energy saving trust

Infrared heating – technology and applications

Green Heat Installer Engagement Programme

11 December 2024

Net Zero Scotland
Scottish Government

LET'S DO NET ZERO

Presenters

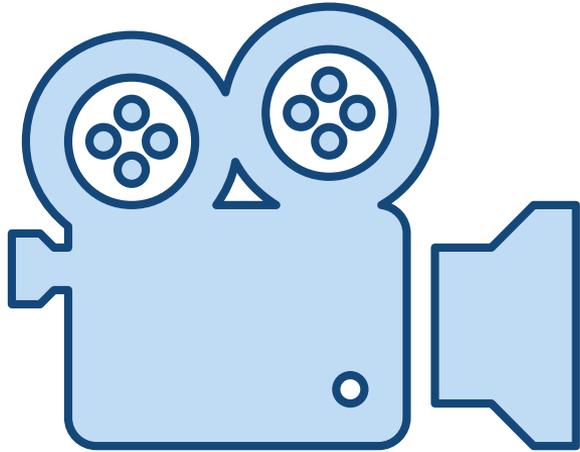| Toby Ross	Green Heat Installer Engagement Assistant Programme Manager, **Energy Saving Trust**	Presenter, Q&A Panel
Craig Herriott	Regional Manager, **Flexel International**	Presenter, Q&A Panel

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

This presentation is being recorded but your name and attendance are hidden from the recording.

The recording will be uploaded and will be made available to watch again.

Details of how to do this will be shared with you via email after the webinar has ended.

Have Your Say

There will be a brief anonymous poll at the end of our presentation and a short feedback survey after the webinar has finished.

Please complete this if you can so we can continue to improve the webinars we offer.

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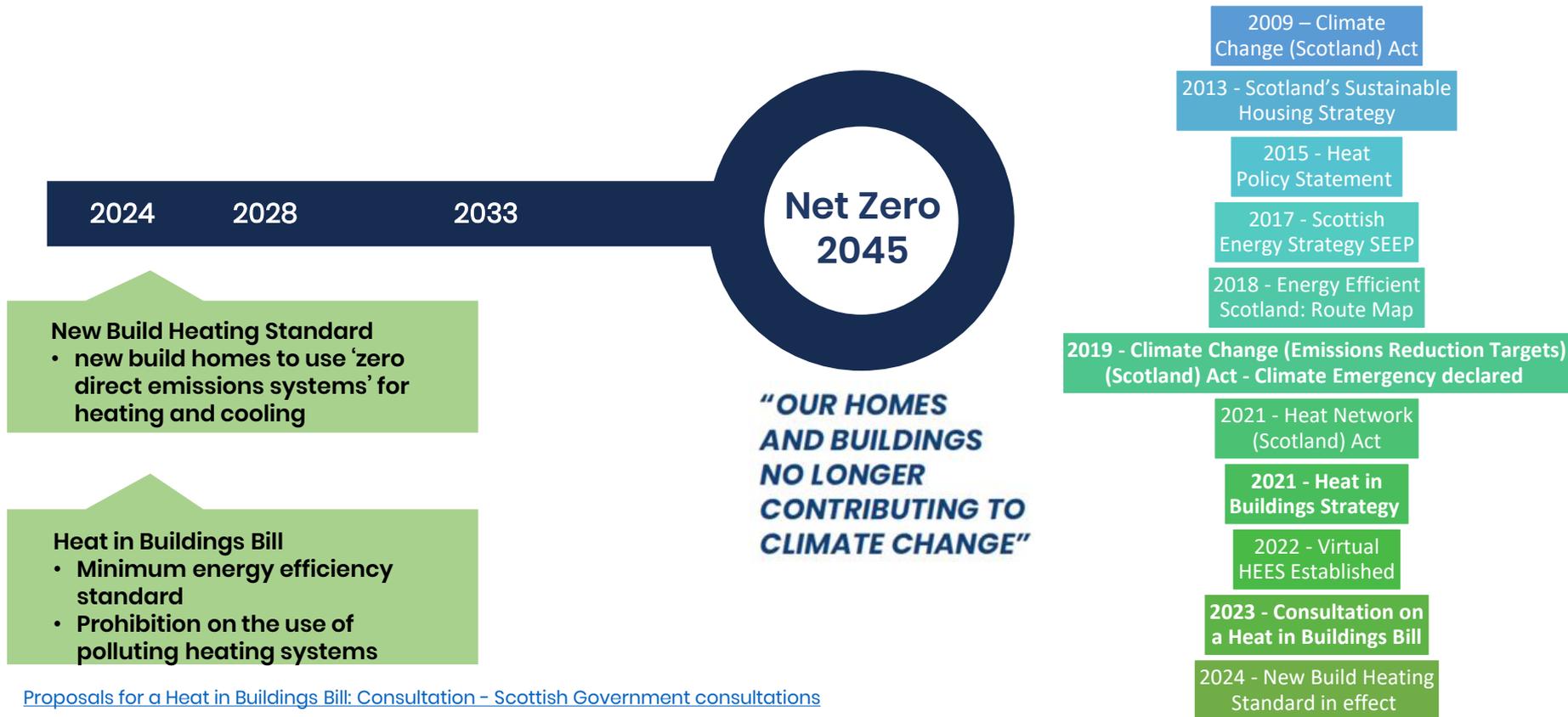
The Green Heat Installer Engagement Programme

