Tenant Inspection
Renewable Heating
Winter 2015/16

INTRODUCTION

The Tenant Inspection team was commissioned by SDC to carry out a review of the three year renewable energy programme. The programme fitted Air Source Heat Pumps and solar panels to properties without access to the gas network. This report follows up the Scrutiny Panel's Fuel Poverty report of November 2013 to which the Tenant Inspectors contributed by checking that:

- the aims of the service were being met (as defined by the Decent Homes and Stroud Standards along with the Energy Strategy)
- the service was being delivered to a good standard
- the service met the needs of all service users
- the service delivers value for money
- In that inspection the aims of the Energy Strategy were summarised as follows:

	Tenant Services, Stroud District Council	
1.	Ensure affordable warmth for current and prospective tenants	✓
2.	Make progress towards meeting carbon reduction targets	✓
3.	Contribute towards the health and wellbeing of tenants	✓
4.	Make every effort to ensure effective usage of diminishing resources	✓
5.	Allow rapid response to opportunities for drawing in grant assistance	✓

This particular inspection focuses on the tangible benefits to tenants as a result of the energy program in terms of:

- a reduction in fuel poverty for tenants
- an improvement in the quality of the tenant's environment

The scope of this report only covers the first, second and third of the above aims; (1) ensure affordable warmth for current and prospective tenants, (2) make progress towards meeting carbon reduction targets and (3) contribute towards the health and wellbeing of tenants.

The tenant inspectors involved in compiling this report are: Sally Millett and Michael Stott.

We are grateful to staff for their help and support which enabled us to compile this report and for the professional analysis of the survey data. We would also like to thank all those tenants who responded to our survey.

METHODOLOGY

Evidence was gathered from a number of sources for this inspection:

- Interviews with Tenant Services' Service team
- Survey responses from tenants who had renewable heating systems fitted

During the inspection we compiled a set of survey questions to determine whether aims 1 and 3 had been met (see Appendix A). This was posted to 350 tenants who had had the new system installed. We had 162 replies, which is a response rate of 46%. Data from these responses can be seen in Appendix B and respondents' comments can be seen in Appendix C

We interviewed two members of the Services Team to get background information.

FUEL POVERTY

To determine whether or not there had been a reduction in fuel poverty, accurate information from pre and post heating installation fuel bills was required so that a comparison of costs could be made. No plans had been put in place to gather the information in this way and therefore precise calculations could not be made to show that the aim of reducing fuel poverty had been achieved in this way. To overcome this obstacle, Services team staff suggested that it might be possible to obtain backdated bills from tenants who have a registered online account with their energy provider. In retrospect it became clear that an objective comparison of energy bills before and after heating installation could not be made due to the complexity of variables such as:

- Fluctuations in global fuel prices
- Changes in fuel tariffs as a result of work
- Differences in lifestyle as a result of the new heating system

IMPROVEMENT OF QUALITY OF TENANTS' ENVIRONMENT

Progress in relation to the second aim (make progress towards meeting carbon reduction targets) of the Energy Strategy could potentially be measured and evidenced by the Energy Performance Certificate [EPC] ratings as well as SAP* ratings which would give a clear indication of reductions in carbon emissions. In theory this would indicate a better quality of the home environment as well as evidence progress towards meeting carbon reduction targets. At the time of this inspection a project had started to convert the data Tenant Services held on their asset management system from SAP 2001 to the modern rating assessment, SAP 2009. As this work has not been completed however, we are unable to evidence progress on carbon reduction targets or provide more evidence in relation to a reduction in fuel poverty to tenants.

When the renewable heating systems were initially installed (in 2013) properties were improved to meet the Stroud Standard https://www.stroud.gov.uk/info/housing/new/Stroud_Standard.pdf. New double glazed windows, doors and wall insulation were installed where appropriate. In some instances, loft insulation was also needed and solar panels were installed where roof position

*SAP or Standard Assessment Procedure is the UK Government's recommended method for measuring the energy and environmental performance of residential dwellings.

and gradient made it possible. Subsequent installation programmes did not necessarily follow the same holistic approach due to the time limits of grant funding.

Our earlier inspection in 2013, at the beginning of the programme, we found that there were problems with the repair of renewable heating systems due to heating engineers responding to 'call outs' not being training on the new type of heating systems. This was rectified by the employment of another contractor who employed staff fully trained on the workings of Air Source Heat Pumps.

