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27 October 2023

Dear Mr Mountain,

I am writing to share with you a copy of our annual progress report on the Heat in Buildings Strategy, and which I have laid before Parliament earlier today. I have attached a copy of the report to the adjoining email.

This report is the second annual progress report on the Scottish Government's Heat in Buildings Strategy since it was published two years ago. We have made significant progress in key areas during the past year, including our broad package of delivery schemes, heat networks, building standards and new build regulations.

There remains a huge amount still to do. I want to assure the Committee, especially in light of the recent UK Government announcements about delays to key parts of its own net zero policies and targets, that the Scottish Government remains committed to doing what is necessary to decarbonise our buildings sector – including consulting on proposals for a Heat in Buildings Bill and publishing our Public Engagement Strategy later this year.

I look forward to hearing the Committee's views on this latest publication and to remaining engaged with you as we continue to make progress in delivering the Strategy.

**PATRICK HARVIE**

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Laid before the Scottish Parliament by the Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights under Climate Change (Scotland) Act 2009, Section 62.

27 October/2023

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## **Ministerial Foreword**

Emissions from Scotland's buildings have already reduced by around 20% (on 1990 levels), however the hardest part of the journey is still ahead - to translate Scotland's targets and leadership into delivery.

We must reduce the emissions from our buildings, and yet the cost of living crisis and high energy costs continue to present a challenge to people across Scotland. Switching to clean heating systems will, however, make us less dependent on volatile and increasingly expensive fossil fuels.

I am pleased to publish this report describing our progress against the Heat in Buildings Strategy during the past year. Highlights include launching our new Home Energy Scotland Grant and Loan scheme, the next Warmer Homes Scotland scheme, and our Green Innovation Support Programme (following the publication of our Supply Chains Delivery Plan).

We provided £170 million of funding through our schemes during the last financial year (2022-23), helping over 138,000 households through the Home Energy Scotland advice service, made over 8,000 fuel poor households warmer and easier to heat, and installed over 5,100 zero direct emissions heating systems in homes.

We have also made tremendous progress with our New Build Heat Standard. These regulations will make sure that, as of next April, all new buildings seeking a building warrant will need to install zero direct emissions heating systems.

The Heat in Buildings Bill, which we are committed to deliver during this session of Parliament, remains our priority over the coming year. We will consult on the proposals which will shape that Bill very soon and describe the regulatory framework that will drive the development of heat networks, the adoption of zero emission heating systems and improved standards of energy efficiency.

However, the UK Government still fails to match Scotland's ambition. Its recent decisions to roll back on existing net zero commitments represent a betrayal of current and future generations, and present serious implications for Scotland's climate ambitions. The UK Government must urgently publish its proposals for rebalancing gas and electricity prices, make progress on a clean heat market mechanism (including requirements on suppliers to install zero emissions heating), and bring forward its decision on the future of the gas grid.

Delivering these will have enormous positive impacts in Scotland as well as in the rest of the UK. However, we cannot afford to wait – Scotland must continue to lead the way, and to do everything that we can within our existing powers.

There is so much more to come in the year ahead. We will use the responses and views from our forthcoming consultation to develop a draft Heat in Buildings Bill that can be laid before the Parliament. This will represent a major milestone on the journey to transforming the ways in which we heat our homes and buildings in Scotland.

I remain determined to support the people of Scotland through the heat transition, liberating people from fossil fuel price insecurity, leading to warm and healthy homes and buildings, while tackling fuel poverty and climate breakdown.

**Patrick Harvie MSP**

Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights

## Heat in Buildings Strategy: 2023 progress report

# Context and purpose

Our [Heat in Buildings Strategy](#), published in 2021, sets out the Scottish Government's programme to deliver our climate targets by reducing our dependence on gas and oil for heating our homes and other buildings. This progress report fulfils our requirement under the Climate Change (Scotland) Act 2009 to report annually on progress against the Strategy. Last year's [progress report](#) was laid in Parliament on 27 October 2022.

We have also, in line with the requirements of Section 61 of the Climate Change (Scotland) Act 2009, reviewed the Heat in Buildings Strategy. In order to bring the Strategy up to date with latest developments, the review has concluded that the strategy should be varied, and this will now take place. The Strategy, as varied, will be published in 2024.

