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An overview of Home Energy Scotland Reports

Green Heat Installer Engagement Programme

18 September 2024

Net Zero Scotland
Scottish Government

LET'S DO NET ZERO

Presenters

Toby Ross	Green Heat Installer Engagement Assistant Programme Manager, **Energy Saving Trust**	Presenter, Q&A Panel
Lewis Shankie	Scottish Home Renewables, **Energy Saving Trust**	Presenter, Q&A Panel

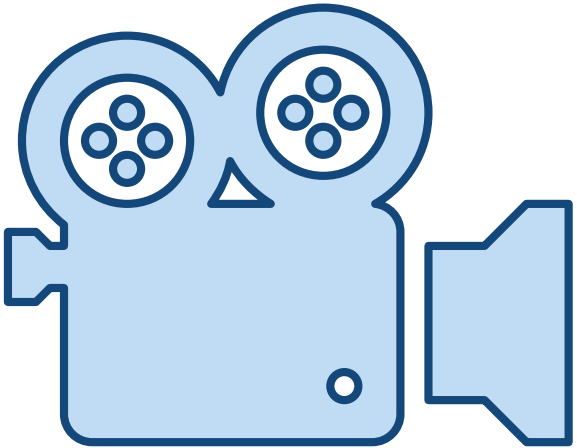
Questions

Type questions into the Questions pane of the control panel.

You can send in your questions at any time during the presentation.

These will be collected and addressed during the Q&A session at the end of the presentations.

Recording



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The Green Heat Installer Engagement Programme

Toby Ross

18.09.2024

Net Zero Scotland
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Green Heat Installer Engagement Programme

- Develop resources for installers to benefit from
- Support installers to become a trusted voice to consumers
- Build awareness of policy developments in the industry
- Collate intelligence and feedback from the supply chain for the Scottish Government

Resources hub

Support hub for small businesses working on energy efficiency, heating systems and micro generation. Find research, case studies and online tools to...

Find out more

Skills, funding and certification

Discover the certification requirements as an installer or assessor looking to carry out work under various schemes.

Find out more

Green heat installer events

We organise networking events, webinars, workshops and information sessions. All free of charge. Find out more about our upcoming sessions.

Find out more

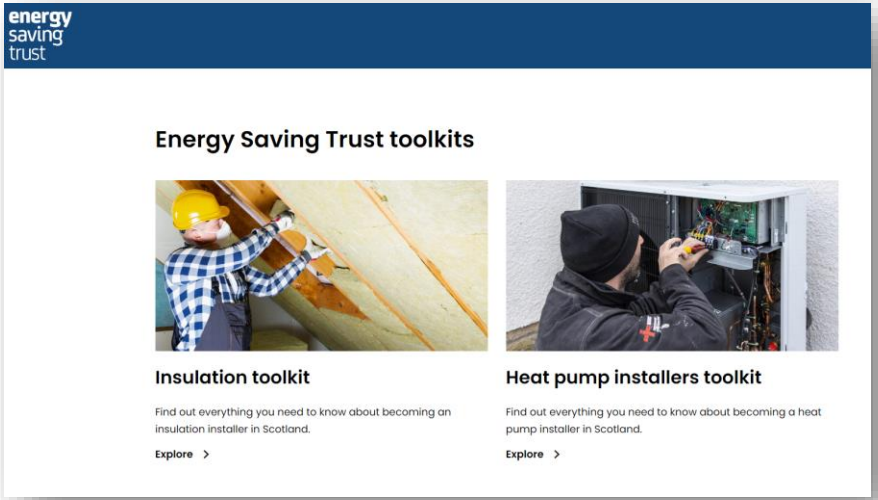
Funding for your customers

Energy Saving Trust helps consumers access funding to make energy efficiency improvements and renewable energy additions to their property.

Find out more

Online resources

- Procurement guide
- Case studies to encourage the industry to upskill
- Webinars
- Clean heat installer toolkits



Mobile Heat Pump Training centre

Delivering training across Scotland

energysavingtrust.org.uk/business/energy-efficiency/green-installer/heat-pump-training

Funding for MCS certification

Scottish Government MCS certification fund for heat pumps :