A Tenant Education officer was put in place to liaise with tenants to make sure they understood how to use the renewable heating system and to answer any queries. From our interviews we found that this officer had interviewed a cross section of tenants to try and establish satisfaction levels a year into the programme. The majority of those interviewed were happy with the new system. One of the greatest benefits highlighted was the heating of the whole house rather than just one or two rooms. This indicates that tenants are getting better value for the money they are spending on energy even though it may not always show a reduction in that spend.

During the interview with Services Team staff, it was pointed out that the installation of the new heating systems was never meant to be only about reducing fuel poverty. It was also aimed at improving tenants' well-being. The evidence collected so far through staff interviews suggested a level of satisfaction requiring further investigation. A detailed questionnaire was therefore sent to 350 tenants who had renewable heating systems installed in their homes. We received 162 replies, which is a 46% response rate.

From the perspective of the quality of tenant environment we feel it is important to mention that one of our earlier report findings (2013) regarding micro-wave radiation has been investigated by officers who are satisfied that there is no threat to any of our tenants. For further information visit the International Agency for Research on Cancer (IAR) website.

STRENGTHS

1. The team working on the renewable heating installation programme devoted considerable efforts to making the change beneficial to tenants.
2. Feedback from tenants and officers indicates overall percentage satisfaction with the system. Our findings indicate that tenants are getting better value for the money with regard to heating their homes. They can now heat the whole house rather than just one room.
3. Our survey showed that just over half the respondents with damp and mould issues prior to the new heating have, in the main, had these problems resolved
4. 50 percent of respondents reported improvements in breathing and lung related problems
5. 81 percent of survey respondents expressed a preference for the renewable heating system
6. A percentage of tenants expressed concerns about understanding the controls A Tenant Education Officer was appointed to work with tenants to solve any problems.

7. As part of the renewable heating programme some properties were upgraded by the installation of new windows and doors as well as roof and wall insulation. Solar panels were also installed where appropriate.

8. In response to concerns expressed about repairs to the new systems an external contractor was appointed who had appropriately trained engineers.

WEAKNESSES

1. One of the aims of the renewable heating systems and property upgrades was to reduce tenants' energy bills and take them out of fuel poverty by reducing their fuel bills. However no arrangements were put in place to create a paper trail which would provide evidence of the differences in the tariffs and subsequent bills.

2. Due to the terms and conditions of the grant funding for the renewable heating project, there was a very tight time schedule in which to complete. As a result, there was a failure to carry out a thorough evaluation of the initial roll out of the programme in order to prevent the recurrence of possible problems in subsequent phases of renewable heating installations.

3. The survey has shown that some tenants are still unsure about how to use the system effectively.

4. Tenant Liaison Officers employed by the contractor Lovells (now Morgan Sindall) explained the need to tenants for them to contact their energy supplier and change their tariff when they signed up to have the heating system fitted in their home. It appears that some tenants had not completely understood this requirement and remained on the night storage rate which is considerably more expensive than the tariff for renewable heating systems.

5. Responses to the postal survey indicate that some tenants thought that their heating package would include solar panels. It such cases, it may have been due to the electricity network operator refusing permission for this work to be carried out. This would normally be due to a lack of capacity in the local infrastructure to accommodate any surplus energy generated by individual solar panels. In other instances, a survey of the property may have revealed that the roof was unsuitable.

RECOMMENDATIONS

1. Identify those who are still having problems with the renewable heating systems.

2. Ensure action is taken to help tenants use the system more effectively

3. Update tenants who expected solar panels to be part of their package as to why this is not going to happen

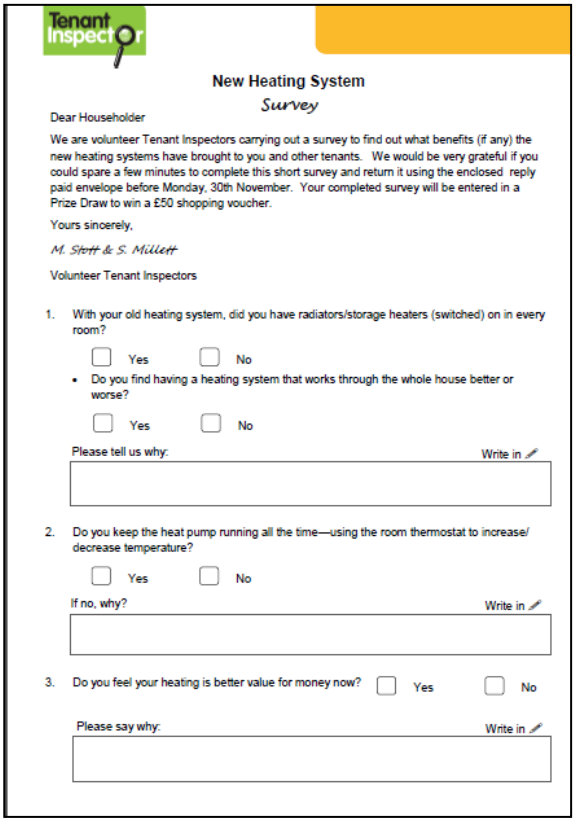
4. Send a thank you letter to all respondents