The Strategy sets out actions to decarbonise Scotland's building stock in line with our legislated climate change targets. The following sections describe progress made in the development of regulation, policy and the key areas targeted by the funding and advice through our delivery schemes.

We remain committed to making available at least £1.8 billion over the course of this Parliament, agreed in the [Bute House Agreement](#), including:

- at least £465 million to support those least able to pay, delivered through our Warmer Homes Scotland and Area Based schemes,
- £300 million for Scotland's Heat Network Fund,
- £200 million Social Housing Net Zero Heat Fund, investing in a sector already leading the way in the heat transition,
- £200 million Scottish Green Public Sector Estate Scheme, supporting leadership for energy efficiency and heat decarbonisation right across the public sector.

## The regulatory framework

### Regulating to improve zero emission heat and energy efficiency

This year, Parliament has passed the New Build Heat Standard – a critical step towards decarbonising our buildings and reaching net zero. The New Build Heat Standard means that no new buildings constructed under a building warrant applied for from 1 April 2024 will be built with direct emissions heating systems, like gas and oil boilers.

The [regulations](#), laid in June 2023, represent a significant development in the transition to clean heat, ensuring that new buildings are future-proofed with no need for owners to undertake retrofit works.

The introduction of these regulations will build upon the recent uplift in energy standards in Scotland and complement the incoming Passivhaus equivalent standard which will ensure new buildings have the highest level of energy efficiency – reducing

the overall heat demand in new homes and removing poor energy efficiency as a driver of fuel poverty.

We know that a regulated system for existing buildings is critical to drive the changes needed to meet our climate targets. We will therefore consult shortly on proposals for a Heat in Buildings Bill, a commitment made in the [Programme for Government 2023-24](#). This consultation will include options on the best approach to phasing in regulation to drive better energy efficiency standards and transition Scotland's existing buildings to clean heating systems<sup>1</sup> by 2045.

## **Social housing standards**

The social housing sector has been leading the way on energy efficiency in recent years and is well placed to show leadership now on the transition to net zero. The Energy Efficiency Standard for Social Housing (ESSH) was established to help remove poor energy efficiency as a driver for fuel poverty and contribute to achieving the Scottish Government's ambitious climate change emissions reductions targets.

In the past year we have worked closely with the sector to review these targets and to bring them into line with net zero. The review has made good progress and the Scottish Government is planning to consult this year on proposals for an amended standard.

## **Energy Performance Certificates (EPCs)**

We are proposing that EPCs provide more and better information in advance of setting any regulatory standards to meet our net zero emissions targets. Following our first consultation on reforming EPCs in 2021, we completed a second consultation on the finalised proposals on 16 October.

Following this consultation, we intend to introduce revised Energy Performance of Buildings (Scotland) Regulations to the Scottish Parliament in 2024, subject to the necessary legislative vehicle being in place. This would mean that revised EPCs come into force shortly after.

## **Delivery schemes**

Our delivery schemes have continued to provide funding to homes and businesses to install energy efficiency measures and zero emissions heating systems, including targeted support for those in or at risk of fuel poverty. We have also updated some of the schemes during the past year to offer a greater level of support.

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<sup>1</sup> A 'clean heating system' refers to a 'zero direct emissions heating system'. These systems – such as heat pumps and heat networks – do not produce any greenhouse gas emissions at the point of use. Modern, efficient electric storage heaters can also perform the same role, as can electric boilers, and other direct electric heating technologies.

During the 2022-23 financial year we provided £170 million of capital funding and a further £20 million of revenue funding which supported:

- over 138,000 households through Home Energy Scotland advice service,
- 8,800 fuel poor households to be warmer and easier to heat,
- over 5,100 clean heating systems installed in homes,
- 7,570 applications for loans or grants (for energy efficiency measures and clean heating systems),
- 652 homes will be connected to a heat network as a result of funding approved this year,
- 12 public sector buildings to install clean heating systems.

