



Energy efficient development and rural fuel poverty

Rural Housing
National Conference 2014



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Hastoe overview

- 50 years old, 6,500 homes
- Specialisms - rural and environmental sustainability
- >200 villages + 70 local authorities
- Subsidiaries:
 - Hastoe Wyvern
 - Sustainable Homes Ltd
 - Hastoe Homes Ltd
 - Hastoe Capital PLC





- Training
- Consultancy
- CROHM
- SHIFT (>60 HA members)



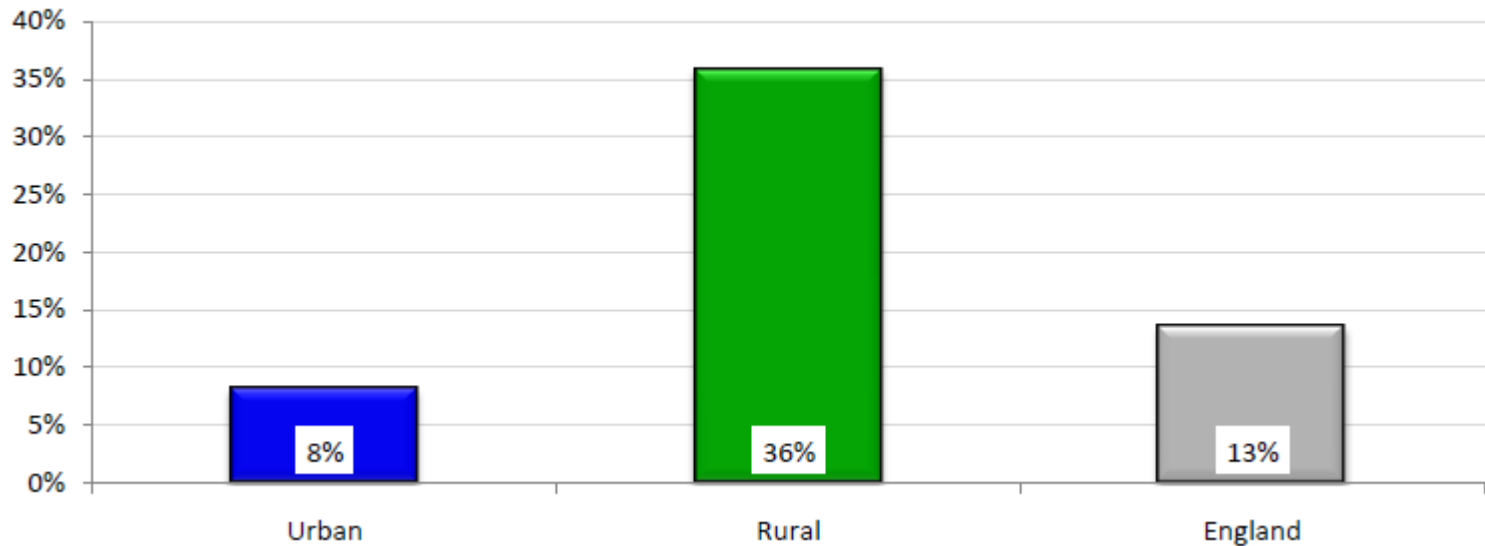


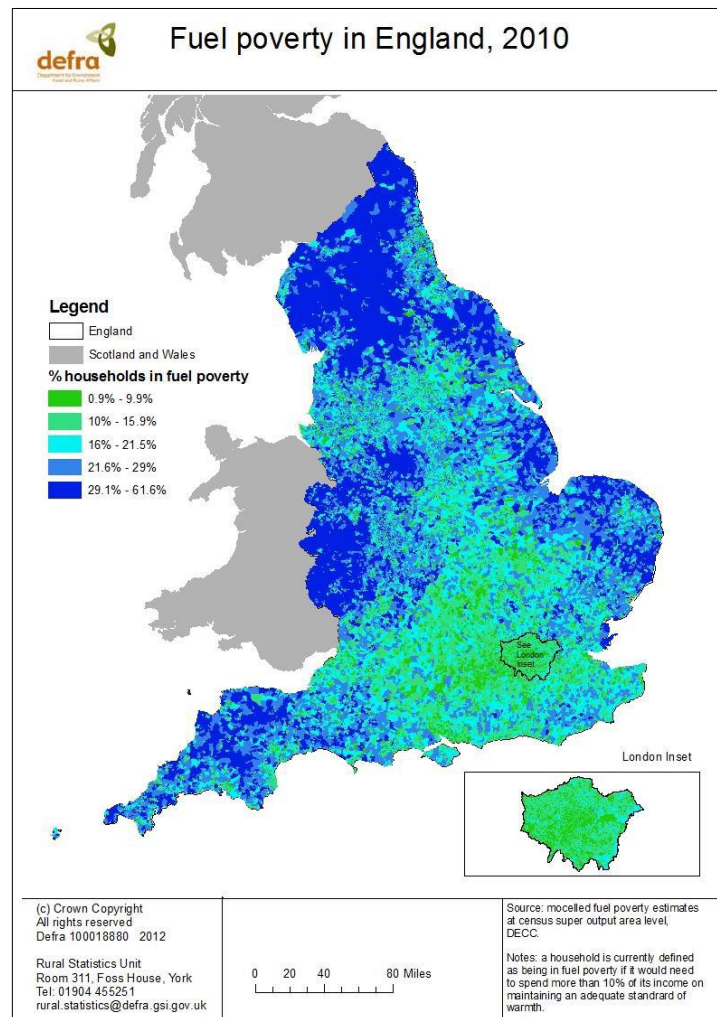
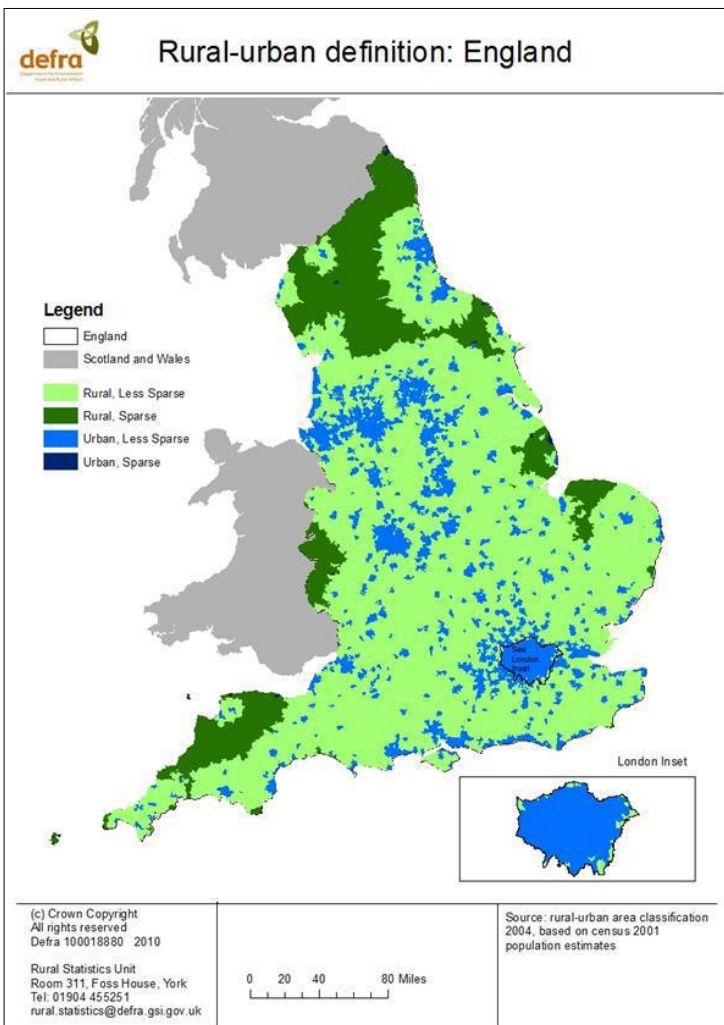
2. Rural fuel poverty



Rural fuel poverty

- Approx 18% households in rural areas, c.f .16% in urban areas.
- Higher proportion of older people
- Approx 50% UK fuel-poor households have homes with solid walls
- More households off the gas grid (below as at 2010)