- For heating engineers with an interest in installing heat pumps (either air, ground or water source)
- The grant pays 75%, up to a maximum of £1,000, of the certification fees
- To apply visit:

energysavingtrust.org.uk/grants-and-loans/mcs-certification-fund

Green Heat Installer Engagement Programme – useful links

Email: GreenInstallerScotland@est.org.uk

LinkedIn Group: www.linkedin.com/groups/5139242

Email updates and quarterly newsletter subscription: bit.ly/2PSatkL

Website: energysavingtrust.org.uk/business/energy-efficiency/green-installer

An overview of Home Energy Scotland reports

Lewis Shankie

Wednesday 18th September 2024

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Agenda

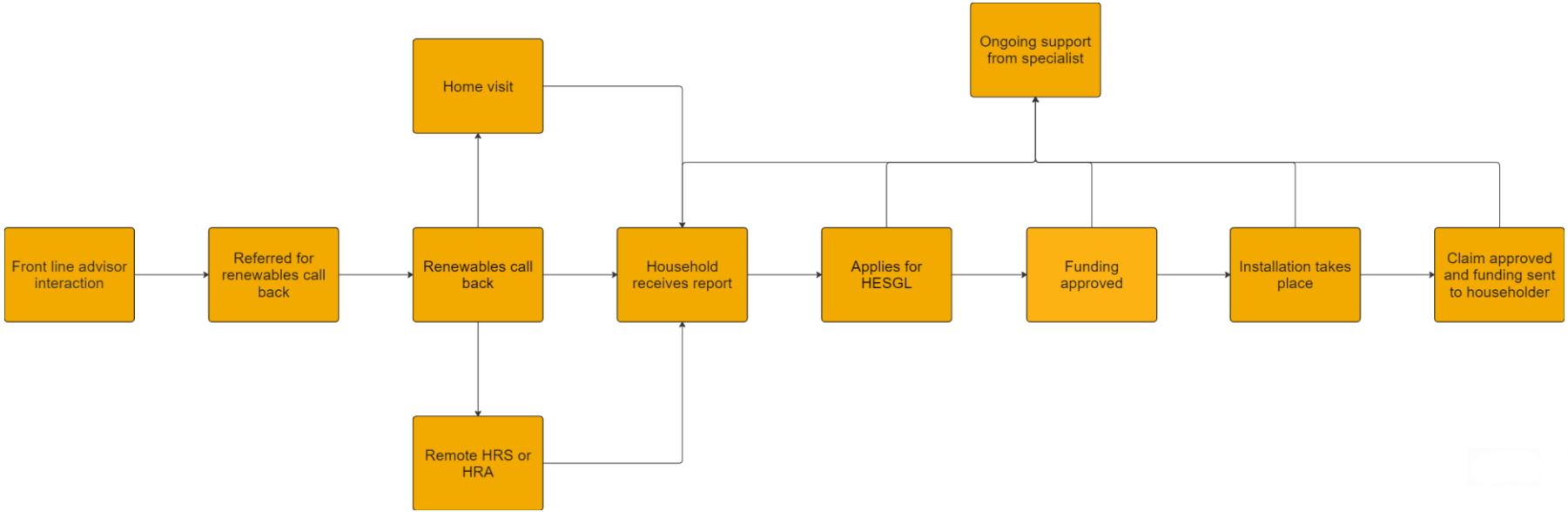
- The role of renewable specialists
- Dynamic Engine
- Home Renewables Selector
- Home Energy Improvements Report
- Reports for Home Energy Scotland Grant and Loan

