



ABERDEEN
CITY COUNCIL

Thermal Imaging and Home Energy



Aerial Thermal image

Home Energy Web Portal

Aerial Thermal Image

- **Captured thermal image of whole city from air.**
- **First carried out in 2001**
- **Organised updated flyover last year.**



ABERDEEN
CITY COUNCIL

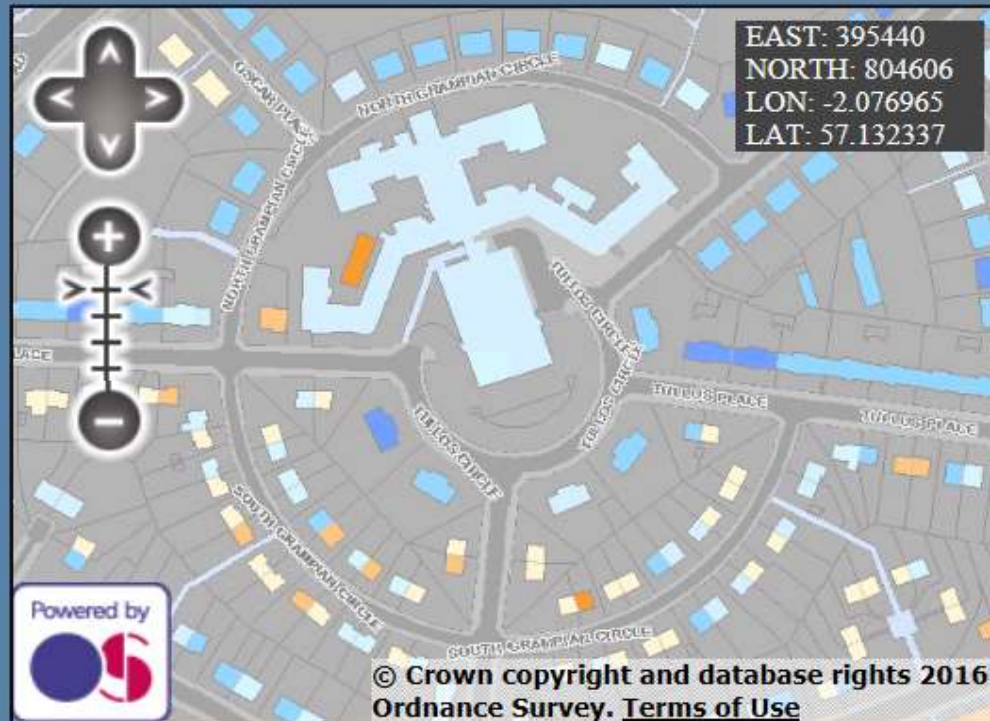
Aerila Thermal Imaging – CITY View



Aerial Thermal Image – Web Search Tool

- <http://www.parthiansystems.co.uk/aberdeen/indexOS.html>

Aerial Thermal Image – Web Search Tool



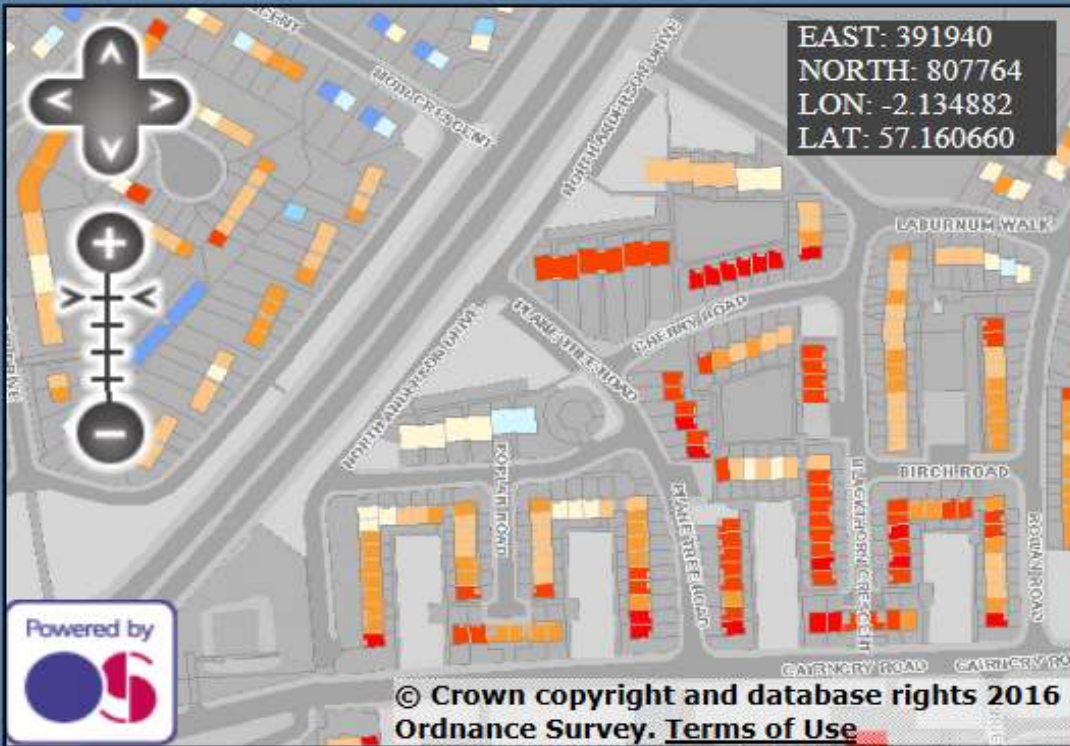
Enter a Postcode

Enter a Placename


Overlays
 Show/Hide Co-ordinate Box
 Show/Hide Heat Loss Layer




Aerial Thermal Image – Web Search Tool



EAST: 391940
 NORTH: 807764
 LON: -2.134882
 LAT: 57.160660

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High  Low
 Heat Loss

Enter a Postcode
 Enter a Placename

Overlays
 Show/Hide Co-ordinate Box
 Show/Hide Heat Loss Layer

Home Energy Web Portal

- **A Pilot Project to determine viability of Thermal imaging as an engagement tool**

Aberdeen Home Energy Web Portal

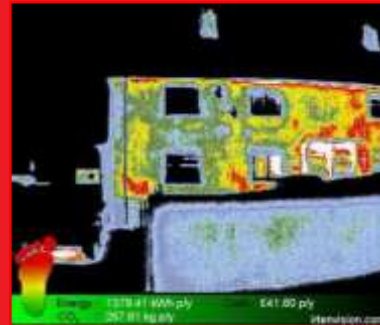
Aims:

- ❑ To utilise infra-red thermology in order to engage householders and encourage action to make their homes more energy efficient, or seek advice on behavioural changes.
- ❑ To develop a web portal for householders to view thermal image of their home, along with energy information including, indicative EPC banding, improvement measures, cost and savings of measures, carbon emissions, further advice and support (next steps).
- ❑ To monitor the effectiveness of web portal in engaging householders
- ❑ To provide lower cost data collection on high volume of dwellings informing Local Authority on energy efficiency, carbon mitigation and fuel poverty, which will enable improved schemes to help meet targets in these area.