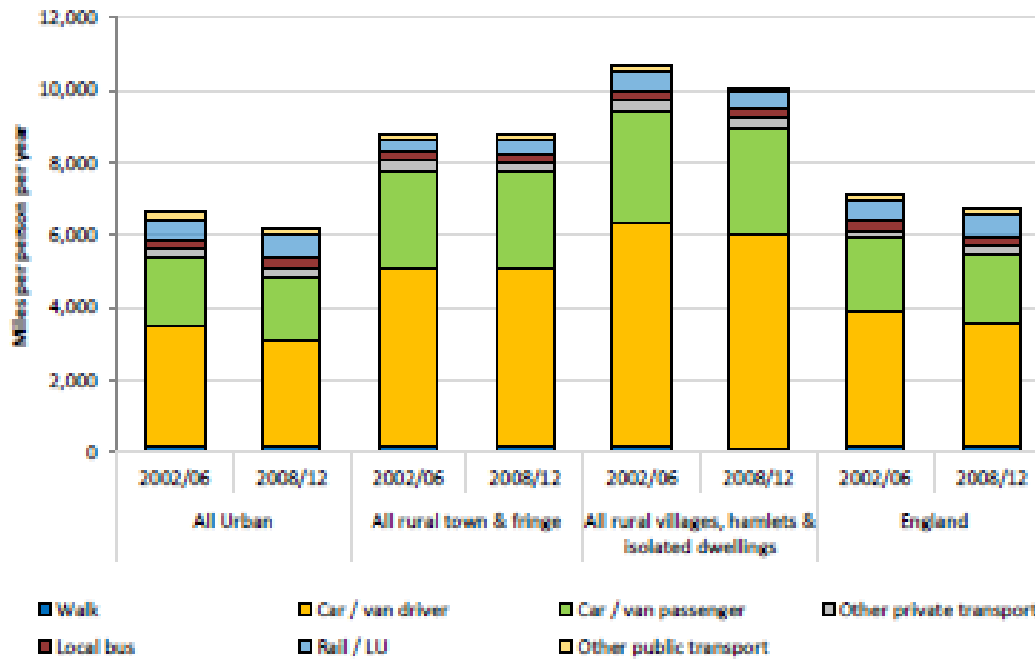




Average weekly transport costs

- £14 higher than the national average
- 13.9% of disposable income (c.f. 11.2% England as a whole).

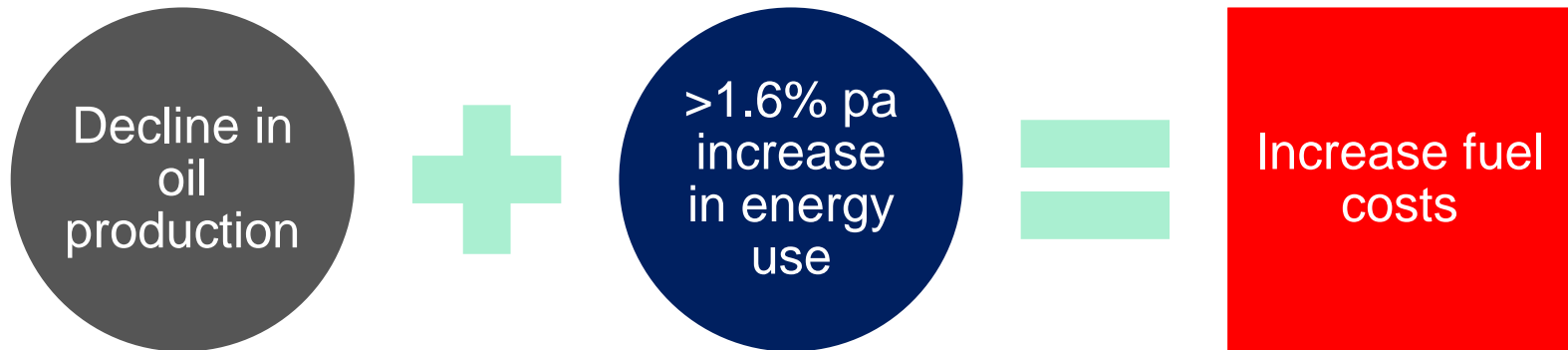
Average distance travelled, per person per year, by mode and settlement type, in England, 2002/06 and 2008/12





Fuel costs increasing

- Oil production has now peaked in most fields
- International Energy Agency: *“A field-by-field analysis of the historical production trends of 800 oilfields indicate that decline rates are likely to rise significantly in the long term, from an average of 6.7% today to 8.6% in 2030”*