Renewable specialists

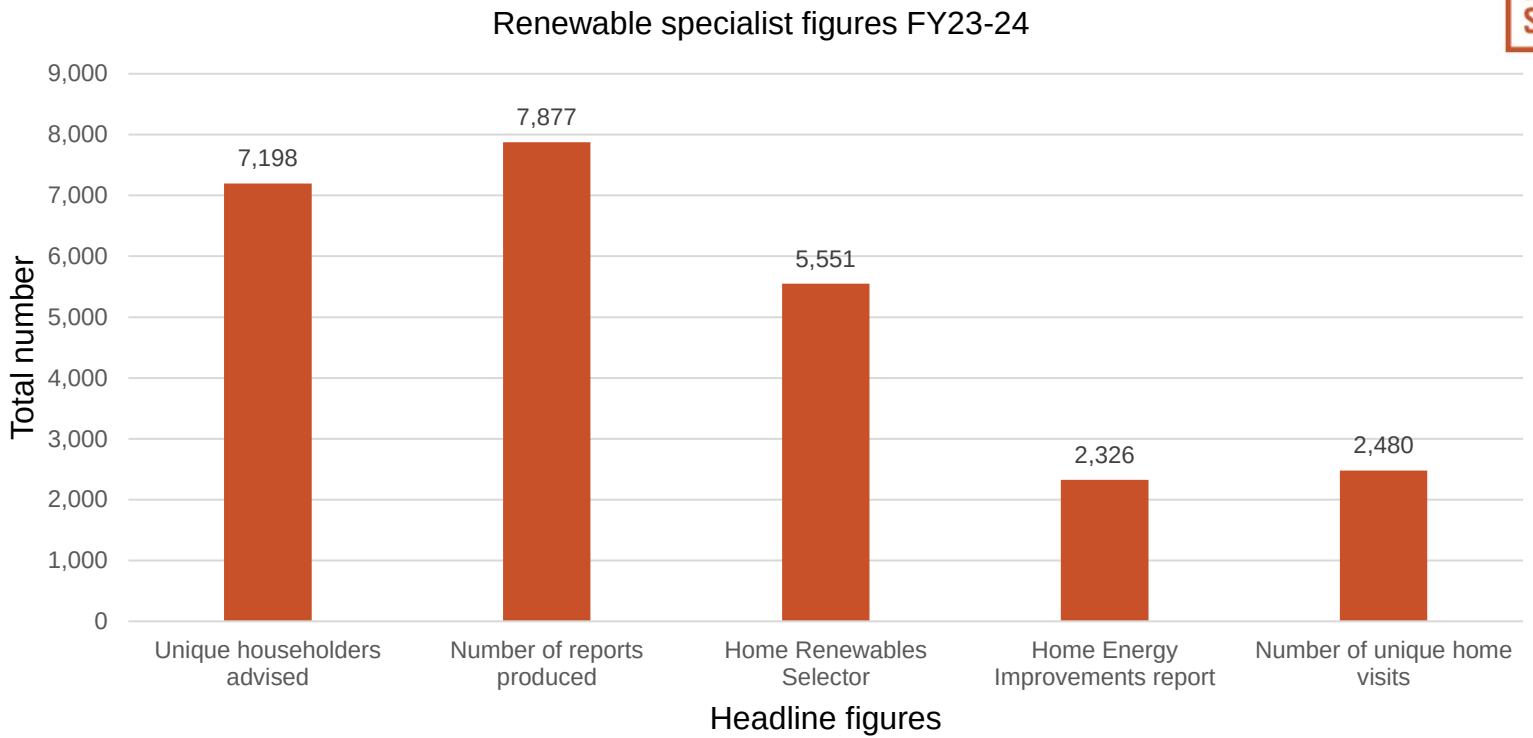
- Cover the whole of Scotland and provide free, impartial and expert advice
- Have three key qualifications to become a specialist

1. Domestic Energy Assessor training
2. Energy Saving Trust's in-house SQA Renewables course
3. Traditional Building Training

Householder journey



Householders advised



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Dynamic Engine

- Domestic energy model
- Builds package of improvements to householder’s budget and goals
- Makes use of as much information as the householder can provide
- Continuously updated to give accurate costs and savings

Home Renewables Selector

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Suitability

Solar photovoltaic suitability	
You answered the following questions about suitability	
Do you have a solar-suitable site?	Yes, I have an unshaded pitched roof facing South between East and West
Suitability	Should be suitable

Solar electricity panels, also known as solar photovoltaics (PV), capture light from the sun and convert it into electricity for your home. Solar electricity panels will generate electricity even on cloudy days – they just need daylight.

As your property has an area of unshaded space where you could install solar electricity panels, this technology should be suitable.

Typical solar electricity systems usually require 10-20m2 of unshaded space. Smaller systems are possible, but less likely to be cost effective.

We recommend using installers and products certified under the Microgeneration Certification Scheme (MCS). Ideally, your installer should also be on a relevant Competent Persons Register (CPR). You should check which scheme installers are registered with and what other protection or guarantees they can offer. You can find MCS installers registered in Scotland using our Renewables Installer Finder tool.

This technology may be eligible for payments through the Smart Export Guarantee (SEG). These tariffs pay you for electricity you don't use and instead export to the network. For more information, see our SEG page.

Visit our funding page to check if you are eligible for funding.

Our Green Homes Network members want to share with you their first-hand experiences of installing and living with renewables. Read their case studies from all across Scotland or request to contact them for further advice.

Find out more:
Visit our solar electricity webpage
Smart Export Guarantee (SEG)
Solar Trade Association
Microgeneration Certification Products and Installers
Approved Certifier of Construction Scheme
Visit our Renewables Installer Finder tool
Visit our Green Homes Network

Ground source heat pump suitability	
You answered the following questions about suitability	
Do you have a hot water tank?	Yes
What is your property's main roof type?	Loft insulated to modern standards (more than 15 cm)
What is your property's main wall type	Timber frame wall
How much outside space do you have	No outside space
Do you have room for a larger than normal heating system (about the size of an american style fridge freezer) in your property, or in a garage or shed?	No
Suitability	Not suitable

Ground source heat pumps (GSHPs) use buried pipes to absorb heat from the ground (the ground stays at a fairly constant temperature under the surface throughout the year). This heat is then used for space heating and hot water. GSHPs need electricity to run, but because they are extracting renewable heat from the environment, the heat output is greater than the electricity input.

As your property has no access to outside space, this technology is not appropriate.

It appears your property does not have enough space for a GSHP system. Space is required for a hot water cylinder and the heat pump's internal unit (similar in size to a large fridge freezer).