5. Identify respondents who have highlighted a problem and take steps to rectify

6. Add SAP 2009 data to this report as an appendix when it becomes available

Appendix A

Survey Questions



Tenant Inspector

New Heating System
Survey

Dear Householder

We are volunteer Tenant Inspectors carrying out a survey to find out what benefits (if any) the new heating systems have brought to you and other tenants. We would be very grateful if you could spare a few minutes to complete this short survey and return it using the enclosed reply paid envelope before Monday, 30th November. Your completed survey will be entered in a Prize Draw to win a £50 shopping voucher.

Yours sincerely,

M. Stott & S. Millett

Volunteer Tenant Inspectors

1. With your old heating system, did you have radiators/storage heaters (switched) on in every room?

   ☐ Yes ☐ No

   - Do you find having a heating system that works through the whole house better or worse?

   ☐ Yes ☐ No

   Please tell us why: Write in

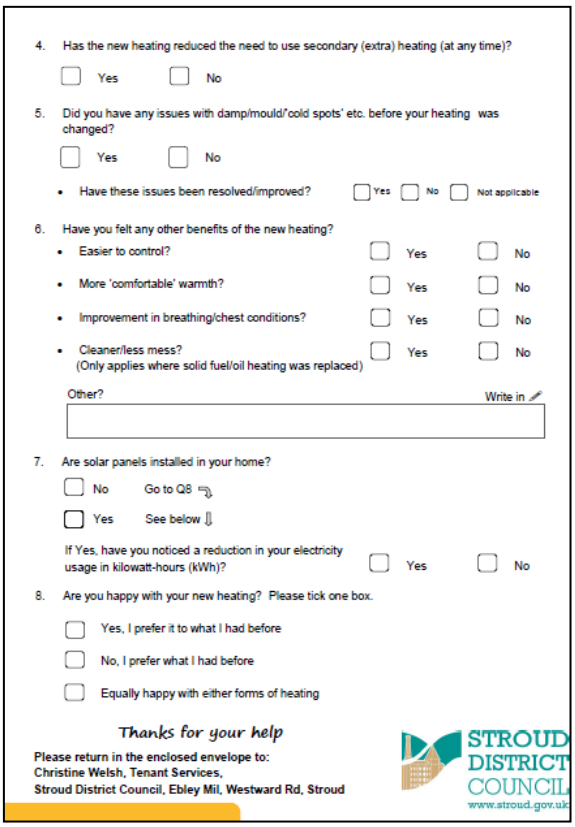
2. Do you keep the heat pump running all the time—using the room thermostat to increase/decrease temperature?

   ☐ Yes ☐ No

   If no, why? Write in

3. Do you feel your heating is better value for money now? ☐ Yes ☐ No

   Please say why: Write in



4. Has the new heating reduced the need to use secondary (extra) heating (at any time)?

   ☐ Yes ☐ No

5. Did you have any issues with damp/mould/'cold spots' etc. before your heating was changed?

   ☐ Yes ☐ No

   - Have these issues been resolved/improved? ☐ Yes ☐ No ☐ Not applicable

6. Have you felt any other benefits of the new heating?
   - Easier to control? ☐ Yes ☐ No
   - More 'comfortable' warmth? ☐ Yes ☐ No
   - Improvement in breathing/chest conditions? ☐ Yes ☐ No
   - Cleaner/less mess? (Only applies where solid fuel/oil heating was replaced) ☐ Yes ☐ No

   Other? Write in

7. Are solar panels installed in your home?

   ☐ No Go to Q8

   ☐ Yes See below

   If Yes, have you noticed a reduction in your electricity usage in kilowatt-hours (kWh)? ☐ Yes ☐ No

8. Are you happy with your new heating? Please tick one box.

   ☐ Yes, I prefer it to what I had before

   ☐ No, I prefer what I had before

   ☐ Equally happy with either forms of heating

Thanks for your help

Please return in the enclosed envelope to:
Christine Welsh, Tenant Services,
Stroud District Council, Ebley Mil, Westward Rd, Stroud

