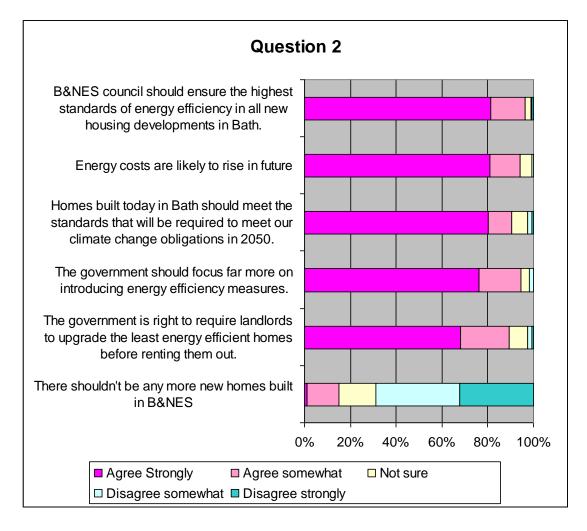
As expected, the price of the property was the most important consideration. Local transport connections was the second most important of the suggested responses, with energy costs in third place.

Respondents were also given the opportunity to add other suggestions of their own. 61 respondents did so, and their suggestions are listed in the following table:

Suggestion	Number of mentions
Access to green space	25
Garden or allotment	10
Local shop	10
Nice / safe neighbourhood	9
Eco-friendliness of house eg options to add	7
renewables, insulation	
Aesthetics of house: light	5
Aesthetics of house: space	4
Quiet road	4
Aesthetics of house: general look	3
No flooding	3
Cycle-friendliness of area	3

Parking	3
Easy access – disabled / not too steep	2
Brown field construction	1
Swimming facilities nearby	1

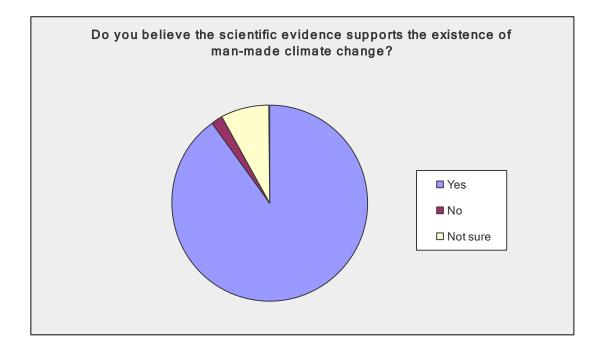
1.2 Question 2: Respondents were presented with a series of statements about energy costs and housing standards, and asked to mark the extent of their agreement or disagreement with each, on a scale from "Agree strongly" to "Disagree strongly". The question was answered by all 167 respondents. The responses are illustrated in the figure:



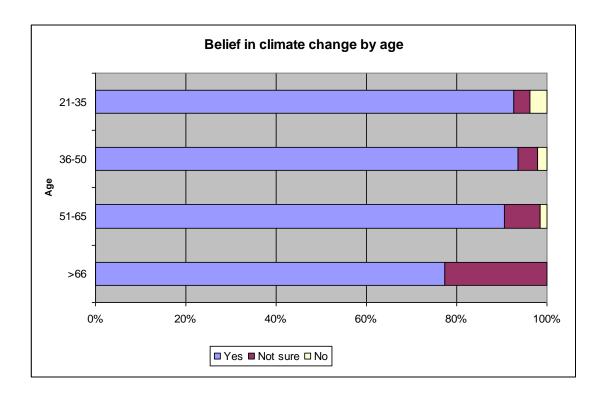
The strongest agreement of all was given to the statement "B&NES council should ensure the highest standards of energy efficiency in all new housing developments in Bath", which provides strong support for the council in its efforts to require builders to build to extremely high standards of energy efficiency.

4.3 Question 3: Do you believe the scientific evidence support the existence of manmade climate change?

The question was answered by 162 respondents. 90% answered "Yes". Responses are illustrated in the figure:



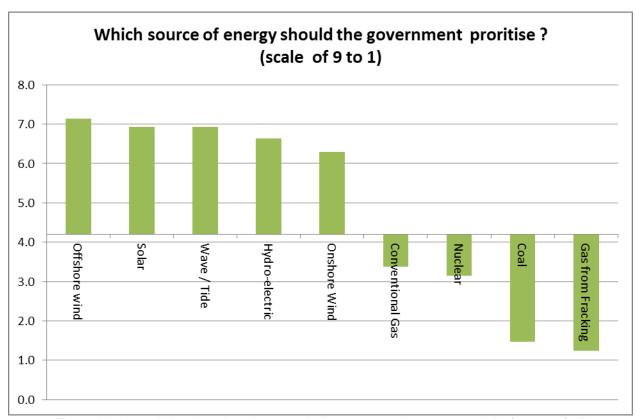
The answers to this question break down further by age as follows:



This suggests that there is a strong belief in the scientific evidence supporting climate change amongst the population surveyed, with perhaps a lower degree of certainty amongst those aged 66 and over.

