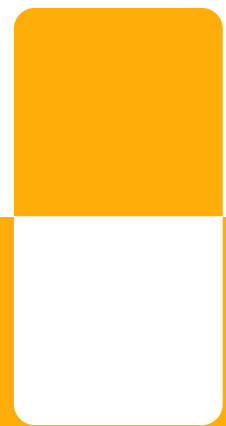


East Lammermuir Energy Efficiency

Community Workshop Report
& Action Plan March 2026



Executive Summary

The programme aims to deliver warm, affordable-to-run homes for residents living within one kilometre of renewable energy and transmission projects in East Lammermuir, using EPCs only as supporting evidence rather than the primary goal. Residents expressed a need for trusted advice, quick and visible improvements, and an approach that respects heritage and planning constraints. An example programme is set out for how this could be achieved.

To provide value for money, this programme proposes a house-archetype strategy that creates repeatable retrofit packages while allowing flexibility for more complex properties. A Project Officer will be appointed as the single, trusted point of contact to coordinate resident support, planning engagement and early delivery activity.

In the first twelve weeks, the focus will be on low-disruption improvements such as draught-proofing, simple heating-control upgrades and loft-insulation top-ups, while archetype surveys and planning pre-application discussions are initiated. The programme will follow PAS-aligned assurance processes through the delivery partner, using the Home Energy Model when available. It will also integrate support from schemes such as Home Energy Scotland and Warmer Homes Scotland to maximise available funding for residents.

1. Introduction

1.1 The EGLI project and community benefit

The Eastern Green Link 1 project (EGL1) EGLI is a 196km long high voltage direct current (HVDC) link from Torness, East Lothian to Hawthorn Pit, County Durham.

In Scotland SP Energy Networks are providing a community benefit package of £4 million to the East Lammermuir community. The East Lammermuir Area has a cluster of renewable energy and transmission projects, and this report aims to guide spend of all new community benefits associated with them.

As part of the EGLI Community Consultation, The East Lammermuir Community Council has identified four community priorities for the spend of all new community benefits:

1. All properties within one kilometre of construction works, haul roads or access routes on public roads should be brought up to a minimum of EPC band C, with any appropriate micro renewables included.
2. A useable, effective Active Travel Network of segregated paths should be planned, designed and built – to include at least one safe crossing over or under the A1 and mainline railway towards the coast and Dunbar
3. A public or community transport service should be re-introduced to link the East Lammermuir villages with each other, Co'path and Dunbar
4. An ambitious biodiversity gain plan should be devised, agreed and implemented with maximum use of developer support for local volunteers and other relevant aspects of the plan.

This report focuses on; All properties within one kilometre of construction works, haul roads or access routes on public roads should be brought up to a minimum of EPC band C, with any appropriate micro renewables included.

1.2 Energy Saving Trust role and work to date

Our work has included the following three tasks, with one and two summarised in this report:

1. Carry out desk-based research of local material and information
2. Facilitate an in-person workshop with the local community that brings together key stakeholders.
3. Write a report/action plan to support the delivery of SPEN / EGLI community benefits funding and other funding sources available to the community.

2. Desk based research

2.1 Key research sources

The following key information was reviewed as part of the desk-based research:

- The East Lammermuir Local Area Plan
- Insulate Innerwick FEASIBILITY STUDY May 2025
- East Lothian Heat – Feasibility Study Report
- Feasibility Study at Crowhill
- Local Heat and Energy Efficiency Strategy (LHEES) strategy and action plan
- Martin Hayman Local Heat and Energy Efficiency Strategy (LHEES) Project Officer at East Lothian Council supported the research work with summaries of EPC data, property tenures and heating systems.

2.2 Summary of the desk-based research

- The area is subject to a high number of energy projects and various consultations as part of the energy projects and Local Place Plan work.
- The local community through consultation, and the community council clearly outlined their priorities. Any future consultation needs to focus on tangible deliverables within a 2-3 year timeline.
- There is good understanding of property types, tenures and solutions that can be taken forward. Some of these can be disruptive (internal wall insulation) so residents need to be made aware of works and benefits.
- EPC data is limited to less than half of properties in community council area and these used the old RdSAP methodology.
- There are several heating options including individual property, district heating for small-medium clusters of housing and a larger heat network. Options for residents need to be discussed with them.
- The area is subject to planning restrictions with protected landscapes in the area.

2.3 Key consideration: Energy Performance of Buildings (Scotland) Regulations 2025

Scotland is reforming EPCs further under the Energy Performance of Buildings (Scotland) Regulations 2025, with implementation from October 2026.

Key changes include:

- A new EPC rating system for domestic buildings based on three metric rating system; Heat retention, Heating system and Energy Cost, known as the Home Energy Model (HEM), replacing the single headline rating currently used.
- Shorter Validity of five years instead of ten
- A cloud-based digital register will launch by October 2026 to support the new system and improve data access.

When completing an assessment of a household energy performance, this project should make sure it follows the new EPC rating system to ensure alignment with Scottish Government policy changes and other match funders.