## **Area Based Schemes**

Our Area Based Schemes (ABS) aim to reduce fuel poverty by enabling local authorities to design and deliver energy efficiency programmes in fuel poor areas. ABS focuses primarily upon insulation measures for 'hard to treat' properties, but includes clean heating and microgeneration measures as part of a 'whole house' approach. Since 2013, the programme has supported over 108,000 households to improve the warmth and energy efficiency of their home. ABS has been particularly effective in enabling improvements to mixed tenure blocks of flatted and terraced properties.

In the last financial year (2022-23), Area Based Schemes enabled just under 4,000 households to benefit from warmer homes and lower energy bills. The scheme supported fabric improvements to 3,000 properties, almost 200 replacement clean heating systems and 1,200 microgeneration measures (typically solar PV and battery storage).

For the current financial year, as of October 2023 (ABS11), we have approved council proposals worth £64 million, including 11 ABS special projects worth £8.1 million. Overall, councils report that they are on track with delivering most of these planned projects and local schemes.

### **ABS Case Study: Parkfarm Estate, Inverclyde:**

An example of one such successful project is the Parkfarm estate in Inverclyde. Parkfarm is recognised as having poor housing and is within the 20% most deprived areas according to the Scottish Index of Multiple Deprivation, leading inevitably to fuel poverty and ill health. All houses are council tax bands A-C. This ABS project has been running since 2021, and over 120 homes have received external wall insulation and solar PV to help reduce energy costs. The estimated energy savings per home has been £477 per annum. This year Inverclyde Council plan on upgrading at least another 46 properties in the area.

## **Warmer Homes Scotland**

Warmer Homes Scotland (WHS) is the Scottish Government's national fuel poverty programme designed to help those households living in or at risk of fuel poverty through the installation of measures such as insulation and clean heating systems in

their homes. It has been operating since September 2015 and has helped more than 35,000 households throughout Scotland. The last year has seen steadily increasing demand and during 2022-23 we delivered improvements in 5,478 households, a record number of installations through WHS. For the current financial year (as of September 2023), we have delivered improvements to 3,328 households.

We launched the successor programme to Warmer Homes Scotland under the same name on 2 October this year. The refreshed programme will build on its predecessor's success, with a significantly increased maximum contract value of up to £728 million over up to 7 years, to provide even more support for fuel poor households over its lifetime. Higher grant limits per household allow us to deliver whole-house retrofit and install more measures in individual properties. There is also a greater focus on clean heating where this is both financially and technically feasible.

### **WHS Case Study: Ms E and family, Inverness:**

Ms E was referred to WHS through the Home Energy Scotland advice service. Warmworks replaced her 40-year old oil heating system with an air source heat pump alongside cavity wall insulation, and replacement heating and hot water systems, resulting in a significant increase in the energy efficiency (from EPC E to EPC C).

Ms E says: "We now have a warm home, it is comfortable, we know that everything is up to standard, so we don't need to worry about it. It has taken a huge amount of worry away and it's made the quality of our lives much better because of that and because of the warmth that we have."

### **Home Energy Scotland (HES) Grant and Loan**

The HES Grant and Loan scheme was launched in December 2022 as an update to the HES Loan and Cashback scheme. The scheme is open to all domestic owner-occupiers in Scotland. The new HES Grant and Loan scheme replaced the cashback element of the previous HES Loan and Cashback scheme with a standalone grant. It provides grant funding for zero direct emissions heating up to £7,500 and for energy efficiency improvements up to 75% of the combined cost of the improvements up to the maximum grant amount of £7,500 – so a grant of up to £15,000 in total.

There is also an additional £7,500 available as an optional interest free loan for both zero direct emissions heating, such as heat pumps, and energy efficiency measures. A rural uplift of £1,500 applies to both clean heating, such as heat pumps and energy efficiency grants. This uplift increases the clean heating grant flat rate and the maximum limit of the energy efficiency grant to £9,000.

The new scheme has seen a steady rise in applications received and approved for heat pumps. HES received over 6,000 applications since launching to the end of August 2023, with over 1,900 funding offers issued for heat pump installations in this period. This reflects a 22% increase in funding offers for heat pumps as compared to the previous year under the HES Loan and Cashback scheme. There has also been significant demand for packaged support combining solar panels and battery storage with a clean heating system.