Toby Ross | 18.09.2024

Net Zero Scotland
Scottish Government

LET'S DO NET ZERO

Reducing all "greenhouse gas emissions" to 100% by 2045

2024   **2028**   **2033**

Net Zero 2045

"OUR HOMES AND BUILDINGS NO LONGER CONTRIBUTING TO CLIMATE CHANGE"

New Build Heating Standard
- new build homes to use 'zero direct emissions systems' for heating and cooling

Heat in Buildings Bill
- **Minimum energy efficiency standard**
- **Prohibition on the use of polluting heating systems**

Proposals for a Heat in Buildings Bill: Consultation – Scottish Government consultations

2009 – Climate Change (Scotland) Act

2013 - Scotland's Sustainable Housing Strategy

2015 - Heat Policy Statement

2017 - Scottish Energy Strategy SEEP

2018 - Energy Efficient Scotland: Route Map

2019 - Climate Change (Emissions Reduction Targets) (Scotland) Act - Climate Emergency declared

2021 - Heat Network (Scotland) Act

2021 - Heat in Buildings Strategy

2022 - Virtual HEES Established

2023 - Consultation on a Heat in Buildings Bill

2024 - New Build Heating Standard in effect

Heat in Buildings Bill Consultation
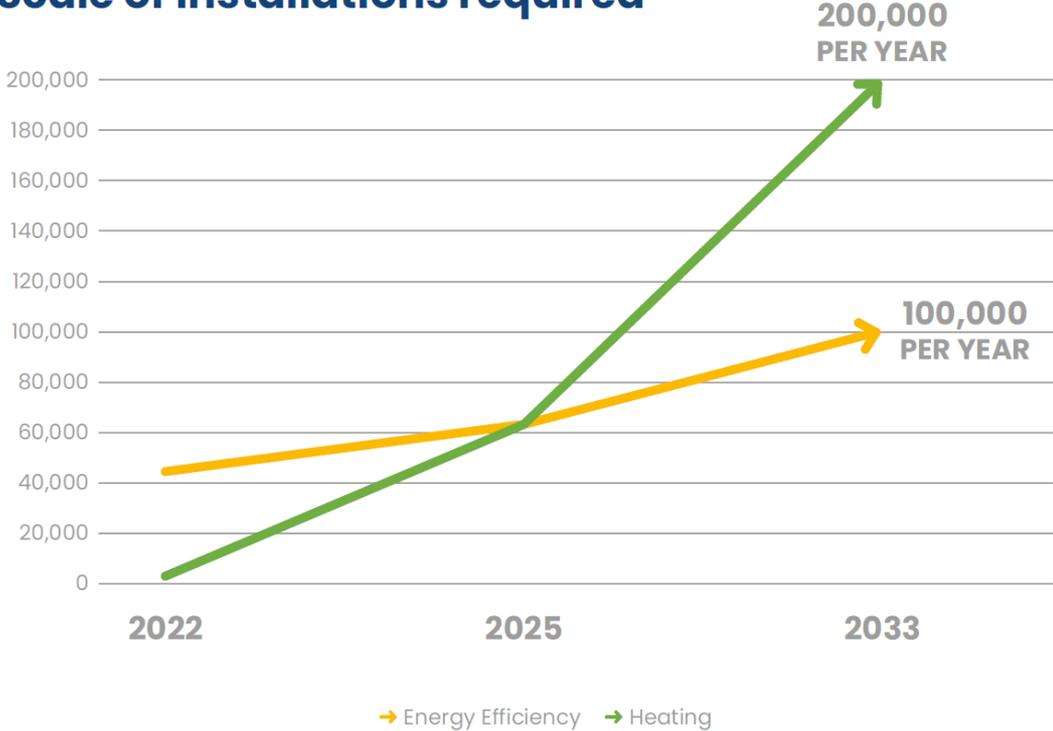
Domestic properties:

