

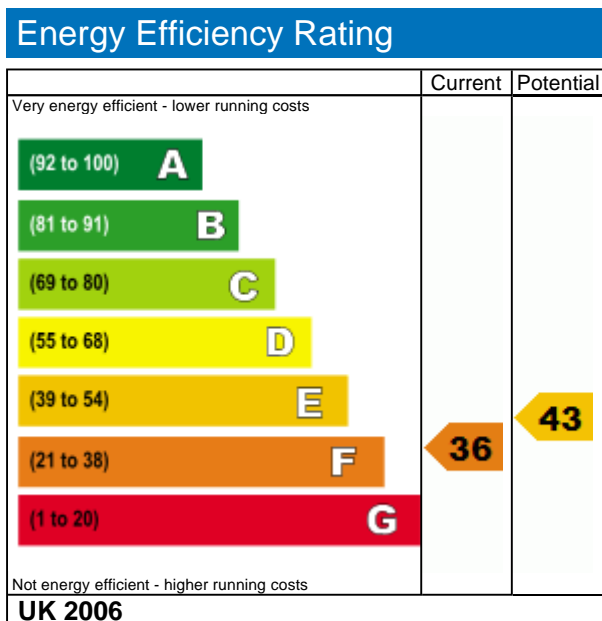
# Energy Performance Certificate

Address:

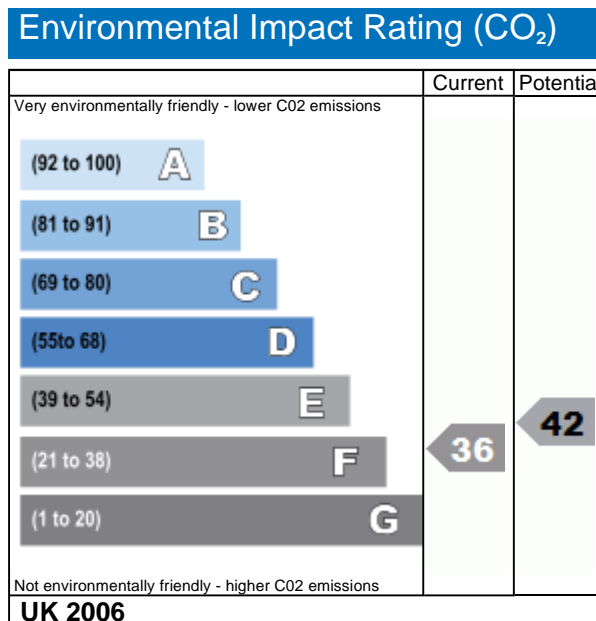
Dwelling type: House  
Name of inspector:

Date of inspection: 4 April 2007  
Date of report: 5 April 2007  
Reference number: 19436  
Total floor area: 146.71 m<sup>2</sup>

This home's performance is rated in terms of the energy use per square metre of floor area, energy efficiency based on fuel costs and environmental impact based on carbon dioxide (CO<sub>2</sub>) emissions.



The energy efficiency rating is a measure of the overall efficiency of a home. The higher the rating, the more energy efficient the home is and the lower the fuel bills will be.



The environmental impact rating is a measure of a home's impact on the environment in terms of carbon dioxide (CO<sub>2</sub>) emissions. The higher the rating, the less impact it has on the environment.

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### Estimated energy use, carbon dioxide (CO<sub>2</sub>) emissions and fuel costs of this home

	Current	Potential
Energy use	253 kWh/m <sup>2</sup> per year	224 kWh/m <sup>2</sup> per year
Carbon dioxide emissions	10.15 tonnes per year	8.91 tonnes per year
Lighting	£122.25 per year	£62.69 per year
Heating	£1090.10 per year	£992.34 per year
Hot water	£162.62 per year	£145.82 per year

Based on standardised assumptions about occupancy, heating patterns and geographical location, the above table provides an indication of how much it will cost to provide lighting, heating and hot water to this home. The energy use includes the energy used in producing and delivering the fuels to this home. The fuel costs only take into account the cost of fuel and not any associated service, maintenance or safety inspection. This certificate has been provided for comparative purposes only and enables one home to be compared with another. Always check the date the certificate was issued, because fuel prices can increase over time and an older certificate may underestimate the property's fuel costs.

To see how this home can achieve its potential rating please see the recommended measures.

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### Summary of this home's energy performance related features

The following is an assessment of the key individual elements that have an impact on this home's performance rating. Each element is assessed against the following scale: Very poor/Poor/Average/Good/Very good.

Element	Description	Current performance	Environmental impact
Main walls	Solid brick (as built)	Poor	Poor
Main roof	Pitched, 100mm loft insulation	Average	Average
Main floor	Uninsulated solid concrete (assumed)	-	-
Windows	100% Double glazed or better. Pre-2002	Average	Average
Main heating	Oil boiler	Average	Average
Main heating controls	Programmer, TRVs and bypass	Poor	Poor
Secondary heating	LPG fire	Very poor	Very poor
Hot water	From main system	Poor	Poor
Lighting	5% of lighting provided by low-e bulbs	Very poor	Very poor
<b>Current energy efficiency rating</b>			<b>F : 36</b>
<b>Current environmental impact rating</b>			<b>F : 36</b>

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## Recommended measures to improve this home's performance ratings

The measures below are cost effective. The performance ratings after improvement listed below are cumulative, that is they assume the improvements have been installed in the order that they appear in the table.