### **HES Case Study: Phillipa, Stirling:**

Phillipa contacted HES, receiving funding to install an air source heat pump in her home. Phillipa said: “we're really pleased to have been able to make such a significant step in reducing our carbon footprint”.

### **SME loan and cashback**

The SME Loan and Cashback scheme provides interest free loans from £1,000 up to £100,000 to small and medium sized Scotland based businesses for the installation of energy efficiency measures and clean heating. SMEs can apply for a 75% cashback grant of up to £10,000 towards the cost of a clean heating system and a further 75% cashback grant up to £20,000 for energy efficiency measures, meaning SMEs can apply for a total of £130,000 through the scheme.

Since its inception the SME loan scheme has paid a total of £50 million in financial support, including £7 million in 2022-23, funding more than 200 projects and providing estimated lifetime savings for SMEs on energy costs of over £65 million. For the current financial year (as of August 2023), we have provided over £3.2 million in funding for over 120 projects. Since we published the Heat in Buildings Strategy in 2021, the number of clean heating systems installed via the scheme has increased year on year.

### **SME loan and cashback Case Study: Ness Soaps, Inverness:**

Ness Soaps, in Inverness, produces Scottish soaps and body products for personal, hospitality and trade customers and supports young people in the Highlands. The business owner used an interest free SME Loan and Cashback grant to help fund energy efficiency measures and an air source heat pump. She said: “Installing the measures has enabled my workshop to be used comfortably all year round. My products are kept in optimum condition because of the consistent temperature created by the air pump and underfloor heating. [...] I believe that had I not received the support and the SME Loan, that the service I would be able to provide would be restricted to the warmer months, as I would have struggled to find the funds to insulate and install the great heating system.”

### **Social Housing Net Zero Heat Fund (SHNZF)**

The Social Housing Net Zero Heat Fund (SHNZF) continues to support the social housing sector deliver clean heat and energy efficiency upgrades across its properties. We have committed to making at least £200 million available to registered social landlords (RSLs) until 2026.

During 2022-23 we awarded over £38 million to 29 projects across Scotland. We also awarded over £2.5 million to six projects during our first application checkpoint for 2023-24. Our second application checkpoint closed in October 2023 and we are



currently reviewing applications. This brings the scheme's total grant support to over £50 million. This represents a substantial (three-fold) increase in funding to the sector since the last progress report.

During the last year, the fund has undergone a review to ensure that it is providing the best support to RSLs in their transition to net zero. The changes, launched in August 2023, took into account feedback from the social housing sector resulting in improvements to both the fund criteria and application process, including:

- the extension of 'fabric first' funding support until 2026,
- increasing the intervention rate to 60% for the installation of clean heating systems,
- the relaunch of development funding for social housing, supporting pre-capital activities such as feasibility studies, stock analysis or research.

### **SHNZF case studies: projects supported this year include:**

A £1.3 million grant was awarded to Argyll Community Housing Association for the retrofitting of three post-war tenements. This project aims to improve the buildings by replacing the existing gas boilers with a communal air source heat pump supported by solar PV and battery storage. In addition, a range of energy efficiency measures will be installed. This project is seen as a catalyst for the wider regeneration of the local area.

Hebridean Housing Partnership has been awarded a grant of £800,000 to replace 110 inefficient storage heating systems with new air source heat pumps. These will all be fitted with Wi-Fi adaptors to give tenants remote access, allowing the tenant to see the exact amount of energy used and budget in advance.

A £900,000 grant was awarded to East Ayrshire council to deliver a 'pathfinder' project that will assess four different approaches to delivering whole-house retrofit in a single phase of works, including assessing the Energiesprong, PAS 2035, LETI (Low Energy Transformation Initiative) and Enerphit approaches to retrofit.

## **Scottish Green Public Sector Estate Decarbonisation Scheme**

The Scottish Government has made £200 million available over the next five years to support the decarbonisation and increased energy efficiency of existing public sector buildings across the country.

The Scottish Green Public Sector Estate Decarbonisation Scheme is the main government-led capital funding mechanism to support decarbonisation of buildings owned by the public sector. The scheme comprises three support elements for public sector bodies:

- the Scottish Public Sector Energy Efficiency Loan Scheme,

- the Scottish Public Sector Non-Domestic Energy Efficiency Frameworks and Project Support Unit; and
- the Scottish Central Government Energy Efficiency Grant Scheme.