Hastoe's Rural Home Energy Bills Study

- Unexpected results from first year (2013)
- No evidence of higher costs from storage heaters
- Energy consumption and cost below national averages:
 - only two homes exceed the Ofgem 2012 annual benchmark (£1,342)
 - none exceeded the Ofgem energy consumption benchmark (19,800 kWh pa)
 - some would pay >50% more to achieve adequate heating
- Suggest homes not adequately heated:
 - Fixed budgets
 - Not all rooms used
 - Under-heating
 - Secondary heat source (multi-fuel stoves and open fires).
 - Frugal lifestyles



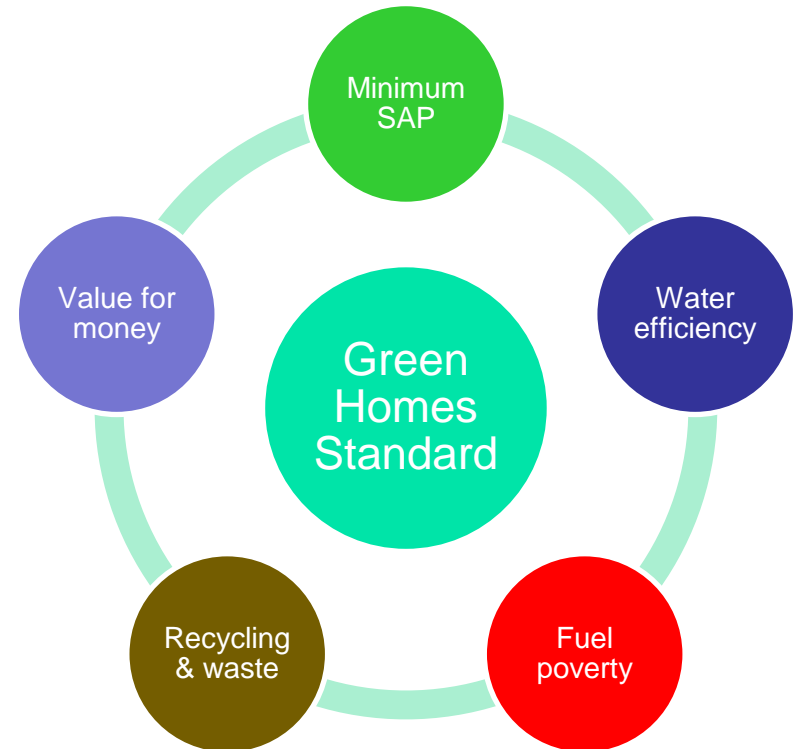
3. Existing homes



Hastoe: where we are now

- Average SAP rating of 72.9
- 1,000 homes with SAP less than 65
- 200 homes with SAP of less than 50
- 9,300 tonnes pa overall carbon footprint
- 3.7 tonnes pa per home carbon footprint

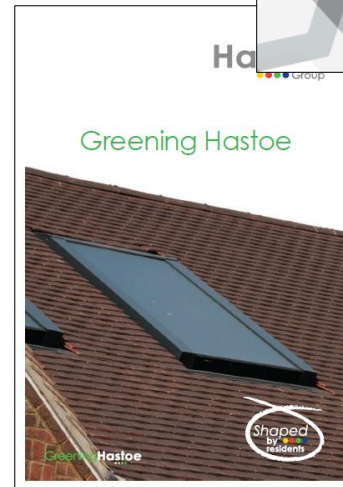
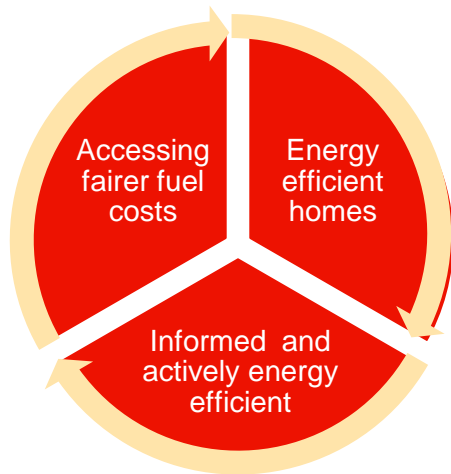
Hastoe: where we want to be





