GREEN HOME UPGRADES

HOW TO MAKE IT HAPPEN IN NORWICH

Who are we?

Charlie Chamberlain



Retrofit project coordinator

Simeon Jackson



Architectural technologist

What we're talking about today

1. What is retrofit?
2. The problems
3. The solutions
4. How to make it happen

WHAT IS RETROFIT?

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The introduction of new materials, products and technologies into an existing building, usually to improve the energy efficiency of occupying that building.

Retrofit Measures

INSULATION

- Cavity wall insulation
- External wall insulation (EWI)
- Internal wall insulation (IWI)
- Loft or roof insulation
- Under-floor insulation
- Party wall insulation
- Airtightness membrane/taping

HOT WATER

- Hot water cylinder jacket
- Cylinder thermostat
- Thermal store

MICRO-GENERATION AND RENEWABLES

- Air source/ground source heat pumps (ASHP/GSHP)
- Solar panels (PV)
- Micro wind generation
- Solar water heating (solar thermal)
- Energy storage



HEATING

- Heating controls (e.g., remotely controllable thermostats, zone controls, smart radiator valves
- Infrared panels
- HHRSH (modern storage heaters

VENTILATION

- Mechanical ventilation with heat recovery (MVHR)
- Demand controlled ventilation
- Background ventilation
- Natural and purge ventilation

LIGHTING

- Low energy (LED)