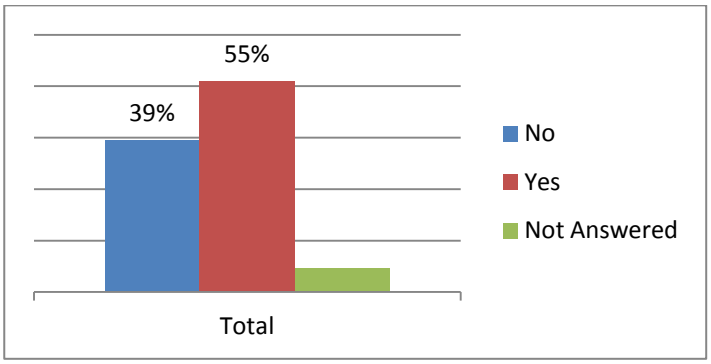
STROUD DISTRICT COUNCIL
www.stroud.gov.uk

Appendix B

Heating Survey 2015 Charts

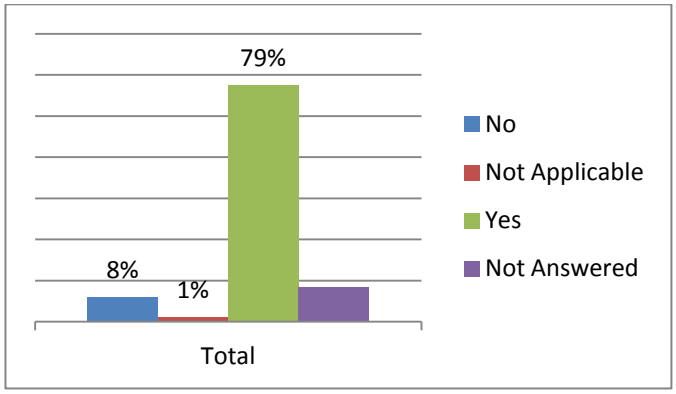
With your old heating system, did you have radiator/storage heaters (switched on in every room?

No	39%
Yes	55%
Not answered	6%



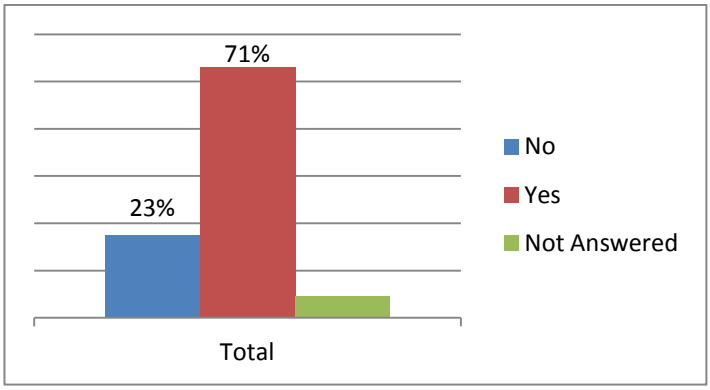
Do you find having a heating system that works through the whole house better or worse?

No	8%
Yes	79%
N/A	1%
Not answered	12%



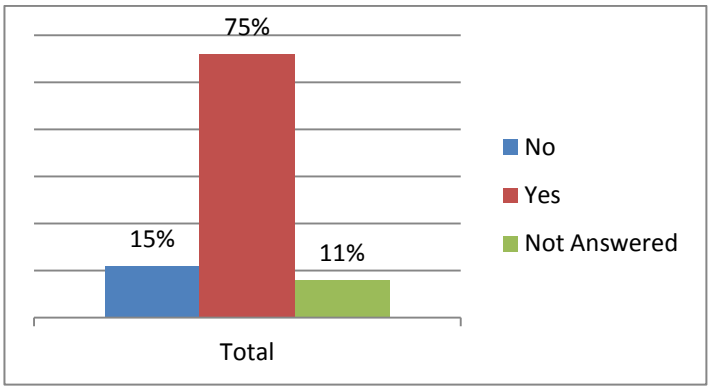
Do you keep the heat pump running all the time – using the room thermostat to increase/decrease temperature?