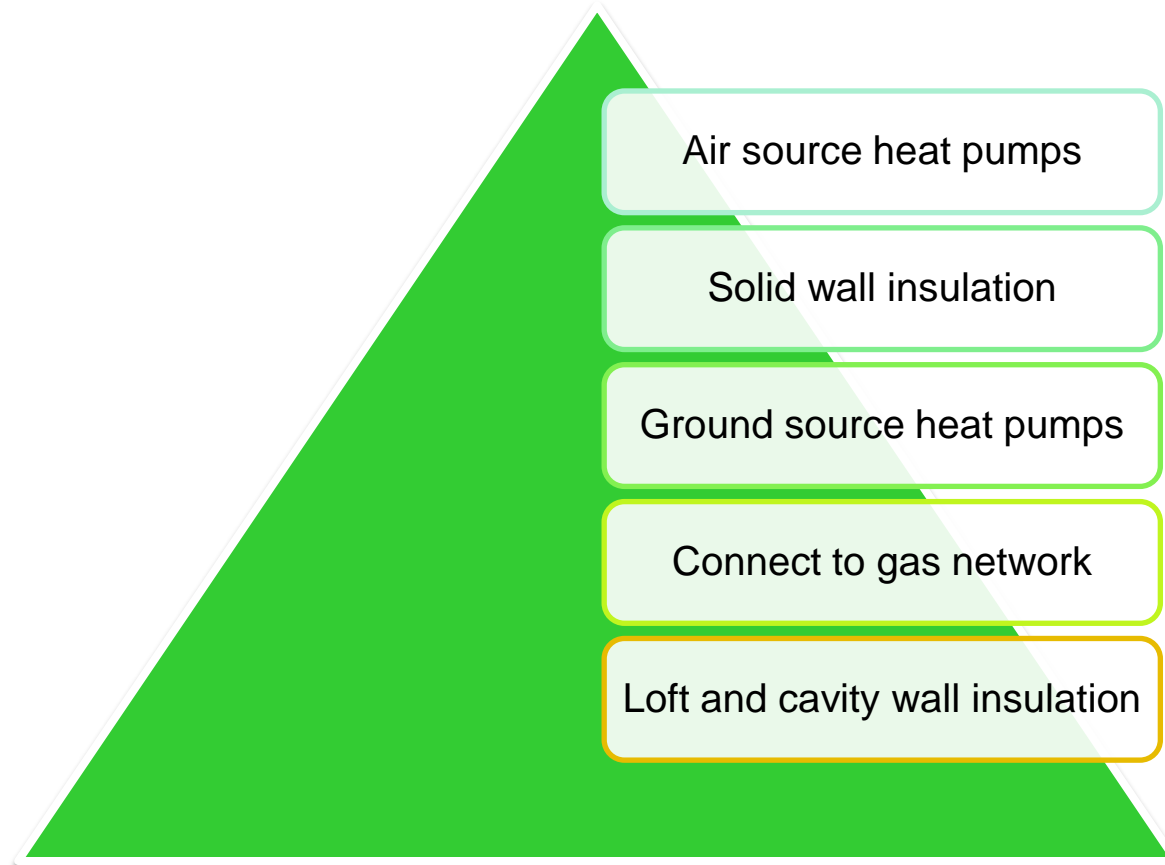
Two strategies and a plan!

- Asset management strategy
- Greening Hastoe strategy
- Affordable warmth plan





Retrofit hierarchy





Challenges

- New homes v retrofitting capital investment
- Grant availability
- Integrate into maintenance programme, e.g.
 - Cavity and loft insulation
 - Replace boilers with super energy efficient ones
 - Fit low tech devices
- Where to start ...



Lessons so far

- Retrofit programme is:
 - saving residents average £200 pa on energy bills.
 - generating 365 MW hours of renewable power
 - earning £155,255 income from renewable power generation
 - reducing carbon footprint by 191,504kg emissions
- Information for residents is vital, including face to face
- Reinforce
- Train relevant staff
- Train maintenance contractors





Maximise use of grant and incentives

- Almshouse exemplar: Retrofit for the future grant
- Renewable Heat Premium Payment Social Housing competition
- ECO funding
- Green deal
- Feed in tariffs





Example: Gaymer Memorial Almshouses

Target:

80% reduction carbon emissions

- Mix of un-insulated cavity and solid walls
- Single steel-framed glazing
- Little loft insulation
- Off gas
- Electric storage heaters



Achieved:

92% reduction carbon emissions

- insulated internal walls, loft, floors and doors
- high performance steel windows and secondary glazing
- photovoltaic panels
- air source heat pump
- heat recovery ventilation
- energy monitoring equipment and A+ (or better) rated appliances