WINDOWS & DOORS

- Double or triple glazing
- Energy efficient doors

Source: Energy Specifics

Insulation



Photo: Simeon Jackson

Renewables

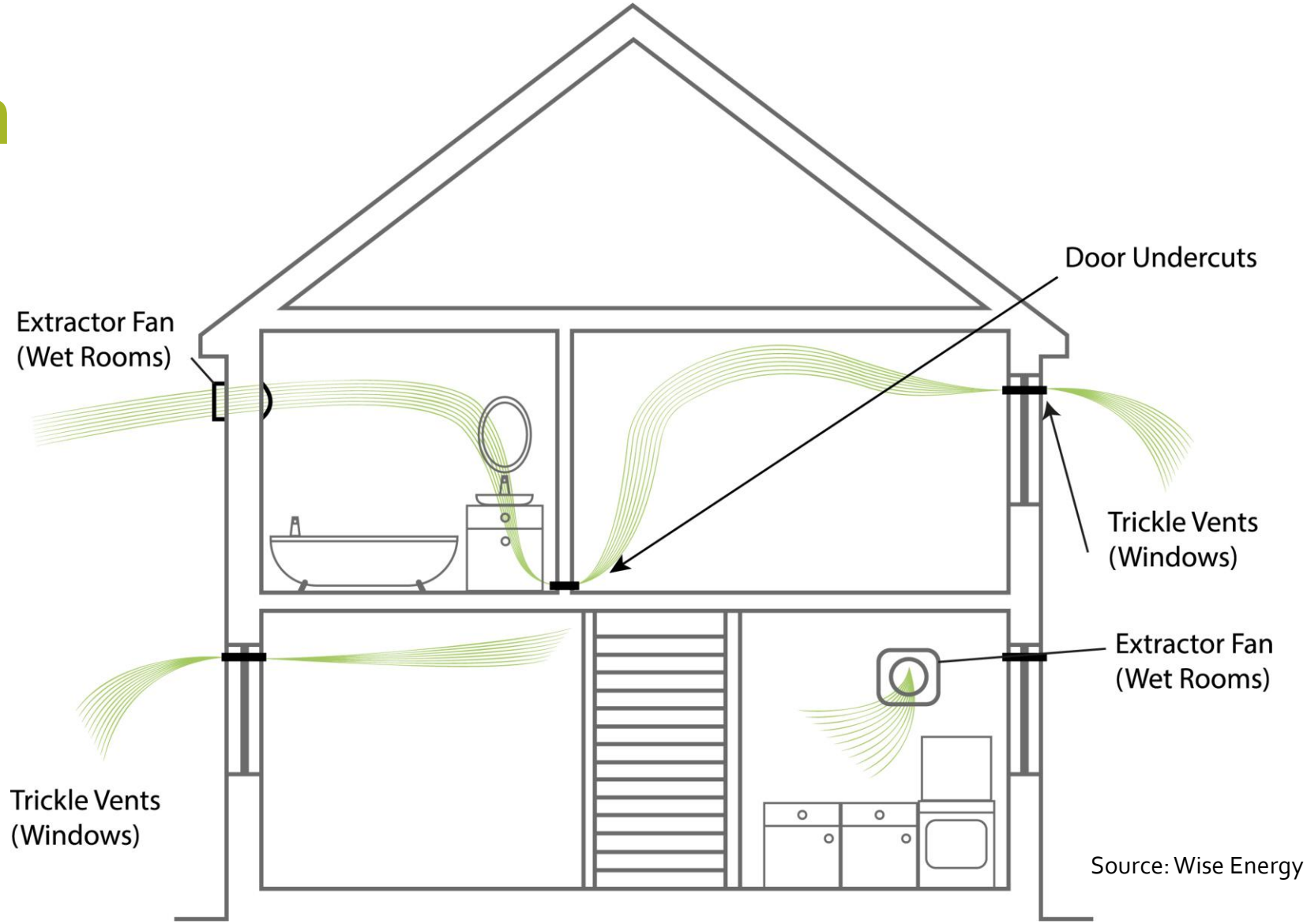


Photo: PEOPLE POWERED RETROFIT

Ventilation



Victorian open fires

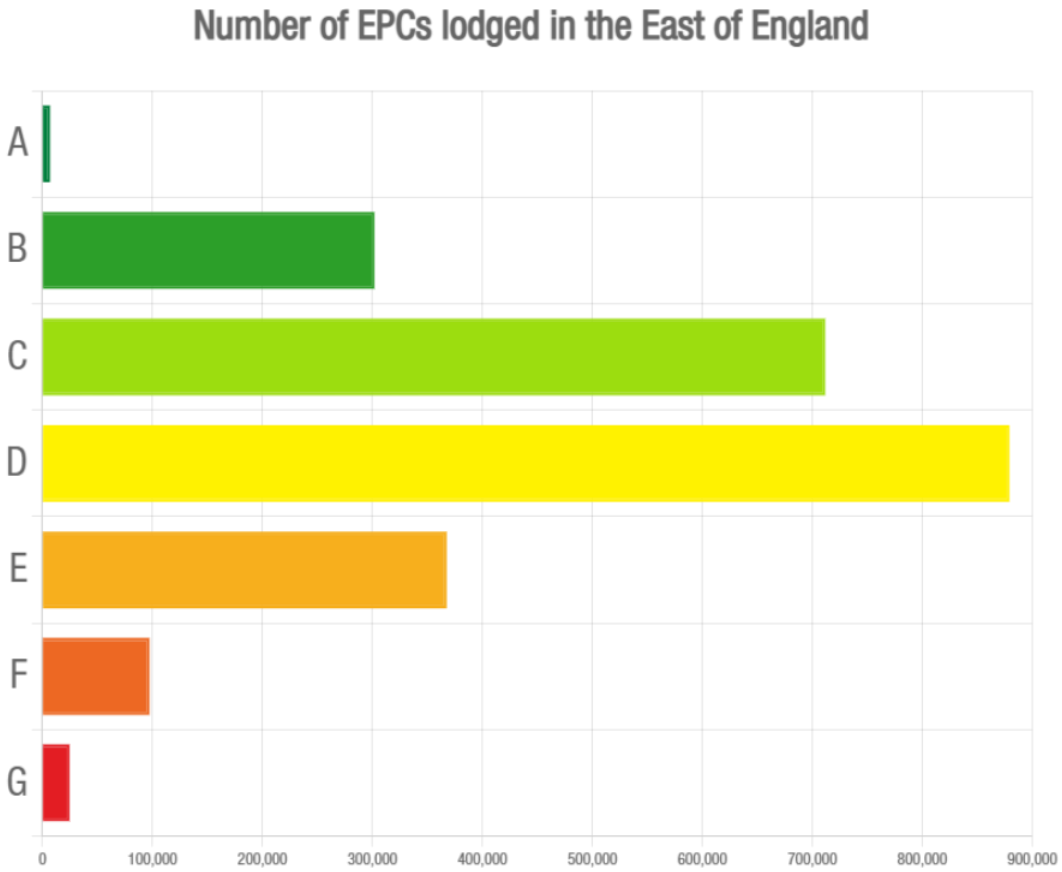


Source: Wise Energy

THE PROBLEM

The barriers to retrofit

The need is urgent







Lack of services for homeowners



Buildings are complex







Not just technical complexity

MCS

TRUSTMARK