No	23%
Yes	71%
Not answered	6%



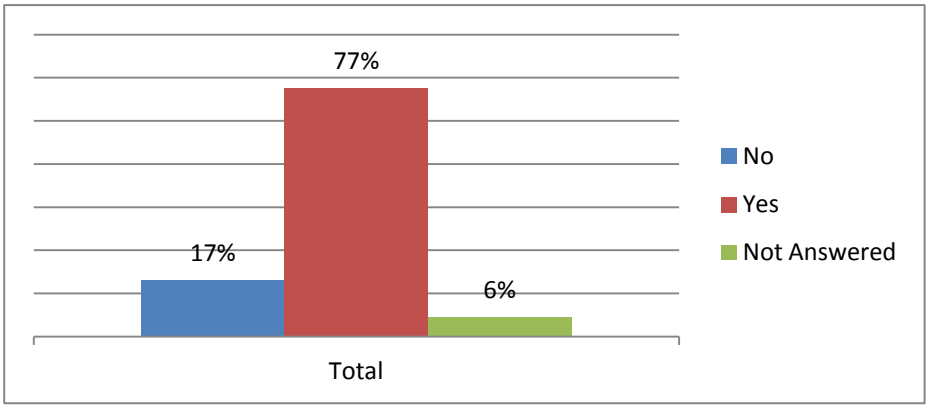
Do you feel your heating is better value for money now?

No	15%
Yes	75%
Not answered	11%



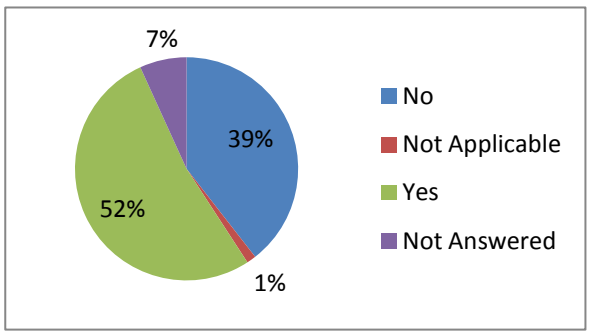
Has the new heating reduced the need to use secondary (extra) heating (at any time)?

No	17%
Yes	77%
Not answered	6%



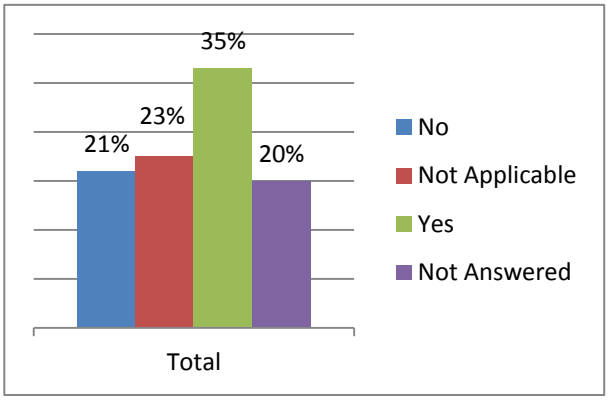
Did you have issues with damp/mould/cold spots etc. before your heating was changed?

No	39%
Yes	52%
Not answered	7%
N/A	1%



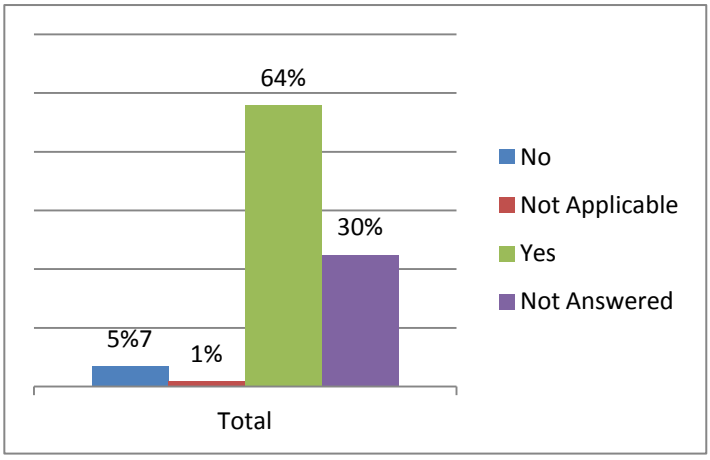
Have these issues been resolved/improved?

No	21%
Yes	35%
Not answered	20%
N/A	23%



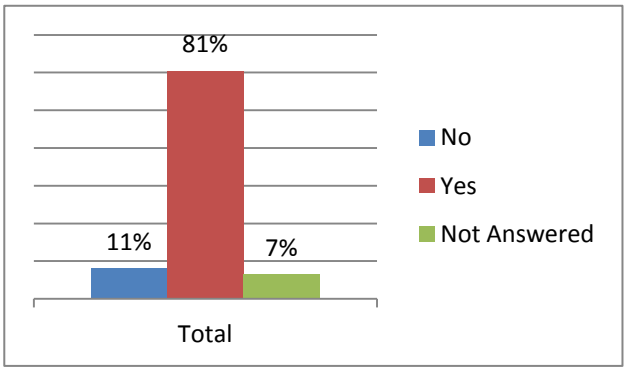
Have you felt any other benefits of the new heating?