The Scheme

- ❑ Capture c5,500 thermal images of dwellings within Aberdeen City

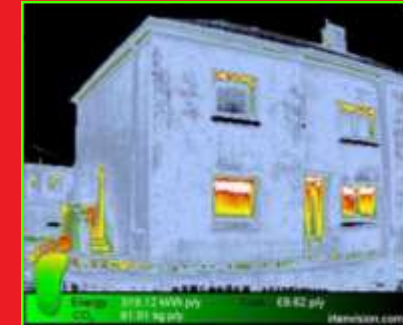
The Carbon Diet Plan



before



diet plan



after

Evaluate

Prioritise and Simulate

Appraisal

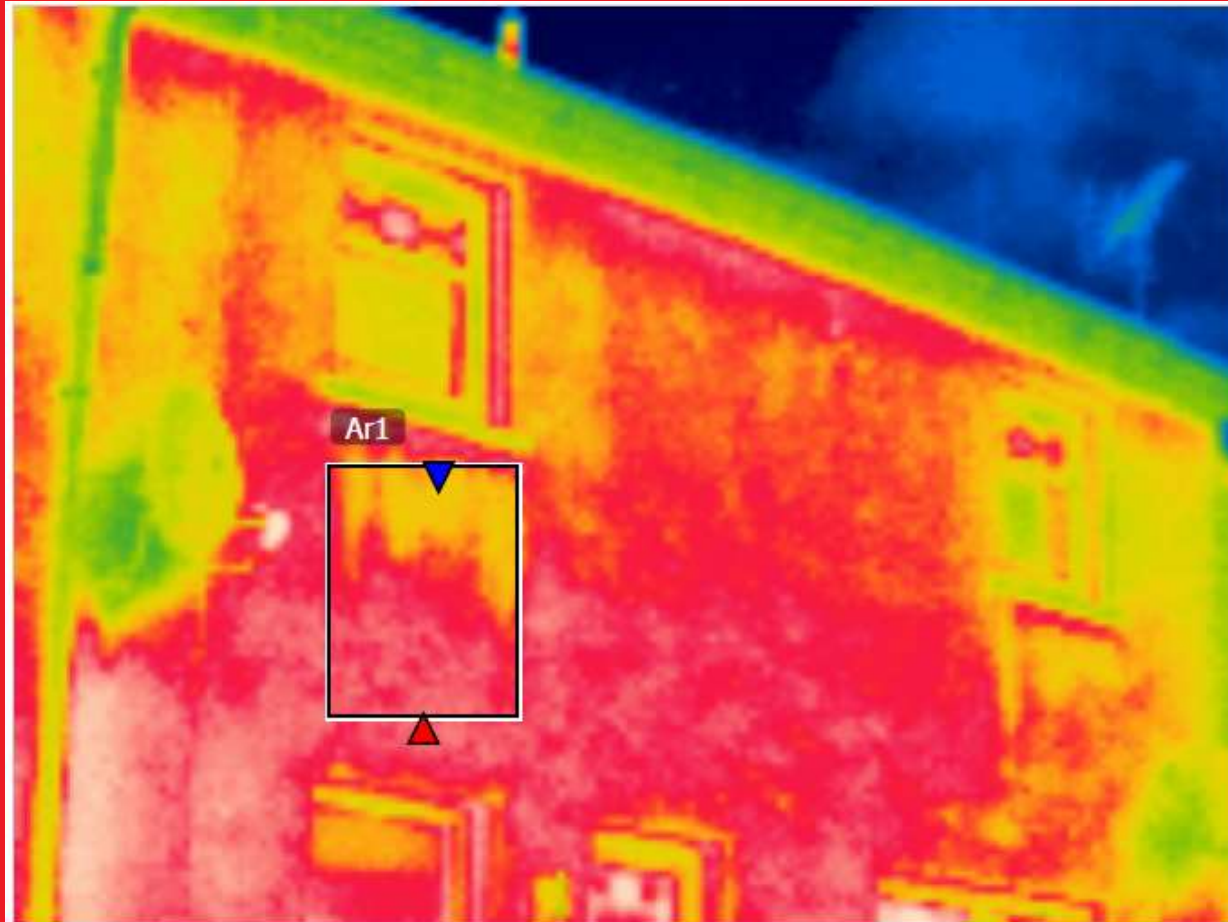
- ❑ Develop web portal to allow householders to view image, along with energy performance and energy saving data
- ❑ Monitor effectiveness of engaging householders with controlled marketing campaigns.
- ❑ Produce energy portfolio to inform Aberdeen City Council

Aberdeen Home Energy Web Portal Pilot

Benefits:

- Make energy visible
- Quick rating/assessment of properties
- Potentially save money
- Make for more informed decision making
- Engage householders
- Inspire householder action ?





Thermal Imaging - Home Energy Web Portal



<http://www.myadhere.co.uk/>

Thermal Imaging - Home Energy Web Portal



The screenshot shows the ADHERE web portal interface. At the top left is the Aberdeen City Council logo. The main header area features a large aerial photograph of Aberdeen with the text "How efficient is your home?" overlaid. A circular inset in the bottom right of the header shows a thermal image of a house. Below the header are four informational sections: "Do you have an invitation code?", "What is ADHERE?", "Has my home been surveyed?", and "What will you see?". Each section contains text and interactive elements like input fields and buttons.

ADHERE
Helping you manage your home energy

Do you have an invitation code?
If you have received an invitation letter from us, please call NHS on 0800 808 2282 for your code.

Have you used the service before? [Log in here](#)

Has my home been surveyed?
Check here to see if we have done a survey on your home energy use yet. Please enter your postcode.

What if I have a question?
We will do our best to provide all the support you need using the service and help understanding what your home report means. [Just visit the help page](#).

What is ADHERE?
ADHERE stands for Aberdeen Domestic Home Energy Reporting Engine. This site allows you to view a thermal image of your home and see where you are losing energy. In addition to this the site will estimate your current EPC and highlight potential savings you could make. As part of the Aberdeen City Council's initiative to help you and other Aberdeen residents better understand their Home Energy efficiency.

Over 7000 homes in the Aberdeen region have been surveyed. If your property has been surveyed the data is available to you free of charge.

If you need help please call Home Energy Scotland on 0800 808 2282 or [click here](#).

What will you see?
If we have imaged your home you will see a heat survey of your home. Along with this will be calculations representing your home energy, with your EPC rating information.

What if the information is wrong?
If the information we estimate for your home is incorrect, for example the type of heating you have installed, you can simply call Home Energy Scotland on 0800 808 2282 and they will update the information for you.