4.4 Question 4: Electricity generation

Respondents were asked which power sources the government should focus on developing. They were asked to give each of 9 methods of generating power a score from 1 (highest priority) to 9 (lowest priority). The results are illustrated in the figure.



From this data, it is clear that the population surveyed was strongly in favour of all renewable sources over fossil fuels or nuclear, and that fracking was the least popular option for development. The opinions expressed with regard to wind farms, as opposed to fracking, are broadly in line with recent national poll findings (see links in section 6).

The report should be read in the context of recent national polls (links at section 6 below):

- a YouGov poll carried out on behalf of Ecotricity, published on 14th April 2014, found 62%, when asked to choose, would rather have a wind farm in their local council area than a fracking site, with just 19% preferring to have fracking nearby.
- an IPSOS-MORI poll on Public Attitudes to Science, commissioned by the Department for Business, Innovation and Skills, published on 14th March 2014, found stronger support for the development of offshore wind farms (77%) versus carbon capture and storage (51%) or fracking (36%);
- a Survation Energy Poll on behalf of the Mail on Sunday, published on 27th
 October 2013, found 68%, when asked to choose, would rather have a wind farm
 built in their local area than a fracking site, with just 32% preferring to have
 fracking nearby; and 70% stating they would be happy to have a wind farm built
 in their local area, as opposed to 30% disagreeing with this sentiment;



4.5 Question 5: Would you consider buying your energy from a local, community-owned energy company, assuming prices were comparable to those offered by conventional suppliers?

This question was answered by 162 respondents. 98.8% of respondents said they would.

4.6 Question 6: The government has reduced requirements on energy companies to fund home insulation (targeted primarily at occupants on low incomes), in order to reduce household energy bills for all households by around £3 per month. Do you support this approach?

The question was answered by 161 respondents. 19.3% said, "Yes", whilst 80.7% said, "No". However, from the comments the wording of this question caused some confusion.

55 people chose to make free-text comments on the question. Comments are included at Appendix A. Some comments were critical of aspects of the operation of ECO scheme previously in place, and various suggestions were made about different methods of funding insulation of the existing housing stock that might work better. However, there was not one comment made that was supportive of the government's reduction in support for insulation, with the aim of reducing fuel bills in the short term.

4.7 Question 7: Bath and North East Somerset Council currently asks new-build housing developers to build homes with a higher level of energy efficiency than the minimum required by government. Energy bills for occupants of homes built to these higher standards are around 40 to 80% lower than for homes built to the minimum standard. The additional cost of building these homes, around £6k to £10k per home, does not affect the purchase price of the house (as it is borne by the land owner on selling to the developer). The government would like to remove the council's discretion to set the higher standard, allowing developers the choice to build to the minimum standard. Do you support B&NES council's requirement for the higher standard, lower energy homes?

The question was answered by 161 respondents, of whom, 98.1% supported the right of councils to set higher standards of energy efficiency than the minimum. However, it was clear from the comments that at least two respondents found the question too technical, and would have preferred to have a "Don't know" option.

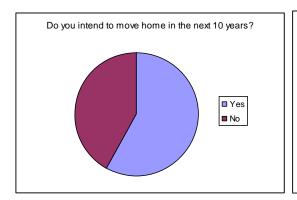
Respondents were also offered a free-text box to make whatever comments they wished. 48 respondents chose to do so, and these are included at Appendix B. More than half of these comments were in support of the council's stance in relation to new developments. Other comments ranged across a number of areas, including views on recent large-scale developments in B&NES, and views on the government's position in this area.

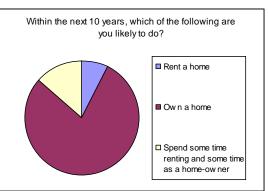
4.8 Question 8: Do you intend to move house in the next 10 years?

The question was answered by 161 respondents. 57.8% expected to move within the next 10 years, whilst 42.2% did not.

4.9 Question 9: Within the next 10 years, which of the following are you likely to do? Rent a home, own a home, or spend some time renting and some time owning a home?

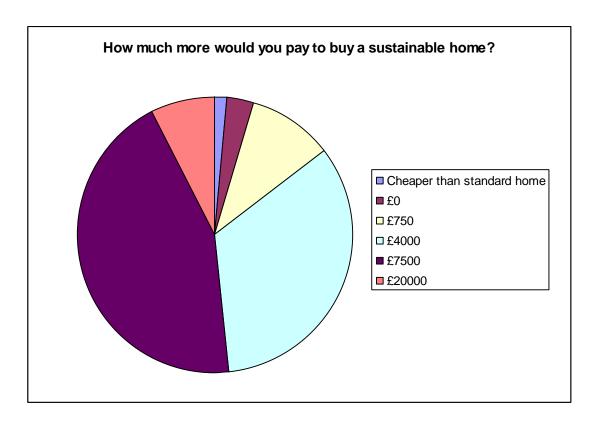
The question was answered by 161 respondents, of whom 7.5% expected solely to rent, 78.9% expected solely to own their home, and 13.7% expected to do both.