Ground Source Heat Pump Retrofit



Above:
Drilling rig



Right:
GSHP installed in 2012
Coil buried in front garden



EU structural funds 2014-2020: retro-fitting social housing

- <£6bn through LEPs
- 2014-2020 EU Cohesion Policy Framework prioritises:
 - move to a low-carbon economy
 - achieving social inclusion and
 - combating poverty
- Option to combine capital investment (*European Regional Dev Fund*) with revenue (*European Social Fund*)
- Consultation on draft guidance closing end of Ma 2014:
<https://www.gov.uk/government/publications/development-of-eu-structural-and-investment-fund-strategies-preliminary-guidance-to-local-enterprise-partnerships>



4. New rural homes



Build standards

- Minimum CSH level 4
- Passiv haus
- Passiv haus lite
- Straw bale homes





Passiv haus

- Carbon emissions & fuel bills approx 10% of UK average
- Features:
 - high insulation levels
 - high performance doors and windows
 - minimal thermal bridging
 - very low air leakage
 - mechanical ventilation with heat recovery
 - passive solar gain
- Water consumption savings and recycling facilities





University of East Anglia study, results so far

- 90% energy savings
- Fuel bills:
 - 3 bedroom house £120pa
 - 2 bedroom flat £65 pa
- Comfort levels very high:
 - air changes 7x ph (cf 2.5 ph)
 - filtered air beneficial for allergies etc
- Also... very low rent arrears



Passiv haus – various designs







Straw bale homes - High Ongar, Essex





Straw bale homes

- Likely to be significantly cheaper to keep warm
- 60% reduction in carbon dioxide emissions
- Insulation standards nearly 3x higher than building regs
- Comparable build costs
- Double the fire resistance required by law



5. Lifestyle advice, information and support



Advice

- Promote tariff switching and comparison services
- Energy saving advice
- Money management advice
- ‘Winter warmers’

Home

Existing Tenants Existing Owners Homes For Rent Homes For Sale About Hastoe

Existing Tenants

Annual report
Community
Contact us
Equality and diversity
Going green
Health and safety
How to
In my region
Employment support
Money Matters
Welfare Reform
Home Contents Insurance
Managing your money
Dealing with Debt
Norfolk Credit Union loans

Save Energy Save Money

Energy saving video

Print this page
Go to Calendar

Get Adobe Reader

Energy saving video

Make small changes and save money on your fuel bills! Watch our energy advice video (starring Hastoe staff and a Hastoe resident) for some super-saving tips:

Home Heat Helpline

If you are worried about paying for your energy bills and keeping your house warm this winter, please call the free, confidential Home Heat Helpline (0800 33 66 99) for help and advice.

Money Matters

Money Matters
With financial inclusion Coordinator
Farzana Sarwar
Contact Farzana
Tel: 0300 123 2250 Email: fsarwar@hastoe.com

Download Our Money Matters money locker - [click here](#)

New Year, new budget?

We have ten top tips to help you get back in control of your finances if the cost of Christmas has left your budget stretched.

- 1. Draw up a sensible monthly budget** - Make a list of all of your necessary monthly payments and cash and mobile bills they are covered by your monthly income. Make sure you stay within your budget guidelines.
- 2. Use cash instead of credit cards** - Have one credit card and use it only for emergencies or necessities. Put your credit card away in a safe place, not available for everyday use. Be aware that store cards carry very high rates of interest.
- 3. Cut down on loans and unnecessary expenses** - If may sound obvious, but small things like bringing lunch to work rather than eating out, or using your mobile phone less can make a difference. Before you go grocery shopping, write a list of everything you need and stick to it.
- 4. Be sales savvy** - The January sales are a great place to pick up a bargain, but before you buy, ask yourself if you really need it. It might be a great opportunity to buy something you have needed for ages, but don't be tempted by items you don't really need just because they are discounted.
- 5. Try to find an extra income** - Do more to bring in extra money to save you over until you are back on your financial feet. Even if you have a full time job you could work overtime, try baby-sitting or using any skill you can to bring in a little more cash.
- 6. Pay off the credit card bills with the highest interest rate first** - If you pay all balances to below 50% of the card limit, because interest on your credit score, then pay off the credit card with the highest interest rate. Then do the same with the card that has the second highest interest rate. Continue until you reach the credit card with the lowest interest rate.
- 7. Avoid borrowing to cancel out debt**, especially consolidation loans. It is easy to be convinced that this is a way of helping you get out of debt. However, consolidation loans are simply a means of
- 8. Contact your creditors and try to work out repayment plans** - Many are willing to sit down with you and organise repayment schemes that will help them get back what they are owed without having to send in the paperwork and important documents in a false, label financial information out in a way which you understand. Knowing every detail of your finances puts you in control.
- 9. Get organised** - Organise your paperwork and important documents in a false, label financial information out in a way which you understand. Knowing every detail of your finances puts you in control.
- 10. Start saving for next Christmas now** - Try to save a little each month. Set up a standing order to a savings account. You will be surprised how quickly you will forget you are saving, and by next Christmas you will have a specific pot of money to buy all your presents.