Proposals include setting a "Heat in Buildings Standard, which consists of two main parts:

- **Prohibition on the use of polluting heating systems** after 2045 and progressively at certain 'trigger' points before then.

- Make sure that homes meet a reasonable **minimum energy efficiency standard** by the end of 2028 (private rented sector) and end of 2033 (owner-occupiers).

- For the **private rented sector**, the property should meet this energy efficiency standard **before the end of 2028** even if it has a clean heating system installed.

- For all other **privately owned homes**, the property should meet this energy efficiency standard **by the end of 2033** – <u>unless</u> the property has installed a clean heating system by then.

Domestic energy efficiency installations

Scale of installations required

200,000 PER YEAR

100,000 PER YEAR

Energy Efficiency   Heating

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](#)

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

Radiating Quality

Manufacturing in Scotland for over 45 years

Far Infrared Heating
A Smarter Way to Warm Your Space

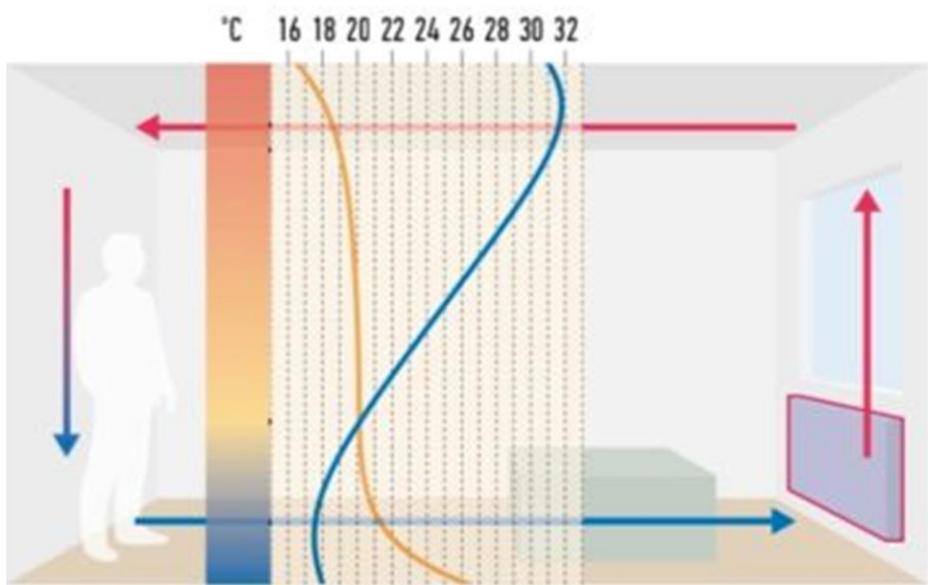*Craig Herriott - Regional Manager Scotland & NI*
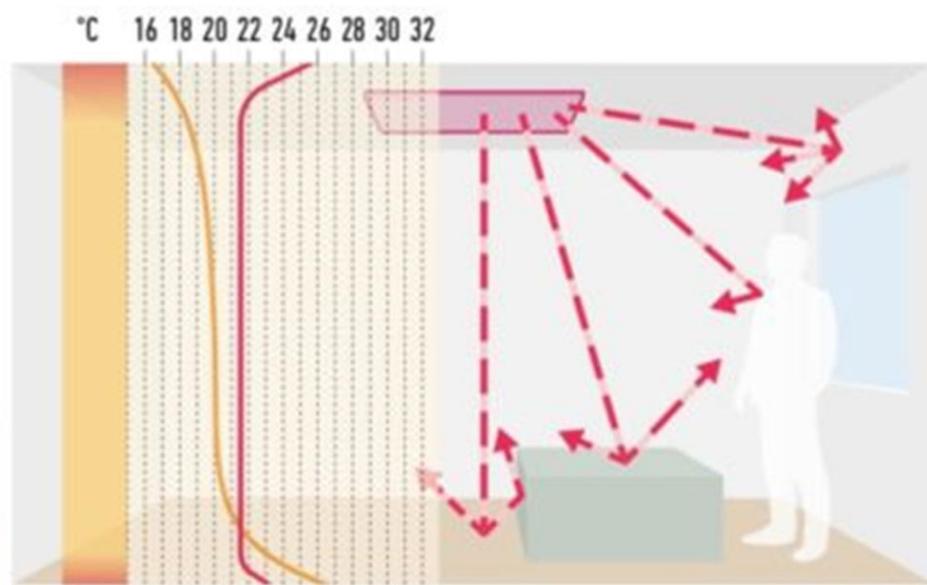
What is Far Infrared Heating?