Government Endorsed Quality

elmhurst energy
APPROVED
ENERGY ASSESSOR



THE SOLUTION

A Retrofit One Stop Shop

THE SOLUTION

A Retrofit One Stop Shop

RESEARCH

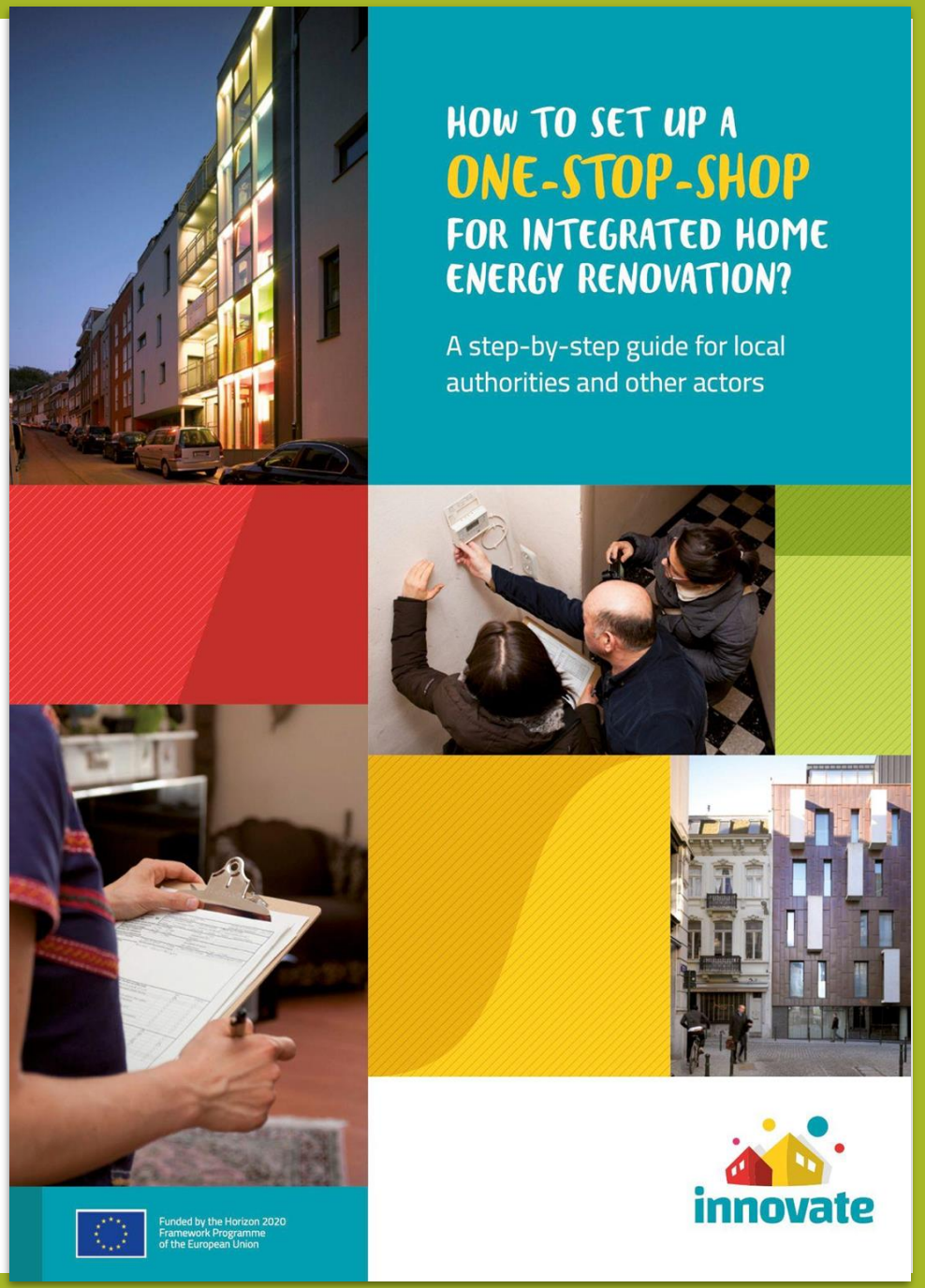
Survey carried out by Norwich Campaign for Warm Homes shows there is a demand for affordable retrofit services

DESIGN

A whole house approach to design ensures that retrofit measures work in harmony

DELIVERY

Experienced retrofit project coordinators project manage properties from assessment to install