Lower cost measures (up to £500)	Typical savings	Performance ratings after improvements	
		Energy efficiency	Environmental impact
Upgrade loft insulation to 250mm	£29.00 per year	F : 37	F : 37
Replace all non-low-energy lightbulbs	£41.00 per year	E : 39	F : 38
Sub-total	£70.00 per year		
<b>Higher cost measures (over £500)</b>			
Improve to programmer, room stat and TRVs	£62.00 per year	E : 41	E : 40
Upgrade existing oil boiler to condensing boiler	£43.00 per year	E : 43	E : 42
Total	£175.00 per year		
<b>Potential energy efficiency rating</b>		<b>E : 43</b>	
<b>Potential environmental impact rating</b>		<b>E : 42</b>	

## Further measures to achieve even higher standards

The further measures listed below should be considered in addition to those already specified if aiming for the highest possible standards for this home.

Fit 50mm internal insulation to main wall	£300.00 per year	D : 55	E : 54
Add a photovoltaic system (25% of roof)	£43.00 per year	D : 58	D : 57
Total	£518.00 per year		
<b>Enhanced energy efficiency rating</b>		<b>D : 58</b>	
<b>Enhanced environmental impact rating</b>		<b>D : 57</b>	

Improvements to the energy efficiency and environmental impact ratings will usually be in step with each other. However, they can sometimes diverge because reduced energy costs are not always accompanied by reduced carbon dioxide (CO<sub>2</sub>) emissions.

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## About the cost effective measures to improve this home's performance ratings

### Lower cost measures (typically up to £500 each)

These measures are relatively inexpensive to install and are worth tackling first. Some of them may be installed as DIY projects. DIY is not always straightforward and sometimes there are health and safety risks, so take advice from an energy advisor before carrying out DIY improvements.

#### Upgrade loft insulation to 250mm

Insulation laid in the loft space over the joists or between roof rafters to a depth of at least 250 mm will significantly reduce heat loss through the roof. The insulation can be installed by professional contractors but also by a capable DIY enthusiast. Loose granules may be used instead of insulation quilt; this form of loft insulation can be blown into place and can be useful where access is difficult. Ensure that the loft space has adequate ventilation and seek advice about this if unsure.

#### Replace all non-low-energy lightbulbs

Replacement of traditional light bulbs with energy saving recommended ones will reduce lighting costs over the lifetime of the bulb, and they last up to 12 times longer than ordinary light bulbs.

### Higher cost measures (typically over £500 each)

#### Improve to programmer, room stat and TRVs

The heating system should have a room thermostat to ensure the boiler switches off when no heat is required. A competent heating engineer should be asked to do this work. Insist that the thermostat switches off the boiler as well as the pump and that the thermostatic radiator valve is removed from any radiator in the same room as the thermostat.

#### Upgrade existing oil boiler to condensing boiler

A condensing boiler is capable of much higher efficiencies than other types of boiler, meaning it will burn less fuel to heat this property. This improvement is most appropriate when the existing central heating boiler needs repair or replacement. Building Regulations apply to this work, so your local authority building control department should be informed, unless the installer is registered with a competent persons scheme<sup>{1}</sup>, and can therefore self-certify the work for Building Regulation compliance.

## About the further measures to achieve even higher standards

Further measures that could deliver even higher standards for this home

#### Fit 50mm internal insulation to main wall

Solid wall insulation involves adding a layer of insulation to either the inside or the outside surface of the external walls, which reduces heat loss and fuel bills. As it is relatively expensive it is only recommended for walls without a cavity, or where for technical reasons a cavity cannot be filled. Internal insulation, sometimes known as dry-lining, is where a layer of insulation is fixed to the inside surface of external walls; this type of insulation is best applied when rooms require redecorating and can be installed by a competent DIY enthusiast. External solid wall insulation is the application of an insulant and a weather-protective finish to the outside of the wall. This may improve the look of the home, particularly where existing brickwork or rendering is poor, and will provide long-lasting weather protection. The External Wall Insulation Association keeps a register of professional installers. It should be noted that planning permission might be required.

#### Add a photovoltaic system (25% of roof)

A solar photovoltaic (PV) system is one which converts light directly into electricity via panels placed on the roof with no waste and no emissions. This electricity is used throughout the home in the same way as the electricity purchased from an energy supplier. The Solar Trade Association has up-to-date information on local installers and any grant that may be available. Building Regulations apply to this work, so your local authority building control department should be informed, unless the installer is registered with a competent persons scheme<sup>{1}</sup>, and can therefore self-certify the work for Building Regulation compliance.

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## General Information

### About this energy inspection

This inspection has been undertaken by a qualified Inspector who has received appropriate training to collect the correct information about the energy performance of homes. This information has been processed by a Government approved organisation to produce the energy performance certificate and the recommendations for improvements in this report. Both the Inspector and the energy performance certificate supplier are regularly monitored to ensure that their work is up to standard.