During 2022-23, the Scottish Central Government Energy Efficiency Grant Scheme has made awards of £30 million to 33 projects across publicly owned buildings for retrofit heat decarbonisation and energy efficiency projects, and £18 million to 10 projects this financial year (as of September 2023), bringing the total grant support to over £59 million. This represents a substantial increase in funding to the sector since the last progress report.

In order to support a larger scale, estate-wide, holistic approach to decarbonisation, the Scottish Central Government Energy Efficiency Grant Scheme now has an increased funding cap to £5 million (from £2 million) per organisation per year and no longer funds single measure energy efficiency projects.

We have also recently announced that the Scottish Public Sector Energy Efficiency Loan Scheme, which has provided zero interest loans for energy efficiency improvements since 2006, will be replaced with Scotland's Public Sector Heat Decarbonisation Fund, which will issue grant funding to deliver heat decarbonisation and energy efficiency projects. The new scheme is aimed at local authorities and universities.

As a result, our grant funding schemes now cover all of the public sector to take forward heat decarbonisation measures in their buildings. The funding forms part of the £200 million already committed to the public sector for energy efficiency and renewable heating over the next five years.

### **Scottish Central Government Energy Efficiency Grant Scheme case study: NHS Orkney:**

NHS Orkney received a £3.9 million grant to implement a strategic approach incorporating energy efficiency, heat decarbonisation and renewables in 12 of its properties across the islands. These measures include insulation and window and door upgrades, various renewables and clean heating technologies including air source heat pumps, solar PV, electric storage heaters and wind turbines. It is expected that this project will see annual energy consumption savings of 274,000 kWh.

### **Heat and Energy Efficiency Scotland**

A virtual Energy Agency, Heat and Energy Efficiency Scotland, currently operates within the Directorate for Energy and Climate Change with a focus on the delivery of our advice and funding programmes. Work is progressing on the business case for the dedicated body, and in the meantime, we continue to take action now through existing Delivery division workstreams.

# Working with UK and Local Government

## Local Heat and Energy Efficiency Strategies (LHEES)

Local Heat and Energy Efficiency Strategies (LHEES) are at the heart of a place based, locally led and tailored approach to the heat transition. These local Strategies will underpin an area-based approach to heat and energy efficiency planning and delivery. LHEES Strategies will set out the long-term plan for decarbonising heat in buildings and improving their energy efficiency across an entire local authority area.

The Scottish Parliament passed our [legislation](#) in April 2022 which requires all local authorities to publish a Local Heat and Energy Efficiency Strategy and Delivery Plan by the end of 2023 and update them on a five-year basis. We published [guidance](#) regarding what is required to fulfil this duty in October 2022. Accompanying the Strategies will be Delivery Plans, which will be developed in partnership with key stakeholders and provide a strong basis for action for local communities, government, investors, developers and wider stakeholders, pinpointing areas for targeted intervention and early, low-regrets measures.

Local authorities are making good progress with their LHEES ahead of the statutory deadline and are beginning to consult on draft Strategies and Delivery Plans. We continue to engage closely with local authorities and are providing support through capacity building training, in-person visits to raise awareness of LHEES at a senior level and providing feedback on draft LHEES. We are also working to align our delivery programmes with the emerging LHEES Delivery Plans. For example, our Heat Network Support Unit is working with local authorities to take the indicative heat network zones identified through LHEES and develop them into projects through feasibility and business case support.

## UK Government role

Our ambitious plans in Scotland will be affected by actions on the part of the UK Government, whose announcements in September about slowing or dropping some key heat in buildings policies and targets could have implications for Scotland's climate ambitions, including on jobs and investment in clean heat.

We continue to press the UK Government to:

- follow through on its commitment to publish proposals to rebalance energy bill costs, while ensuring those at risk of fuel poverty are supported, so that the running costs of clean heating systems are comparable to fossil fuel systems
- make a clear commitment to the Clean Heat Market Mechanism
- fulfil the commitment for a collaborative approach with the Scottish Government (and other Devolved Administrations), as urged by the Climate Change Committee
- bring forward the 2026 gas grid decision (on hydrogen), removing uncertainty
- continue to support and engage with the Clean Heat Forum.