Comprehensive retrofit service

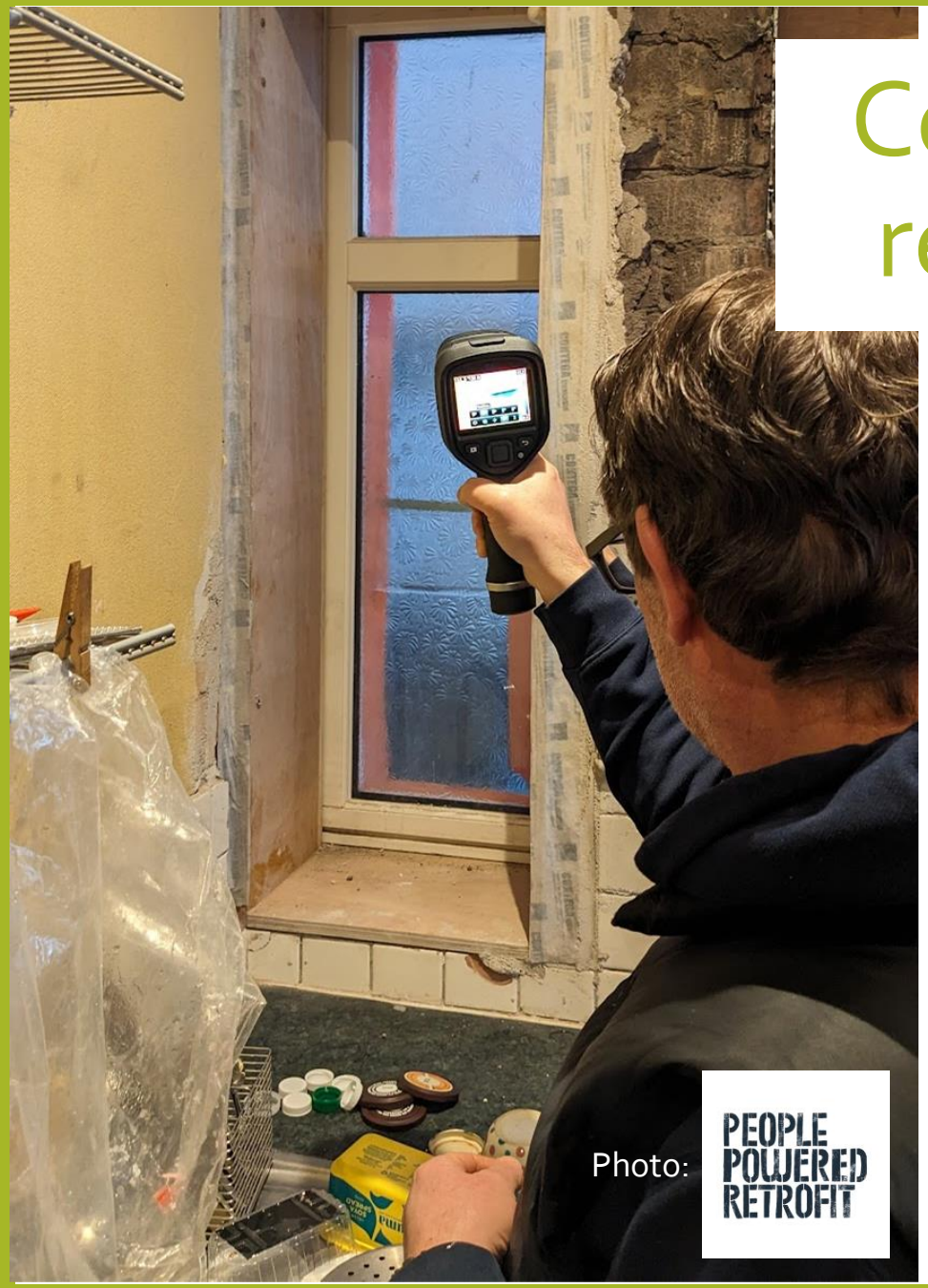


Photo: PEOPLE POWERED RETROFIT





Photo: Simeon Jackson

Retrofit at scale



Image:Google

Cooperative model



Photo: LOCO HOME RETROFIT

HOW TO MAKE IT HAPPEN

Our calls to action

Insulate your loft



Check whether you're eligible for help

- Norfolk Warm Homes

https://norfolkwarmhomes.org.uk/

- Boiler Upgrade Scheme (BUS)

https://www.gov.uk/apply-boiler-upgrade-scheme

- Great British Insulation Scheme (GBIS)

https://www.gov.uk/apply-great-british-insulation-scheme

- Energy Company Obligation (ECO_4)

https://www.ofgem.gov.uk/environmental-and-social-schemes/energy-company-obligation-eco

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Ask your politicians to support retrofit

- https://unitedforwarmhomes.uk/how-guides/how-campaign-2024-general-election



Norfolk PPCs who have already signed the United for Warm Homes pledge:

Jan Davis (Broadland – Green)

Liz Dixon (North Norfolk – Green)

Dr Catherine Rowett (South Norfolk – Green)

Ben Price (Norwich North – Green)

Jamie Osborn (Norwich South – Green)

Adrian Ramsay (Waveney Valley – Green)

Help us develop a One Stop Shop

- 21 members to incorporate as a cooperative
- People who can help set up the cooperative (no retrofit experience necessary!)
- People with expertise of business and finance
- Partner organisations

Join us