4.10 Questions 10 & 12 (asked only to prospective home-owners): If, in the same area, you were given the choice between two homes, a standard home with an annual energy bill of £1000 per year, and a more sustainable home with lower annual energy bills of £250 per year, how much more would you be prepared to pay for the more sustainable home?

This question was answered by 149 respondents. Their responses are summarised in the figure:



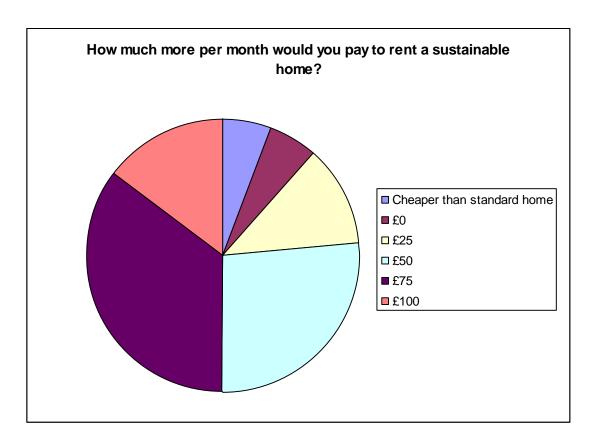
The majority of respondents (78%) said they would be willing to pay £4000 or £7500 extra for the sustainable home, equating to around 5-10 years' worth of financial savings on energy bills. The average was £6,200 or about 8 years worth of energy bill savings. An economist might argue that in a rational market the 25 year monitised value of the energy bill savings, discounted at 3.5% assuming 2.5% fuel price inflation over a 25 year period would be about £16,500 i.e. the more sustainable home should be worth £16,500 more.

Respondents were also given space to make some comments, and these are shown at Appendix C. Several discussed their desire to pay more for increased energy efficiency versus affordability. Others pointed out that a more energy efficient home was likely to be more comfortable, as well as cheaper to heat, than a less sustainable one. Two noted that as fuel costs are likely to increase, it would probably prove a good investment to pay more for increased energy efficiency. Several expressed a view that it should not be up to home-owners to pay for the increased energy efficiency, whilst one pointed out that as houses are produced in this way at scale, increased building costs should soon drop.

4.11 Questions 11 & 13 (asked only to prospective renters): If, in the same area, you were given the choice between two homes, one with a monthly energy bill of £100 and another with monthly energy bills of £25, how much more in rent would you be prepared to pay for the more sustainable home with lower energy bills?

The question was answered by 34 respondents. Their responses are summarised in the figure:





A majority (61.8%) were willing to pay either £50 or £75 extra on rent for the more sustainable home, an average of £57, reflecting 67-100% of the financial savings made through reduced energy consumption. Some 14.7% were willing to pay more than their monthly energy savings in additional rent, perhaps reflecting the fact that they expected the more sustainable home to be more comfortable to live in. Respondents were also given space to make some comments, and these are shown at Appendix C.

4.12 Question 14: Have you heard of Transition Bath before?

The question was answered by 160 respondents, of whom 90% had heard of Transition Bath. 5 people requested further information.

4.13 Question 15: Have you heard of Bath Green Homes?

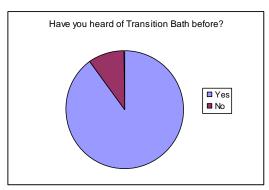
The question was answered by 160 respondents, of whom 59.4% responded, "Yes", and 40.6%, "No". 17 requested further information.

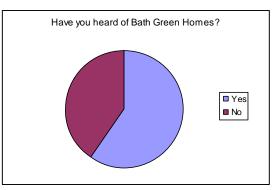
4.14 Question 16: Have you heard of Bath & West Community Energy?

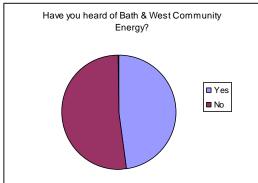
The question was answered by 160 respondents, of whom 47.5% responded, "Yes", and 51.9%, "No". 35 requested further information.

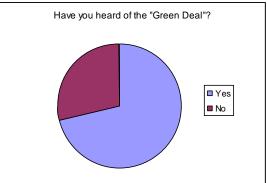
4.15 Question 17: Have you heard of the Green Deal?

The question was answered by 160 respondents, of whom 71.2% replied, "Yes", and 28.8%, "No". 17 requested further information.







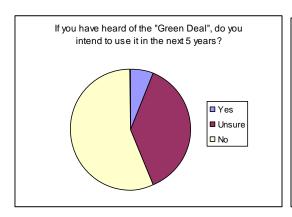


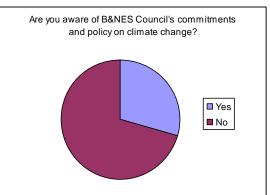
4.16 Question 18: If you have heard of the "Green Deal", do you intend to use it in the next 5 years?

The question was answered by 115 respondents, of whom 6.1% planned to use the "Green Deal", 37.4% were unsure, and 56.5% had no plans to use it.

4.17 Question 19: Are you aware of B&NES Council's commitments and policy on climate change?

The question was answered by 160 people, of whom 28.8% answered, "Yes", and 69.4%, "No". 20% requested further information.