# Workers and skills

## Support for skills and supply chain

We estimate that with current levels of demand our supply chains for clean heating systems and energy efficiency improvements are largely balanced. However, to make this transition at the pace and scale needed we will require these supply chains to grow substantially, particularly the number of reliable and skilled tradespeople and businesses who can advise upon and install systems and improvements. Businesses in the supply chain will also need to undergo a cultural and business model change, adapting to the practical challenges associated with delivering technologies such as heat pumps, integrating with a wider range of trades, and working to streamline the process for consumers.

In November 2022 we published our [Heat in Buildings Supply Chains Delivery Plan](#), which sets out practical steps that we will take to support the growth of the green heat sector. Alongside this we also published [our response to the Heat Pump Expert Advisory Groups final report](#).

The plan highlights the key role that government can play in supporting this growth and change within the sector by sending market signals about our intentions to which businesses across the supply chain could then respond.

The plan launched a new £17.6 million [Green Heat Innovation Support Programme](#) to support Scottish companies to respond to clean heat innovation challenges.

Supporting Scotland's current and future workforce to develop the skills needed for the net zero transition is a priority for this government. Training provision is already available throughout both the public and private sector, with many colleges across Scotland already offering heat pump training, with more facilities under development. However, to ensure that training is equally available across all geographic areas we have invested in a new [Mobile Heat Pump Training Centre](#), accessible to any college in Scotland, which will be capable of delivering on-site training in remote and rural areas.

We will continue to work with the sector to identify and address any gaps in training provision or support.

## Public awareness

We must bring people, businesses and communities across Scotland with us as we decarbonise our homes and buildings. As we said in last year's progress report, we will publish our Public Engagement Strategy this year.

The strategy will introduce a framework with three key principles for engagement:

- promoting a shared understanding of the heat transition, including how to access support;
- public participation in policy and delivery design to ensure acceleration of the heat transition is done in a just and fair way; and
- facilitating action through improving the consumer journey and normalising the change required across society.

Since last year's progress report, we have been working to develop the strategy, including through a Call for Evidence from December 2022 to February 2023 involving 59 organisations, including industry (installers, manufacturers, energy suppliers), local authorities, housing associations, NGOs, wider third sector, advice service providers and researchers. Based on these discussions we identified three key themes for our approach to public engagement: amplification, collaboration and coordination. The collated insights from recent research we have commissioned are informing the upcoming engagement strategy.

In the past year we have also run two marketing campaigns. In Winter 2022-23, we ran a campaign targeted at those in or at risk of fuel poverty, to increase awareness of the support available through Home Energy Scotland. In March 2023, we ran a marketing campaign to promote our newly launched Home Energy Scotland Grant and Loan scheme. After the marketing campaign, applications saw a 23% increase that month compared to the previous month.

Through both the Home Energy Scotland and Business Energy Scotland services, we continue to fund outreach activities including workshops delivered to community groups and employees to increase knowledge about how they can reduce their carbon footprint in our homes and buildings.

Home Energy Scotland provided over 2,800 local affordable warmth outreach initiatives during the 2022-23 financial year, as well as basic energy advice support and training to over 200 voluntary sector and community groups. Our Home Energy Scotland advice service also helped to support over 138,000 unique households, with over 71,000 of those vulnerable to fuel poverty. So far this financial year (as of September), we have supported over 44,000 households, with over 23,000 of those vulnerable to fuel poverty.

We are planning further national marketing activity from January to March 202, to encourage households to contact HES to discuss funding options for installing a heat pump.

Business Energy Scotland received over 9,000 enquiries from SMEs in Scotland and completed over 1,000 energy assessment reports during 2022-23. It also identified £10.1 million in savings across 365 applications.

# Finance

## Green Heat Finance Taskforce

The independent Green Heat Finance Taskforce continues work to explore innovative solutions to deliver the necessary private sector finance at scale for the heat transition.