For clarification of the technical information in this Energy Performance Certificate, please contact the Home Inspector.

EU legislation dealing with Energy Performance Certificates is to be implemented early in 2007. If you wish to re-use this Certificate later, you should contact the scheme of which the inspector is a member to find out if that is possible.

### About this home's performance ratings

The ratings provide a measure of the overall energy efficiency of this home and its environmental impact. Both are calculated using the Standard Assessment Procedure (SAP), which is the Government's recommended system for assessing the energy performance of dwellings. The ratings take into account the home's insulation, heating systems, hot water system, fixed lighting, ventilation, number of windows and fuels used.

Not all of us use our homes in the same way so to allow one home to be directly compared to another, energy ratings are calculated using 'standard occupancy' assumptions. Standard occupancy is based on a home in a central UK location and assumes that during the heating season the home is heated for 9 hours a day during weekdays and 16 hours a day at weekends, with the living room heated to 21°C and the rest of the home at 18°C.

The ratings are expressed on a scale of 1 to 100. The higher the energy efficiency rating the more energy efficient the home and the higher the environmental impact rating the less impact it has on the environment.

Homes which are more energy efficient use less energy, saving money and helping to protect the environment. The cost of providing lighting, heating and hot water to a home with an energy efficiency rating of 100 would be practically zero. Similarly the carbon dioxide emissions from lighting, heating and hot water for a home with an environmental impact rating of 100 would be practically zero.

The potential ratings shown above describe the energy performance of the home assuming all cost effective measures have been installed. For comparison a home built to the 2006 Building Regulations would typically be around the boundary of bands B and C, depending on its type, size and heating fuel.

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## This home's impact on the environment

Carbon dioxide is one of the biggest contributors to the man-made greenhouse effect. We all use energy every day - at home, at work and when we travel. To generate that energy, we burn fossil fuels (coal, oil and gas) that produce 'greenhouse' gases - particularly carbon dioxide - which are changing our climate and damaging the environment. The energy we use for heating, lighting and power in our homes produces over a quarter of the UK's carbon dioxide emissions.

The average household in the UK creates about six tonnes of carbon dioxide every year. There are simple steps you can take to cut carbon dioxide emissions and help prevent climate change. Making your home more energy efficient by adopting the suggestions in this report can help protect the environment by reducing carbon dioxide emissions. You could reduce your emissions even more by switching to renewable energy sources.

## What can I do today?

In addition to the specific measures suggested in this report, don't forget there are many simple measures you can put into action today that will save you money, help reduce your impact on the environment and improve the comfort of your home.

For example:

- Check that your heating system thermostat is not set too high (21°C in the living room is suggested) and use the timer or programmer to ensure you only heat your home when necessary.
- Make sure your hot water is not too hot. Your cylinder thermostat shouldn't need to be set higher than 60°C/140F.
- Turn off lights when not needed and do not leave appliances on standby. Remember not to leave chargers (e.g. for mobile phones) turned on when you are not using them.



Remember to look for the energy saving recommended logo when buying energy efficient products. It's a quick and easy way to identify the most energy efficient products on the market. For advice on how to take action and to find out about offers available to help make your home more energy efficient call 0800 512 012 or visit [www.est.org.uk/myhome](http://www.est.org.uk/myhome)

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## About the Home Inspector

This Energy Performance Certificate is produced by a Home Inspector, who is a member of The SAVAs Certification Scheme (a government-approved certification scheme).

The Home Inspector must provide an objective opinion about the energy efficiency and environmental impact of the property which the buyer, the seller and the buyer's mortgage company must be able to rely on and use.

To become a member of The SAVAs Certification Scheme, a Home Inspector has to:

- pass an assessment of skills, in line with National Occupational Standards; and
- have insurance that provides cover when a Home Inspector is negligent.

The Home Inspector must follow the necessary standards and The SAVAs Certification Scheme code of conduct.

Home Inspector's signature:	
Inspector's membership number:	
Name:	
Qualifications:	FIMBM; DMS; MBII; DipHI
Company name:	County Surveyors
Address:	
Phone number:	0870 000000
Fax number:	
E-mail address:	
Date of making the report:	5 April 2007

### What to do if you have a complaint

If you have a complaint about this Energy Performance Certificate or the Home Inspector who carried it out you should follow the procedures set out below.

- Ask the company who provided the report, (the company named on the front of the report) or the Home Inspector who carried it out to give you a copy of their complaints handling procedure. All companies must have a written procedure and make it available to you if you ask.
- Follow the guidance given in the document, which includes making a formal complaint.

- Companies that provide Energy Performance Certificates must handle your complaint in accordance with their procedure.

You may ask The SAVAs Certification Scheme, The National Energy Centre, Davy Avenue, Knowlhill, Milton Keynes, MK5 8NA to investigate the complaint if:

- your complaint is about an allegation of criminal activity;
- the company fails to handle your complaint in line with their procedure; or
- you are not happy with how they have handled your complaint.