4.18 Question 20: Would you like to make any general comments about energy conservation or cost?

This question provided a free-text box into which respondents could type whatever they liked. There were 49 respondents. The comments are listed at Appendix D. Comments covered the following broad themes:

- Many people emphasised the importance of reducing carbon emissions and conserving energy, although a small number added the caveat that the costs of this should not be too high.
- Several people spoke of the importance of energy conservation, rather than increased generation as a means to do this.
- Many were looking for increased leadership, with a longer term outlook, from national government, and expressed support for B&NES (and encouragement to increase its efforts) in its attempts to do this at a local level.
- Several mentioned specific planning issues in B&NES, some relating to a
 perceived lack of support for retrofitting of older and listed properties, others
 encouraging the imposition of high standards of energy efficiency on the new
 developments.
- The final category of comments related to difficulties people had experienced in retrofitting their own homes – many relating to a lack of information, or of capital.

4. Conclusions

Of the sample surveyed, energy costs came out as a consideration of relatively high importance when choosing a home, behind cost and transport links.

There was a clear view amongst the population surveyed that energy costs are likely to rise in future. There was also an understanding that there is a need to build new homes in B&NES. There was a clear opinion expressed that the council should take a long term view in planning decisions in relation to new developments, insisting upon the highest standards from developers, with a view to meeting long term



commitments to carbon reduction, and to protecting residents from fluctuations in the price of energy.

Amongst the survey sample, there was a very strong belief in the existence of manmade climate change, although certainty on the subject was slightly less amongst the oldest demographic. There was a desire on the part of respondents for the government to target renewable energy sources for future development over conventional fossil fuels, nuclear, or fracked gas (the lowest prioritised option) This finding was in line with recent national polls on priorities for development of future energy sources. Nearly all respondents expressed a willingness to buy energy from a local, community-owned energy company, assuming prices were comparable to conventional suppliers.

Although comments revealed a number of concerns with the limitations and bureaucracy of the ECO scheme, by which energy companies have been required to support retrofitting of energy-saving measures to existing homes, there was strong opposition expressed to the government's recent decision to reduce the scope of this scheme in order to reduce fuel bills across the board by £3 a month.

There was near-unanimous support by respondents for attempts made by B&NES council to insist through planning that large-scale developers build the houses currently planned in the new large-scale developments to the highest possible standards of sustainability, and condemnation of the government's wish to rescind local government's right to do this.

A majority of respondents demonstrated a willingness to consider paying higher purchase prices or rent for properties with higher energy efficiency. Many demonstrated through their comments that they felt that such properties would be more comfortable to live in, as well as cheaper to run. This was reflected in the fact that several respondents were willing to pay more in additional monthly rent than the projected monthly savings, or a purchase price increased by more than 10 years' worth of fuel savings.

90% of the sample surveyed had heard of Transition Bath. 60% had heard of Bath Green Homes, 48% of Bath & West Community Energy, whilst only 29% said they were aware of B&NES council's commitments and policy in the area of climate change. 71% were aware of the Green Deal, but only 6% had definite plans to make us of it.

In free-text comments, respondents expressed a view that energy sustainability should primarily be tackled through a reduction in demand, and were looking for increased leadership from both national and local government to do this. Many were attempting to retrofit their own homes, and felt unsupported in this, either though difficulties in complying with planning requirements, or through lack of information or capital.

The Transition Bath Energy Group has found the survey results enlightening and hopes that they may be used by the local authority and others involved in taking decisions in relation to future large (and smaller) scale housing developments in



B&NES. It is hoped that this poll will be the beginning of a programme of work in this area by the group, with learning points from the current survey being incorporated into future polls.



6 References

https://www.ecotricity.co.uk/news/news-archive/2014/britons-favour-onshore-wind-over-fracking-by-three-to-one, 14th April 2014

http://www.ipsos-mori.com/Assets/Docs/Polls/pas-2014-main-report.pdf , 14th March 2014

 $\underline{\text{http://survation.com/wp-content/uploads/2014/04/MailEnergyFinal.pdf}}\ ,\ 27 th\ October\ 2013$

Sarah Warren May 2014

Appendix A

Analysis of free-text responses to Question 6:

The government has reduced requirements on energy companies to fund home insulation (targeted primarily at occupants on low incomes), in order to reduce household energy bills for all households by around £3 per month. Do you support this approach?