Remember you need to. Money Matters will be the last really useful advice and information about money before the end of the year. Budgeting and home finance.



Winter warmers



Greening Hastoe

Greening Hastoe
With Sustainability Manager

Clare Hendry

Contact Clare:
Tel: 0300 125 2250 Email: chendry@hastoe.com

Keep warm this winter with our thermal curtains giveaway!

Winter will soon come round and you might be wondering if we will experience another long season of extremely cold weather. One of the most economic and easy ways to keep the heat in your home is to dress your windows with thermal curtains.

When you dress your windows with thermal curtains, the main advantage is that in cold weather the curtains will prevent heat being lost through the window and will help to block out draughts. In hot weather, they will help to keep the room cool.

So what makes thermal curtains thermal? They are basically the same as ordinary curtains with one major difference; the fabric they are made from has a foam thermal backing. Most thermal curtains are made from cotton or polyester or both. These fabrics give the curtains easy cleaning qualities with most of them being machine washable.

We are also looking at other "Winter Warmers" that we can offer – free and simple measures that will help residents to keep warm and save energy. So watch this space!

Can you help?
To find out more about the stories featured please contact Clare Hendry on 0300 893 0665 or email chendry@hastoe.com.

Giveaway
To help our residents this winter, we are offering five sets of thermal curtains per region. Just send us your name and address on a postcard to FREEPOST HASTOE. The first five names drawn out of the hat from each region will be fitted with one set of thermal curtains each (colour choice and fitting to be arranged after the draw).

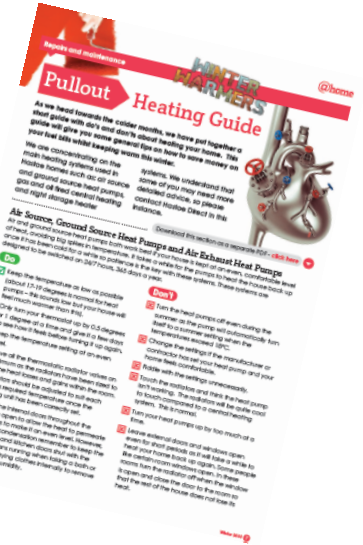
Stop press!
Hastoe is pleased to have been awarded further funding to install ground source heat pumps to 75 homes in our east and west regions. A total of £532,000 has been awarded as part of the Renewable Heat Premium Payment (RHPP) Social Housing Competition. It is the third time that Hastoe has been successful, meaning that 165 heat pumps will have been funded in total. The heat pumps are a renewable heating system and are being targeted to homes off the gas network and reliant on electric storage heaters. The heat pumps heat the whole house at a more affordable cost. Residents identified to receive a heat pump will be contacted to assess suitability.

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- Green Doctors visiting older rural residents:
 - Bespoke advice on keeping warm/best tariffs/proper ventilation etc
 - Fit simple energy efficiency and draught proofing measures
 - Check carbon monoxide and smoke detectors.
 - Hastoe follow up calls
- Practical help – thermal curtains



Information and encouragement examples and ideas



- Pull-out heating system guide in magazine
- Telephone help line
- Customer Energy Saving Competition
- Community bulk energy purchasing and switching
- Digital Inclusion - access more choice of tariffs
- Resident Energy Champions
- Qualified Energy Advisors + volunteers



6. Conclusion



Conclusion

- Fuel poverty greater in rural communities
- Housing associations are uniquely placed and motivated to take the lead as:
 - Landlords
 - Service providers
 - House builders
 - Procurers
- Learning, evidencing and sharing
- Energy efficient homes are more affordable.



Some films

- Ground Source Heat Pumps
- Gaymer Memorial retrofit
- Straw bale construction
- Energy saving in the home

<http://www.hastoe.com/page/674/Films.aspx>