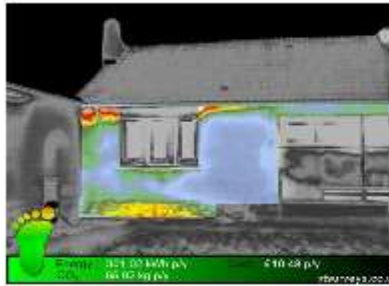
We will then recalculate your savings, update your home report and estimated improvement guides based on the new information. This will allow you to make the best possible decision about any home improvements.

You can [learn more here](#).

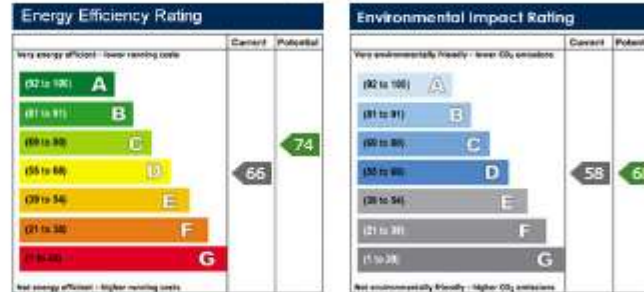
Thermal Imaging - Home Energy Web Portal

28 INCHBRAE DRIVE
AB10 7AA (Semi-Detached House)
Updated: January 01, 1970

HOME ENERGY SCOTLAND
For help and advice
Call Home Energy Scotland
0808 808 2282



[View larger image](#)



Home energy features

Calculations are based on assumptions and SAP2012 formula results.

The following potential savings have been based on calculations and on assumptions about your property.

If these are incorrect please call 0808 808 2282 to update them. If improvement states - No improvement available - this suggests no financially viable improvement is available. In this instance Cost savings refer to the potential saving achievable if the property was upgraded to current building regulations. (Which may be achievable but financially unviable)

Walls

Cavity - Filled ¹

(Heat loss value: 0.35)

(Source: assumptions based on council data)



Change

Improvements

The thermal image has highlighted areas of additional heat loss in red and yellow colours in the above image. This equates to an annual additional cost of £10.48 Per year

Cost savings
£10.48 Per year

Roof

200mm Insulation ¹

(Heat loss value: 0.20)

(Source: assumptions based on council data)



Change

Improvements

Heat rises, and in an uninsulated home, a 25% of heat is lost through the roof. Insulating your loft, attic or flat roof is a simple and effective way to reduce heat loss and reduce your heating bills. We recommend you increase your loft insulation level up to 270mm.

Cost savings
£24 per year

Thermal Imaging - Home Energy Web Portal

Windows

Double Glazed Glazing ⓘ Change

(Heat loss value:)

(Source: assumptions based on council data)



Improvements

Cost savings
£89 Per year

Heating (Condensing Boiler)

Make/model unknown ⓘ Change

(Source: assumptions based on council data)



Improvements

As fuel costs rise, having an efficient and cost effective heating system is vital, and it's one of the main steps you can take to reducing your carbon dioxide emissions. Upgrade your boiler or heat system to an A-rated system to start saving money.

Cost savings
£364 Per year

Lighting

Lighting ⓘ Change

(Efficiency: 0%)

(Source: assumptions based on council data)



Improvements

You can cut your lighting bill and energy use by changing which bulbs you use and how you use them. Houses typically use a mixture of standard light fittings and downlighters or spotlight fittings. Energy efficient bulbs are available for both types of fittings.

Cost savings
£75 Per year

Draught proofing

Draught ⓘ Change

(Efficiency: 100.00%)

(Source: assumptions based on council data)



Improvements

No improvements, draught optimal.

Cost savings
£0 Per year

The information contained on this page is estimated based on the thermal image and assumptions about your property construction, heating type and insulation levels. A visual inspection is recommended to verify this information.

Ask us a question

If you have a question, a request or require any help making decisions concerning any improvements please ask us here...

Outcome:

Increased engagement with householders leading to increased actions, providing more affordable warmth and/or reducing carbon emissions.

Thermal Imaging - Home Energy Web Portal

Response

Neighbourhood	Not Looked up	Looked up	Count	% engaged
Altens	64	17	81	26.5
BRIDGE OF DON	654	338	992	51.7
Cove Bay	171	64	235	37.4
GARTHDEE	1630	312	1942	19.2
HEATHRYFOLD	121	46	167	38
TILLYDRONE	1248	132	1380	8.9
WOODSIDE	89	35	124	39.3
Other	1608	280	1888	17.4
Grand Total	5585	1224	6809	21.9

Outcome part achieved...could have done better

Click to edit Master title style



Questions ?

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www.aberdeencity.gov.uk