Insulation was the right approach:

- I do not support the reduction of requirements
- The principle of insulating homes is right.
- All should be encouraged to save / reduce household energy requirements
- If homes were insulated costs would go down as a result.
- Reduction in energy use leading to lower bill should by a very high priority, since in the medium to long term it will be both more economic and effective.
- Helping families on low incomes and helping the environment surely is a Win Win and in the long term is more economic.
- Insulating existing housing stock particularly in "Fuel Poor" areas, is extremely
 important. People needed educating that the grants were available otherwise the big
 six energy companies would line their pockets!
- Not sure I understand the implications properly does this mean there are less companies funding home insulation? If so that's not a good thing and not sure how it will help to reduce bills
- Energy prices are rising for a reason resource pressures. So reducing energy saving measures for a temporary respite in ongoing cost increase makes no logical sense!
- Energy conservation is more important than reducing energy bills
- I think the government is wrong to reduce requirements on energy companies to fund home insulation. A better way to reduce household energy bills would be to help households improve their energy efficiency.
- Insulation of the existing housing stock is absolutely essential, both for the health and financial well-being of residents and also as a key strand (maybe the biggest single contributor) to reducing green house gas emissions from residential (and other) property.
- We have to take along term view re climate change

Thoughts on government policy and politicians' approach:

- All the so called main parties belong to the forty percent party. ie they don't know
 what they stand for but will say anything to get 40% of the vote. I don't respect them
 and vote for other party
- Vote winning is something that will always be with us!
- Government seems more concerned to safeguard business profits than do what is good for people and the community
- This is a gift to energy company profits.
- Buying votes. Typifies the problem of short term political necessity to stay in power versus what is right for the country in the long term. Long live democracy and turkeys don't vote for Xmas.



- Short-sighted
- Bastards
- This is a false economy driven by short-term political concerns rather than solving the underlying energy efficiency root causes.
- This reflects the corporate grip on government, undermining democracy and the common good.
- A very short-sighted policy, the government should invest more in demand reduction

The limitations of the previous programme:

- Even the programmes they had were very basic and limited.
- If conservation of energy means any thing in this country, then all insulation products whether sold to the public or to the building trade should be VAT free!
- It was money ineffectively used to achieve nothing but political goals.
- Insulation is only part of the problem. We need to be looking more widely some of the least efficient houses are insulated how well this is done, how appropriate to the building insulation is, and how householders are educated to work with their home to reduce energy bills and avoid damp/condensation are also important but undermined by the one-size-fits-all insulation approach.
- Yes, but the peculiar way that it is promoted doesn't help people to act. An
 answerphone message is not good. The push-button system of options is annoying.
 The people who answer are uninformed. Face to face advice is best, after a postal
 and on-street campaign. TV and social media will attract certain sections of society.
- Because it seems to me not much effort has been put into companies actually implementing the scheme
- Because many older properties like mine don't benefit much from this approach.
- However this should not be the only way to improve the national average for insulation.
- Home insulation should be funded for all households with an annual income of under £60,000.
- However, I don't believe that the money that was supposed to come from the levy on household bills was used very effectively.

People need protection from fuel poverty:

- This is not right as the people who can least afford it suffer
- I believe those who are less able to afford energy efficient changes, but yet suffer from increasing energy costs, should be financially supported in making energy saving measures. It is a matter of social and environmental justice to overcome fuel poverty.
- I would rather be paying slightly more, knowing that those who cannot properly afford to heat their homes are receiving some support.
- People on low incomes on benefits, with children, retired or part-time workers will spend proportionately more time in the home than those on higher incomes. Many of these people are having to decide between keeping warm and eating. Investing in good insulation is a long term solution to not only reducing energy consumption, but also providing those on low incomes with a more comfortable home environment.
- Those with low incomes will not attempt to insulate homes. They need all the help they can get.



- Poor people are already being squeezed on all fronts, how can richer people want to take another 3 pounds from people who have to live from almost nothing? At least let them live in (somewhat) comfortable houses which do not pollute the environment (i.e., and both rich and poor live in the same environment, so the 3 pounds would be well spend for everybody)
- We need to act on fuel poverty, otherwise society pays in other ways.
- I think they usually try to save on heating anyway (by not using heating during cold months) so if they had better insulation, their homes would be warmer.

Energy companies were the wrong group to be tasked with insulation:

- Without a requirement the companies will not do it as it is not in their interest.
- Housing Trusts should be required to do more on their properties and this would reach many more low-income households
- The ECO has been bureaucratic. We should just tax the energy companies properly and give away insulation free.
- Not sure energy companies are the best people to fund home insulation, might be better coming out of general taxation or carbon taxes, just so long as someone does it
- Improving the energy efficiency of the existing stock should be achieved through taxation measures.

Energy companies could fund from their profits:

- The profits energy companies make could fund this anyway.
- Energy Companies should accept responsibility for efficient use of energy and have ample funds to make it happen.
- Energy companies should fund home insulation
- The govt needs to support all energy efficiency measures and given high levels of profit in the energy industry some of this should go back into supporting those on low income for whom fuel is - as for everyone - a necessity

Savings on bills are too small to make a difference:

- The cost savings are a waste of time.
- £3 per month only makes £36 per Year and doesn't seem like a big enough difference to compromise on home insulation.

Costs of insulation are dwarfed by subsidy to nuclear power:

 Considering how much the government is prepared to spend on subsidising nuclear power; failing to fund lower energy costs for low incomes is disgusting

Appendix B

Analysis of free-text comments in response to Question 7

Bath and North East Somerset Council currently asks new-build housing developers to build homes with a higher level of energy efficiency than the minimum required by government. Energy bills for occupants of homes built to these higher standards are around 40 to 80% lower than for homes built to the minimum standard. The additional cost of building these homes, around £6k to £10k per home, does not affect the purchase price of the house (as it is borne by the land owner on selling to the developer). The government would like to remove the council's discretion to set the higher standard, allowing developers the choice to build to the minimum standard. Do you support B&NES council's requirement for the higher standard, lower energy homes?