Our Green Homes Network members want to share with you their first-hand experiences of installing and living with renewables. Read their case studies from all across Scotland or request to contact them

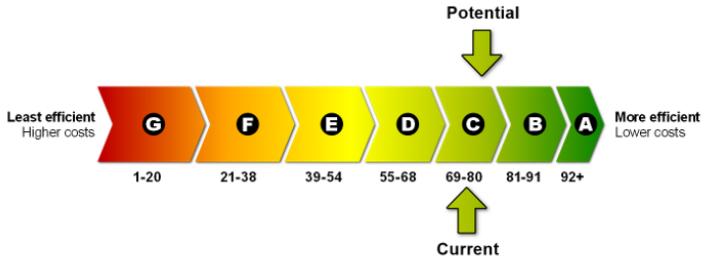
Home Energy Improvements Report

- More detailed report used for in-depth advice
- Import EPC data or in-person home visit by specialist
- More options to customise report to give accurate figures
- Specialist can build their own tailored scenarios for householder’s needs

Scenario 1

Air source heat pump

Your home's energy efficiency



Estimated annual savings and payments with this package of improvements

-£14	7,912 kWh	1,647 $kgCO_2e$
Fuel bill savings	Energy savings	Carbon dioxide savings

Recommended improvements

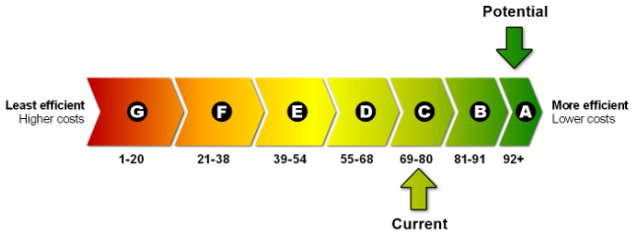
Recommended improvement	Indicative cost	Annual savings		
	£	kWh	$kgCO_2e$	£
Air source heat pump, Oversize radiators, New hot water cylinder, Programmer, room thermostat & thermostatic radiator valves for oversized radiators	£14,100	7,912	1,647	-£14

Details on the fuel costs used in these calculations can be found in the Appendix.

Scenario 2

Air source heat pump + Solar PV + Battery storage

Your home's energy efficiency



Estimated annual savings and payments with this package of improvements

£496	10,196 kWh	2,263 kgCO_2e	£91
Fuel bill savings	Energy savings	Carbon dioxide savings	Additional payments for renewables

Recommended improvements

Recommended improvement	Indicative cost	Annual savings		
	£	kWh	kgCO_2e	£
Air source heat pump, Oversize radiators, New hot water cylinder, Programmer, room thermostat & thermostatic radiator valves for oversized radiators	£14,100	7,912	1,647	-£14
3.5kW solar panels (photovoltaic cells)	£6,500	1,107	644	£248
Electric battery (13.5 kWh)	£8,300	1,177	-29	£263

Details on the fuel costs used in these calculations can be found in the Appendix.

Renewable electricity	
3.5kW Solar panels (photovoltaic cells) and electric battery	
Electricity generated (kWh/annum)	2,863 kWh
Assumed % of generated electricity used on-site	79.75%
Fuel bill savings	£511
Income from exported electricity	£91
Fuel bill savings represent the estimated amount of generated electricity consumed in the property, multiplied by the electricity tariff (22.36 p/kWh). Income from exported electricity represents the estimated amount of electricity exported to the electrical grid, multiplied by a fixed SEG export tariff (20.00 p/kWh).	

Reports for Home Energy Scotland Grant and Loan

Eligible energy reports

If applying for energy efficiency improvements only:
- Pre-EPC only

If applying for renewables improvements only:
- Pre-EPC (only if improvement is on the main recommendation table), or
- Home Energy Improvement Report (HEIR), or
- Home Renewable Selector Report (HRSR; only accepted if chosen improvement listed as most or may be suitable)

If applying for both energy efficiency and renewable improvements:
- Pre-EPC (only if improvement is on the main recommendation table)
- Home Renewables Selector Report (HRSR) recommending the renewable improvements applied for
- Home Energy Improvements Report (HEIR)

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Q&A

You can ask questions by typing them into the **questions** box of the control panel

Panellists:

Toby Ross	Green Heat Installer Engagement Assistant Programme Manager, **Energy Saving Trust**
Lewis Shankie	Scottish Home Renewables, Assistant Manager, **Energy Saving Trust**

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- Email: GreenInstallerScotland@est.org.uk
- LinkedIn Group: https://www.linkedin.com/groups/5139242/
- Email updates and quarterly newsletter subscription: bit.ly/2PSatkL
- Website: https://energysavingtrust.org.uk/business/energy-efficiency/green-installer/
- Heat pump and insulation installer toolkits: https://greenheattoolkit.energysavingtrust.org.uk/

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Thank you for attending