No	5%
Yes	64%
Not answered	30%
N/A	1%



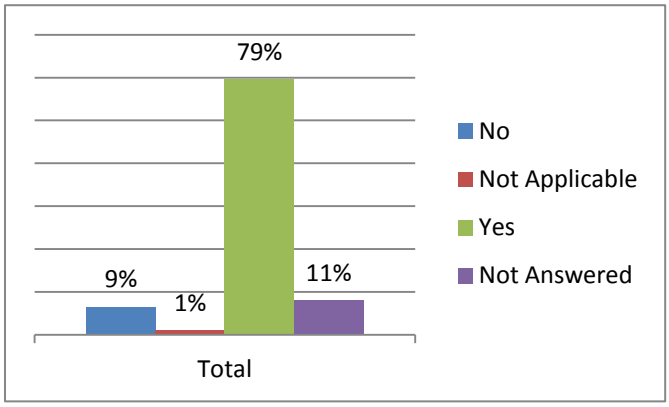
Easier to control

No	11%
Yes	81%
Not answered	7%



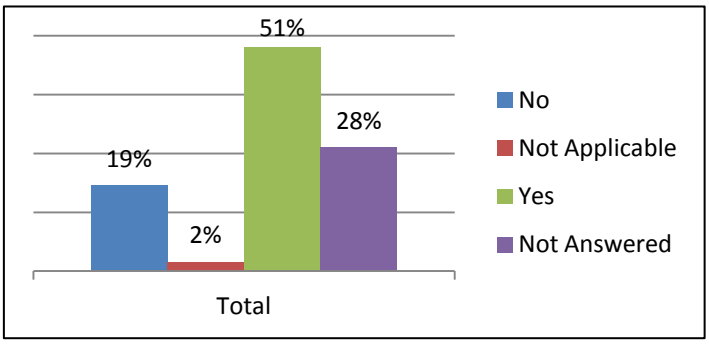
More comfortable warmth?

No	9%
Yes	79%%
Not answered	11%
N/A	1%



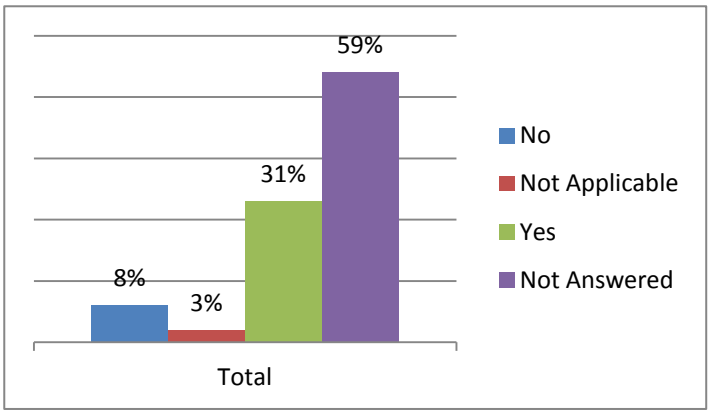
Improvement in breathing/chest complaints?

No	19%
Yes	51%
Not answered	28%
N/A	2%



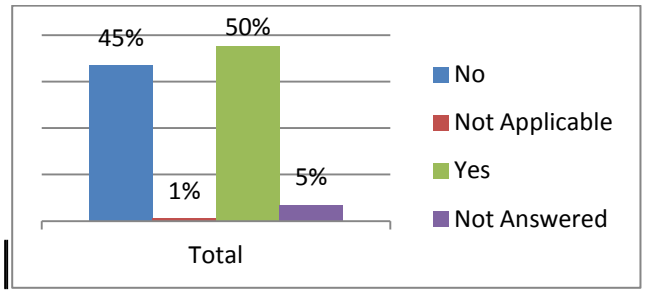
Cleaner/less mess? (Only applies where solid fuel/oil heating was replaced)?

No	8%
Yes	31%
Not answered	59%
N/A	3%



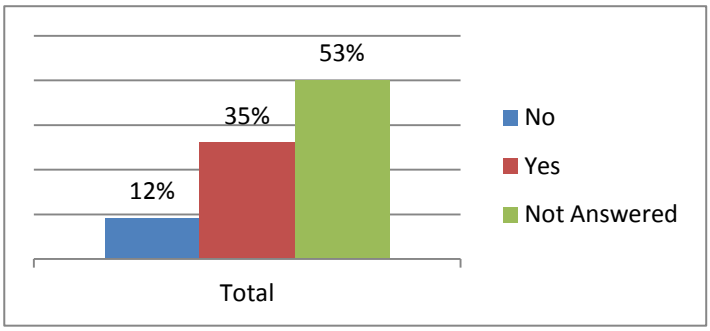
Are solar panels installed in your home?