The market for green finance is still relatively immature, reflecting the current uncertainty over future longer-term demand and lack of existing performance data in this area. There is, however, movement, inspired by increased individual environmental awareness and business decisions to meet their own Environmental Social Governance (ESG) principles around sustainability of their activities.

Green mortgages, or additional secured loans, have been around for a few years, with lenders increasingly interested in the growth potential in this space. Many lenders are starting to test and pilot additional green borrowing products, with low or even zero interest for existing customers and repayment spread over longer periods of time.

There is also market interest in developing other financial products like property linked finance, where the financing is tied to the building and not an individual, and equity release products which allow people who own their property to release cash for green retrofit by selling a stake in their property. While there is potential in these schemes, they are less developed than secured lending, with very few, if any, specific products available on the market currently. However, the Green Heat Finance Taskforce is considering the state of the existing market and how to unlock opportunities to grow a range of private sector products to meet the different needs of individual property owners.

The Taskforce has met three times so far this financial year, and is working towards publishing its Part 1 Report shortly, followed by a Part 2 Report in early 2024. These reports will provide a range of recommendations that the Scottish Government, working in collaboration with the private sector and others, could bring forward to unlock the scaled growth in private capital for decarbonising heat.

## Heat Networks Policy and Delivery

### Heat Networks policy and legislation

Our Heat Networks Delivery Plan, published in March 2022, will be reviewed by March 2024. The plan outlines how the provisions of the Heat Networks (Scotland) Act (the 2021 Act) sets statutory targets for the amount of heat to be supplied by heat networks – 2.6 Terawatt hours (TWh) of output by 2027 and 6 TWh of output by 2030. The 2021 Act requires Scottish Ministers to set a target for 2035; in September we laid a Scottish Statutory Instrument in Parliament to set this target to at least 7 TWh. We will review the 2035 heat network target and, if appropriate, other heat network targets, once more evidence is available, such as Local Heat and Energy Efficiency Strategies and heat network zones designated by local authorities.

As set out in the last annual report, we remain committed to delivering a regulatory regime for heat networks. The first set of regulations were introduced in May 2023, and require people responsible for public buildings to assess their heat demand and ability to connect to heat networks through Building Assessment Reports (BAR). We also introduced a new duty on local authorities with these regulations to take information from BAR and other sources, including LHEES, to identify and designate areas which are particularly suitable for the development of heat networks. Our intention is to complete the required regulations during 2024 with the aim of coordinating the introduction of new regulations with the UK Government's timeline for introducing UK-wide regulations on heat networks.

## **Scotland's Heat Network Fund (SHNF)**

To meet our ambitious statutory targets for heat networks, Scotland needs to see a significant acceleration in their deployment. Although it is expected that heat networks will become financially viable without grant support in the long-term, government support is currently required to facilitate rollout.

Scotland's Heat Network Fund (SHNF) was launched in February 2022 with a commitment to make £300 million available for investment in zero direct emissions heat networks up to March 2026. This created a clear signal for the market, encouraging organisations to begin project development.

The fund offers long-term support to enable the rollout of new zero emission district heat networks and communal heating systems, as well as the expansion and decarbonisation of existing heat networks across Scotland. Projects that receive support must demonstrate that they align with the objectives of SHNF, showing that they will result in a reduction in carbon emissions, support the eradication of fuel poverty and provide opportunities to grow Scottish skills and supply chains.

SHNF is building on the progress made by the Low Carbon Infrastructure Transition Programme which, although now closed, is providing funding to heat networks currently being built. Across both programmes, there are a total of 10 heat networks under construction which will connect to a total of 4,500 homes, with potential for expansion. These projects are receiving a total of £30 million of grant support.

The SHNF has awarded £1.1 million of grants in the past year. With the pipeline of projects currently in development growing due to the activity of the Heat Network Support Unit, it is expected that annual grant awards will increase substantially over the next few years.

### **Scotland's Heat Network Fund Case Studies: Aberdeen, Motherwell and Glasgow communal heat networks:**

An efficient and cost-effective way to install zero direct emissions heating is through the use of communal heat networks. In 2023, Scotland's Heat Network Fund (SHNF) has provided support for the installation of ground source heat pumps in homes where

the heat collecting pipework in the ground is shared between homes. Although ground source heat pumps have low running costs due to their high efficiency, the installation of ground loops or boreholes can make the upfront cost high. By spreading this cost across multiple homes and with support from SHNF, this enables the installation of highly efficient communal heat networks that align with net zero and deliver savings for residents.