How Far Infrared Heating Works

Convection heating | Radiant heating by ECOSUN

ideal temperature characteristic ■ ECOSUN temperature characteristic
convection heating temperature characteristic

Benefits of Far Infrared Heating

Far Infrared Product Options

Far infrared heating technology offers a diverse range of products suitable for various applications.

1. **Far Infrared Heating Panels** *Wall-mounted panels:* These are the most common type, offering a sleek and modern design. They can be easily mounted on walls to provide targeted heat. *Ceiling-mounted panels:* Ideal for large spaces, these panels can be discreetly installed on ceilings. *Picture panels:* These panels are used to add a photographic image to the glass panel. *Mirror panels:* Combine the functionality of a mirror with the warmth of a heater. *Pet Cassettes:* Used for cattery and kennels to keep animals warm.
2. **Far Infrared Heating Underfloor Heating Film**: These are used to heat floors, providing a comfortable and efficient heating solution.
3. **Mirror Demista Pads:** used to keep mirrors steam free in wetrooms.
4. **Snake and Reptile Heating Pads:** Used to maintain exotic pet temperatures.
5. **Far Infrared Heating Blankets:** These blankets can be used to warm specific body parts, such as shoulders or knees.
6. **Far Infrared Heating Saunas:** These saunas use far infrared technology to provide a relaxing and therapeutic experience.
7. **Far Infrared Heating Lamps:** These lamps can be used to provide localized heat in specific areas.

Installation and Maintenance

<u>Installation</u>
- Professional Installation: While DIY installation is possible, it is always highly recommended to hire a qualified electrician to ensure safe and efficient installation., especially at the fuse box and if a Contactor is required to be installed.
- Key considerations for installation:
- Placement: Wall-mounted: Ensure the heater is mounted at the correct height, avoiding direct eye contact with the heating element.
- Ceiling-mounted: Consider the room's height and the desired heat distribution.
- Wiring: Correctly wire the heater to a suitable power outlet, following local electrical codes.
- Thermostat: Install a compatible thermostat to control the heater's temperature and energy consumption.

<u>Maintenance</u>
- Far infrared heaters are relatively low-maintenance. However, regular cleaning and inspection are essential for optimal performance and longevity.
- Cleaning: Power off and cool down: Ensure the heater is completely cool before cleaning.
- Gentle cleaning: Use a soft cloth or duster to remove dust and debris.
- Avoid harsh chemicals: Avoid using abrasive cleaners or solvents that could damage the surface.

ANY QUESTIONS?

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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**
Craig Herriott	Regional Manager, **Flexel International**

- **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