No	45%
Yes	50%
Not answered	5%
N/A	1%



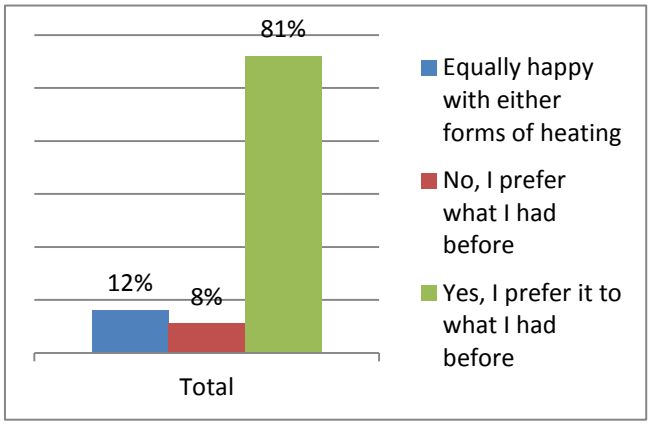
If yes have you noticed a reduction in your electricity usage in kilowatt-hours (Kwh)?

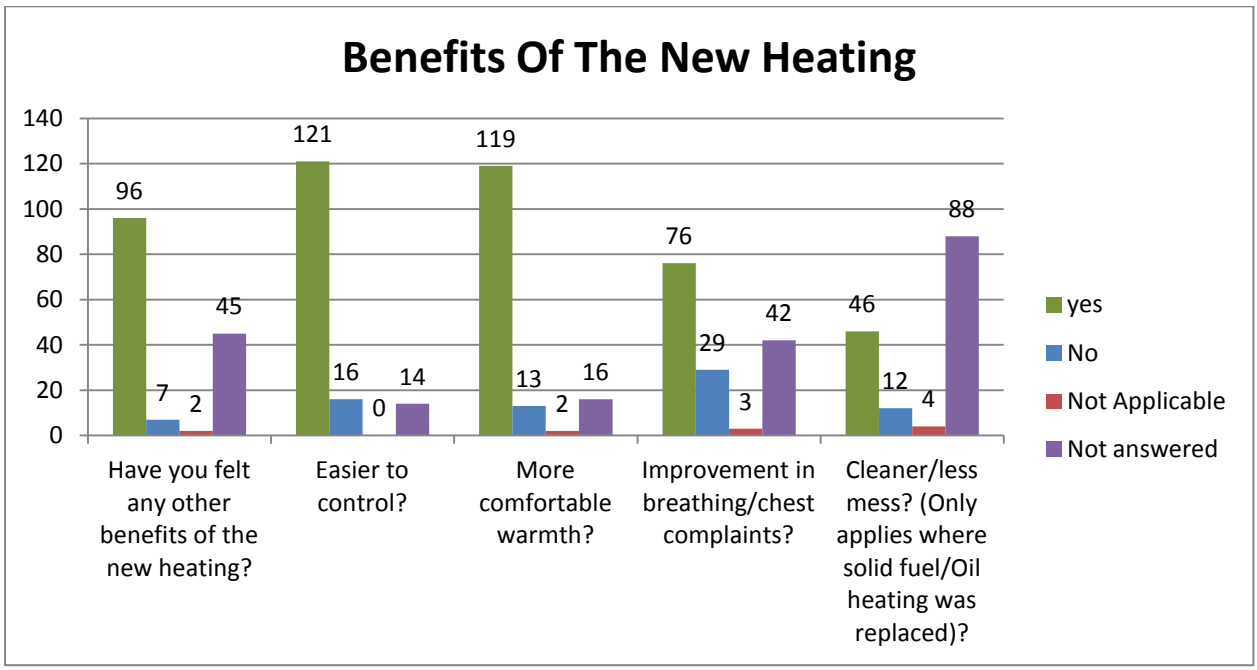
No	12%
Yes	35%
Not answered	53%

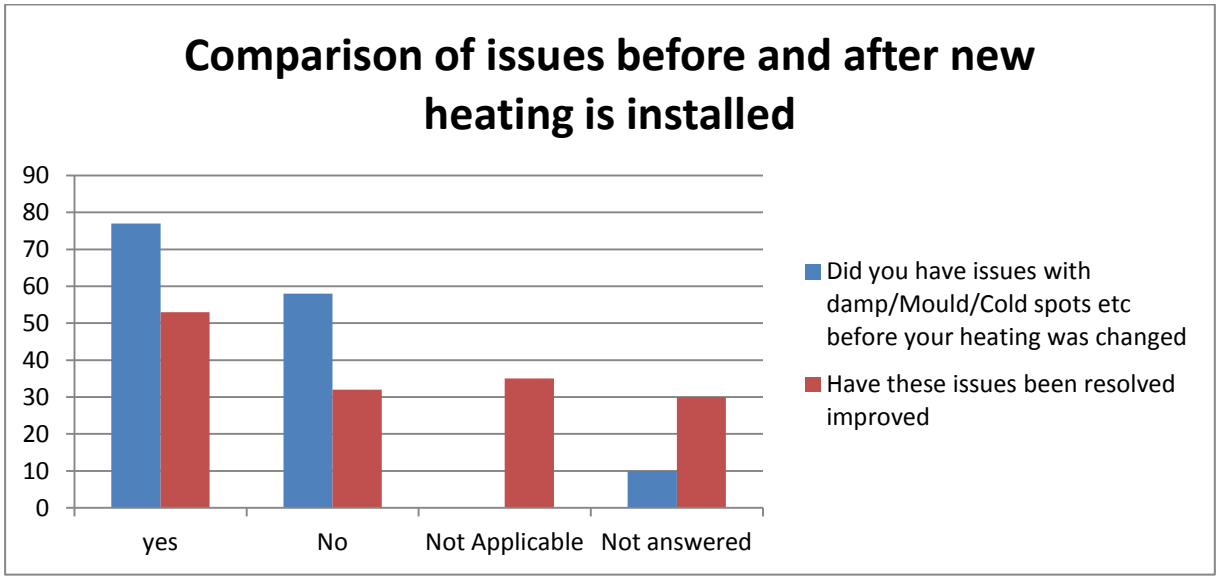


Are you happy with your new heating?

Equally happy with either forms of heating	12%
No, I prefer what I had before	8%
Yes, I prefer it to what I had before	81%




Benefits Of The New Heating
140
120
100
80
60
40
20
0
96
7
2
45
121
16
0
14
119
13
2
16
76
29
3
42
46
12
4
88
Have you felt any other benefits of the new heating?
Easier to control?
More comfortable warmth?
Improvement in breathing/chest complaints?
Cleaner/less mess? (Only applies where solid fuel/Oil heating was replaced)?
yes
No
Not Applicable
Not answered


Comparison of issues before and after new heating is installed
90
80
70
60
50
40
30
20
10
0
yes
No
Not Applicable
Not answered
Did you have issues with damp/Mould/Cold spots etc before your heating was changed
Have these issues been resolved improved

Appendix C

A Selection of comments from survey respondents

Do you find having a heating system that works throughout the whole house better or worse?	
Much better as you can control it unlike storage heaters that go cold in the evening	Costing too much to run. My bills are higher now than before
Do not understand how system works. Too complex. Kitchen heater over door too high for old person to reach	No cold rooms
Press - and hey presto you it the way I want it	I still don't switch it on in the kitchen or bathroom. It has to be on full and the extraction fans just suck it straight outside
Because you can't control the radiators individually (except for the bedroom)	A lot better warmth and cheaper to run
It's warmer and I no longer have a damp, mouldy home!	The temperature has to be so high that with my complaint it is impossible to breath. It can't be controlled to a decent heat
The system I have I don't understand	I can control each radiator with the thermostat and can switch it on or off depending on the heat in the house
Do you feel the heating is better value for money?	
Works out cheaper	Cost virtually the same. Would be more efficient with solar panels as agreed with Council
My electricity bill is higher	Storage heater very expensive
The storage heating system failed to heat the whole of any room in our dwelling. The heat pump system we have now keeps the whole of the room at a desirable temperature throughout our flat - we pay more but it's worth it	Compared to heating in previous address, the heating bills are excessively high
Because the other day I had an engineer come out with one heater not working, only then did I discover my hot water heater was wired up wrong when it was put in. I kept complaining to the Council, about my water being scalding hot from morning to night that's why I have been getting huge electric bills for two years.	Do not have to use other forms of heating
It's more controllable and much more efficient	The bills I get have been outstandingly high. Is now being investigated.
Cost virtually the same. Would be more efficient with solar panels as agreed with Council	