In the past year, SHNF has provided £1.1 million of grant funding to install this type of heating system across three housing developments in Aberdeen, Motherwell and Glasgow, providing heat to a total of 131 homes.

## **Heat Network Support Unit**

Launched in September 2022, the Heat Network Support Unit (HNSU) supports the growth of heat networks by addressing key challenges in the pre-capital stages of heat network development and building capacity across the public sector to deliver successful projects.

The HNSU is sponsored by the Scottish Government, with Scottish Futures Trust and Zero Waste Scotland as core partners who provide a range of support services via the HNSU.

Working primarily with public sector organisations, the HNSU identifies and supports prospective heat network projects. It offers advice and grant funding for pre-capital stages of works, for example developing feasibility studies and outlining business cases. The HNSU also builds capacity and expertise across the heat network sector by advising on best practice and standardisation on developing and running successful heat network projects in Scotland.

In its first year, the HNSU has supported the development of 21 district heating projects across Scotland, for example in Edinburgh, Glasgow, Dundee, and the Highland and Islands. The HNSU has also provided advice and expertise to at least 30 organisations across the public, private and social housing sectors, including councils, universities, housing associations and private developers.

The full list and detail of projects supported by the SHNF and HNSU can be found in the [Scottish Government's Quarterly Heat Network Project report](#), which aims to provide a regular snapshot of the Scottish heat network pipeline and the various opportunities for developers, investors and the wider supply chain.

## **Community schemes**

### **Community and Renewable Energy Scheme (CARES)**

CARES continues to help communities across Scotland engage with, participate in and benefit from the transition to net zero. To date, CARES has advised over 900



organisations and offered £60 million in funding to over 680 projects, supporting the installation of 57.9 MW of renewable energy.

CARES' Community Buildings Fund provides a rolling programme of support to community organisations to decarbonise their buildings and reduce energy bills. This support takes a whole building retrofit approach covering energy efficiency measures, zero emissions heat installations and additional small-scale generation where there is a clear benefit to the community organisation in terms of energy bill reduction.

The Community Heat Development Programme works with community organisations and groups of householders to help develop their ideas for locally generated, low and zero carbon heat project ideas, with applicants receiving support to assess the feasibility of their project and advice on next steps.

## **Future reporting plans**

The Heat in Buildings Strategy included a provisional renewable heat target (RHT). The RHT, as currently defined, is an important measure of our renewable ambitions, but alone, is insufficient to measure Heat in Buildings progress, such as the growth in clean heating systems. As part of the Energy Strategy Just Transition Plan, we are considering alternative approaches. We published a RHT update in May 2023 as part of the Climate Change Plan monitoring report, and will continue to do so on this schedule.

By the end of 2023, we will publish a new Monitoring and Evaluation Framework for the Scottish Government's Heat in Buildings Strategy. For the next iteration of this progress report, we will report against the new Monitoring and Evaluation Framework.

## **Conclusion**

This report summarises the considerable progress we have made in the past year.

Our Delivery Schemes, through £170 million of capital investment, have supported the heat transition in homes and buildings across Scotland.

Delivering Scotland's strategy for heat is a huge challenge and will require support in so many areas, not just capital investment. For example we also need supply chain readiness, a clear regulatory framework, support from the public through engagement, and a plan for Scotland's many unique buildings, such as tenements, and rural areas.

We have developed regulations for new buildings, but now the biggest challenge remains in existing buildings. We know this is an environmental, social and economic necessity, and also a legal obligation to which all parties in Parliament signed up to in 2019. We will shortly seek the views of the people of Scotland on proposals for a Heat in Buildings Bill, and will take account of those views before bringing legislation to Parliament.

We will do this in a way that puts people and communities at the heart of our approach, so no one is left behind. This will be our opportunity to break Scotland's dependence on volatile fossil fuel markets, and achieve greener and more reliable ways to heat our homes and buildings.