Comments in support of council's stance

- All new homes should include energy efficient measures, ensure they do not add to flood problems and, where possible, include other environment benefits - water collection and recycling for example.
- Energy efficiency is important
- Absolutely
- Going forward I think this is the answer.
- I didn't realise the government wanted this. I totally support the council's stance on this, one for the energy aspects that will continue to impact decades into the future and two because it evens out the burden of energy cost across society (energy efficiency costs are met by shareholders / landowners rather than borne by householders in higher energy bills)
- Climate change is the biggest problem facing humanity. We should not take any short cuts to the actions we need to take to make the future liveable.
- New build homes should be insulated to standards which are comparable to Holland, Denmark and Germany - the current UK building standards are inadequate.
- It is important that local people decide what is to be built in their area
- They should not just ask but enforce it.
- If a building company wants to build in B&NES then it must abide by B&NES rules and NOT governed by outside interests.
- Absolutely! Every house should be built to the highest energy efficient standard possible. Developers will always make a profit that is the nature of their business. The question here is how much profit. If every house is built to the highest energy efficient standards, every new householder will benefit from reduced outgoings on a permanent basis. For those on low incomes, this can make a significant difference to their budgets and health and welfare, and for those on higher income streams, a reduction in spending on energy will reflect in increased spending elsewhere. Locally, this might mean more spent in local shops or on entertainment, keeping money within the local economy and supporting local businesses.
- All new homes should be built to the highest efficiency. Minimum standards are a cop out to profit.
- This is what councils are made for, stand up for the most vulnerable people when making transactions with big companies.



- Well done B&NES.
- Absolutely. The short-termism of accepting lowest standards for the sake of hitting targets is ridiculous
- Strongly
- B&NES needs to be a trailblazer amongst local authorities for the introduction and support of policies to promote environmental sustainability. We should be leading the way on this and setting an example to other councils.
- The time to ensure decent energy efficiency standards is during the build when there are no occupants, not via retrofitting.
- Quite surprised they currently make those requirements but should definitely be maintained.
- Without a local plan in place BANES are currently powerless to implements such policies.
- But it does need to be robustly backed up by the council or it is open to challenge.
- So once again the council should set challenging targets, but these must be robustly defended else developers will simply challenge them
- Council should absolutely insist on this and ban developers from building to a minimum standard.
- The government has reduced the energy efficiency requirements for social housing but BaNES should keep to the highest standards.
- Council should inject long-term planning aspects into what would otherwise be short term cost & profit objectives for builders.
- Definitely.
- Very much so, could even be higher!!
- The policy is attempting to force longer-term investment in the future. This is purely a good thing. The fact that this is a local legal requirement means that the added costs are factored into local house prices; the argument that it costs the house building companies (rather than the purchasers of the houses) is spurious.
- Very strongly.
- Absolutely, builders should not be given the opportunity to lower insulation/energy efficiency

Other comment on council's stance

 More work needs to be done to assess cost to value and extremes of too high standards against minimum standards are not helpful, sustainable or thought through properly.

Comments regarding recent new developments in B&NES

- Some of the energy efficiency measures included in new developments (e.g. Riverside) are very poor. In fact, some of the measures actually cost / waste more than traditional measures due to poor implementation by the developers.
- I didn't realise this but I don't like they style of buildings on western development and would like to have seen clearer cycle routes, more car free zones, river side walk and cycle path, purpose built independent properties for older people, student accommodation new youth hostel etc ie create a green traffic free space with forward looking pro european ideas and ethos
- Amazed that rain water harvesting isn't part of this higher standard.



- It should be the law for developers and anyone else to build houses as sustainably as possible. All new houses should have top quality insulation, solar panels and other measures to reduce the use of energy.
- The intention does not always translate into energy efficient homes once they are built my mother lives on the new Western Riverside development her energy bills are currently running at around 3.5 times the level predicted by the Energy Performance Certificate. Eon, who won the contract to provide the community heating scheme, are being very very slow to address the concerns of the residents and seem to be in complete denial that there is a problem. This is an absolute scandal. There are many people living there who don't know who to turn to next. Can you help us?

Comments on the government's stance

- The gov't supports wealthy land owners
- It's almost self evident! It is taking the strategic view that energy conservation is necessary and a responsibility of the State as much as that of corporations and individuals. There could be an argument for higher standards on that basis. Corporations appear to cherry-pick where and when they want the State to intervene to lower their costs and increase profits/
- What is the matter with the Govt?!
- Government seems more concerned to safeguard business profits than do what is good for people and the community. Local decisions should be respected above business profit
- There is no need for me to comment on this policy, words would be inadequate.
- The government should make all councils do the same as B&NES.
- If the Government is moving to remove councils' discretion to demand high standards of energy efficiency in new-build homes, this needs to be publicised widely.
- I am shocked that the government would do this but not surprised.
- This would be a seriously retrograde step by the government, and should be contested strongly.

Other comments

- I am not sure about the cost of upgrading all existing housing at once and perhaps there needs to be a stepped approach.
- At present am replicating a project first pioneered with Oldham BC last year zero, energy homes, for bottom of the ladder tenants, partnered with the NHS.
- I am a private tenant and my heating bills are astronomical, I live in a Georgian home with hardly any insulation. I would prefer to live somewhere more energy efficient.
- Not sure why the costs can't be borne by the house purchaser, nor why it would cost so much more if done at scale
- It is not as black and white as these approaches appear, there is so much work that needs to be done in education of occupiers of low energy buildings and the general public before even higher standards are introduced. There is no benefit to the additional cost of higher standards if buildings are not used correctly in the first place.
- Why should self builders be the only ones bearing the burden of adopting better standards for insulation and energy?
- Better build houses will be the one which people want to buy as energy prices will soar. Better to prepare now for the future and to renovate houses (which will be much



- more expensive). In you example I would also indicate when the ROI is achieved from the higher upfront costs (e.g., approx. 5 years? 10 years?)
- Developers are competing against each other and need to keep their shareholders happy. They will always build to a minimum standard.
- Unfortunately the idea that the cost comes off the land is a myth, as many land owners will simply wait for a more favourable period of legislation, which actually harms everyone as then not enough (suitable) land comes foward for the delivery that is needed.

Appendix C

Free-text comments in response to questions 10, 11, 12 & 13:

Affordability:

- From a selfish perspective, if there is no return on my investment it is not worth it. I can use that same money in better ways for the greater good.
- In the end it will be down to affordability for me. I would consider the energy saving desirable
- I would have ticked £20,000 if I had ready money and a good income...
- As a proportion of the house price this is little to pay for lower energy bills year on year.
- In reality I will have a maximum amount I can spend and will look for a sustainable home within that budget.
- Unlike many people, I am capable of seeing long-term value.
- It would really depend on the initial cost of the house, but I would certainly pay more for an energy efficient house if it was attractive and well proportioned ie energy efficiency is high on the list but there are other things to take into consideration
- At present I have little income so any increase would be difficult. If I could afford it I would pay more for energy efficiency.
- It's not what I'd be prepared to pay but what I could pay!

Comfort:

- It's not just about energy cost, the lower energy home will be more comfortable
- You are implying the decision will be financial based on return. I would decide on quality and comfort which would be effected by the sustainable measures in place
- Spending also depends on how it would improve the value of the house and its living comfort. Hence, I would spend more than 7,500, but difficult to say if it would go up to 20K
- I would expect the increase in rent to reflect a much higher standard of property.

The importance of energy efficiency:

- If I was to buy the standard home, I would pay less, but spend the difference on making it more energy efficient.
- I want to invest for the future and make the world a better place where possible
- There would also need to be opportunity to make further savings or investments in self generation for example.
- It is worth the investment of valuing energy efficient properties

Sustainable homes should not be more expensive:

- These costs should be borne by the developer, hence my answer.
- To encourage people to buy sustainable homes the prices need to be comparable.
- The more widely energy saving options are installed, the greater are the savings costs come down with volume. So there should not be a large premium to pay on an indefinite basis.
- Lower energy consumption needs to be a govt target for landlords and home builders
 all of whom make large profits. Reducing energy costs and improving energy



efficiency should be carried by the companies and landlords who have the profit and who should be leading climate change mitigation by example.

Fuel costs increasing:

- Fuel costs are going to skyrocket.
- Future proofing energy bills is very important as increased cost of environmentally damaging fuels is inevitable. The construction of nuclear power stations is too costly and time consuming. Paying for and developing sustainable energy sources now is the ONLY way forward.

Other issues are also important:

- Difficult to answer as I like where I live now and energy prices would not be a major factor in a new house really as other factors probably more important
- It would play a large part in my decision making, I would pay more for it, but there are many other issues in choosing a house too.

Appendix D

Comments in response to Question 20 (free text):

Would you like to make any general comments about energy conservation or cost?

Imperative:

- I believe we have to do far more than we are at present to address these issues.
- I feel that reducing co2 in the atmosphere is the biggest problem we face.
- Climate change is the number one problem facing human beings and threatens out survival as a species.
- You only have to look back in history to see most civilizations respecting the planet and earths resources. If we don't then we will see the consequences.
- This is hugely important to me. I will bear what cost I can.
- Could you also include consideration to water consumption & resiliency issues?
- As a society we do not have a choice. We have to find ways to encourage people and businesses to conserve energy.
- Energy conservation is critically important to us all
- I believe energy conservation is extremely important, not only on grounds of cost saving but in order to tackle climate change
- It's very important, but also important to keep costs as low as possible, without losing viability
- Its importance can't be emphasised enough

Sustainability of energy supply:

- Energy conservation is the obvious way to ensure sustainable supplies and in the long run is the cheapest.
- Energy conservation and cost are clearly important for the future.
- Insulation and renewables are key
- I think it is imperative to invest in energy saving now to stay afloat in the future
- Nuclear power is a very good option in Britain if we maintain our high standards and should be revisited
- Let the lights go out, shake the complacency out of Joe Public, 1974 again as a sample of where we are going.
- It's a lot cheaper and more effective than some current investment priorities (e.g. nuclear)
- Sometimes hear that 'alternative' energy sources couldn't meet all our demands wish people would stop saying this: make a start, do what we can, other things will follow. It will, VERY HOPEFULLY, all be part of a bigger picture. The house I grew up in, in Bradford-on-Avon, was built in 1871 and had a rainwater tank in the roof space. Mum used this for so many purposes that clean water was unnecessary for; and rinsed my hair in it! it made it shiny. If this happened back then, what's happened since just corporate greed, capitalism etc? My son and I live in a Curo new-build property completed in May 2012. Yes, we have solar panels, a water-butt and what we've been told is excellent insulation. But what these new houses could have been ...
- Energy conservation is more important than energy production, the government has the wrong focus - which is short-term

Leadership from government:

- It needs more commitment from all governmental departments and developers to ensure this.
- Climate change should be the number one priority for all governments.
- Too many people don't think about resources on a national scale.
- I am looking for leadership on this from local and national government but I don't think what is happening is enough to secure a good future for my children (and grandchildren). I also believe a change in culture is required.
- As technology for energy conservation is progressing fast, councils and governments should move fast to keep up and make our societies as energy efficient as possible.
- Nothing good will happen while we are governed in the way we are, it fosters a short term, blinkered approach to most things.
- People need to be educated so that they can choose the best option for them
- More emphasis on the impact of culture/lifestyle changes can have on conservation &reducing cost
- If we want it or not the climate will change and energy prices (and other prices) will rise, so it's better to prepare for the future than live in the ideology of a past era
- Not nearly enough is being done to make homes more energy efficient could the new pension regime (pension pots) be used to encourage people to make their homes more energy efficient and thus save money on energy bills in retirement
- I feel very strongly that we should be looking to be as self sufficient as possible in energy use
- I'm appalled by the back-sliding of our 'greenest ever' coalition government. Their attempts to force local authorities to desist from their own efforts to set high housing standards is in direct contradiction to their supposed 'localism' approach. They are therefore doubly deceitful and culpable.

Leadership from local government:

- B&NES should be planning for energy descent and following Bristol's lead.
- Bath is pretty good for recycling and generally trying to avoid waste
- Need work in Bath about retrofitting listed properties
- Solar panels and insulation should be installed on all new builds and at a discount to all residents/owners of homes in Bath. This should be a priority for the council.

B&NES planning department issues:

- Energy conservation is important but Bath needs more new houses.
- BANES should also allow double glazing to be fitted
- Energy concerns should not be allowed to dominate developments in a city such as Bath. Birmingham, Manchester, Bristol, Yes. Bath. No.
- Given the scope of domestic and non-domestic building construction in the western corridor of Bath in the Enterprise Area, all buildings should be build to CSH 4 minimum, preferably 5 as for the first part of Bath Western Riverside. And please reuse the gasometer structure. Reuse of steel in building structures (or somewhere else) will reduce the carbon footprint of the development.
- I would like to see a commitment from B&NES's Planning Department to require ANY
 new development to adopt the highest standards of energy conservation, efficiency
 of generation. These one-off costs should be born by developers and never, ever,



- passed on to the customer to pay for their, and the energy companies profits over and over again.
- Volume developers have by law to focus on profit making, so will always resist raising their standards. Obviously they must therefore be forced to make improvements.
- It's 2014 so please build modern houses, the 1980's are over as is short-term thinking neo-liberalism.
- Energy convservation mustn't come at the too great a price, be it the loss of affordable homes delivery, or simply that building homes in our area becomes unviable so developers go elsewhere, there must be a balance
- I live in a listed building they need to relax the rules so we can install solar panels
- The Council and the Government needs to revise its heritage guidance in respect of energy efficient improvements to buildings to strike a better balance between efficiency and aesthetics.
- The problem we have is the conflict between planning and conservation rules and our desire to make energy-efficiency improvements to our house. We would love to change things to improve energy efficiency but planning restrictions make them difficult.

Barriers to home improvement:

- It is difficult to get good information. I tried to do this when making some changes in my house and gave up in the end because I could not find good comparability information.
- The upfront cost is a hurdle
- Always seems to slip down my personal priority list. Lack of an assessment as to what can be done given constraints of 1930s property and feeling planning would say no
- I've heard of the green deal but no idea what it is
- Green deal is a waste of time and money. There are cheaper, better loan deals available.
- In old stone houses it's very difficult to make more than average changes eg. external wall insulation not possible, no cavity wall to insulate. The roof space is insulated but what more can be done there? Badly fitting doors, porches, modern extensions...all need addressing. ..
- Subsidised advice and insulation for households that are low- to medium income would be useful
- I would consider solar panels if there were a better feed in tariff
- The government's Green Deal is a complete hoax. The energy companies have ensured it comes to nothing.