3. Community priority workshop

3.1 Workshop Information

Held at Innerwick Old School / Outdoor Centre on Thursday 9th October
Attendees were a mix of local residents, public servants, technical personal and programmes like Home Energy Scotland.

Having reviewed the available local information and spoken to some of the key stakeholders in the local area, I decided to use the community workshop to focus on two questions:

1. What measures are acceptable for the local community or put simply what would you like installing or improving in your property?
2. What measures can be installed as part of an energy efficiency project?
These are measures that are suitable for the area and property types.

The workshop included a presentation by Energy Saving Trust covering:

- What an EPC is and how you can improve it.
- What the EPC data tells you about the area.
- Key challenge 1: High number of Pre 1919 properties
- Key challenge 2: decarbonisation of Heat
- Fabric first measures options
- Low carbon heating system options
- Solar PV/Thermal and battery storage options

Breakout five groups of 5-6 people spent 20mins per topic discussing:

1. Write down the key challenges of carrying out fabric measures.
Discuss what measures are residents going to want installed?
2. De-carbonisation of heat; Discuss the preference/approach favoured by attendees.
Do you prefer a heating upgrade now or the option to connect to the East Lothian Heat Network ELHN in the future?
3. Should Solar PV/thermal and battery storage be included or offered as an option to properties?

3.2 Community Signals from the workshop

A full set of workshop notes is included in Appendix A of this report. The following key areas of importance were highlighted by meeting attendees.

- **Trusted help:** Residents want a single, trusted advisor who can be contacted easily and who stays involved before, during and after works.
- **Value for money:** Interest in cost-effective solutions and using purchasing power to lower costs across similar homes.
- **Fabric first:** Strong appetite for windows/doors (where permitted), insulation (loft, internal wall, underfloor) and airtightness with ventilation – with sensitivity to heritage.
- **Heat options:** Mixed preferences – some ready for heat pumps; others may wait for a potential heat network; some prefer improved modern electric systems in the interim.
- **Solar & storage:** Broad interest where viable; desire for simple information on tariffs and payback.
- **Planning:** Conservation/listed constraints add time and cost; collective approaches to planning should be explored to speed decisions.

4. Delivery of improvements for households (Action Plan)

4.1 Programme Objectives & Principles

- Deliver warm, affordable-to-run homes for participating residents within 24–30 months, with tangible early benefits in the first 12 weeks.
- Maximise value for money by grouping similar homes (archetypes) into packages, while allowing tailored exceptions for complex properties.
- Minimise disruption and manage heritage/planning risk through early engagement with Local Authority Planning department.
- Provide end-to-end resident support via a single Project Officer and an appointed delivery partner with PAS2035-aligned quality assurance.

4.2 Delivery Model (Pragmatic & Resident-Centred)

What follows is a suggested action plan, but it is stressed that this should be used to inform a locally led approach rather than being prescriptive.

1. **Appoint a Project Officer (single trusted point of contact).**

This post leads resident journeys, coordinates assessments and installs, convenes planning pre-app conversations, manages comms, and escalates issues to the Steering Group and delivery partner.

2. **Use a House-Archetype Strategy for Value for Money**

Segment the 328 homes into archetypes (e.g., stone/rubble pre-1919 cottages; inter/post-war homes; conversions; modern dwellings). For each archetype, pre-design a preferred fabric-first package and typical heating/solar options. Procure on this basis to reduce unit costs while enabling house-by-house adjustments.

3. **Fabric-First, Then Heat, Then Solar/Storage.**

Start with insulation, airtightness and ventilation (and high-performance glazing/doors where permissible). Then deploy the most appropriate low-carbon heating option per home and consider PV/thermal/battery where viable.

4. **Assessments & Assurance.**

Complete moisture/ventilation checks and whole-dwelling assessments. Use HEM as it becomes available for pre/post evaluation. Apply PAS-aligned retrofit coordination and commissioning checks through the delivery partner.

5. Planning Pathway

Secure early pre-application advice for standard measures and build a "pattern book" of heritage-sensitive details (e.g., IWI, conservation-grade glazing) to streamline individual consents.

4.3 Immediate 12-Week Action Plan (Quick, Visible Progress)

1. Recruit and onboard the Project Officer; publish a named phone/email contact for residents.
2. Run a simple sign-up & triage: prioritise households by need (comfort/cost issues, system failures, vulnerability).
3. Commission an archetype survey & procurement pack (fabric patterns, heritage details, QA and performance specs).
4. Hold an initial planning pre-application meeting to agree streamlined routes and required evidence for typical measures.
5. Launch quick wins: draught-proofing; loft top-ups where access is straightforward; radiator/system balancing; basic heating controls and advice.
6. Set up referral pathways and funding blend: Home Energy Scotland grants/loans; Warmer Homes Scotland for eligible households; coordinate offers with the delivery partner.
7. Publish a 2-page Resident Guide: what to expect; typical timelines; who's who; what's funded; how to prepare for installs.

4.4 12-30 Month Phased Rollout

Phase 1 (Months 0-3): Mobilisation

- Set governance; appoint delivery partner; onboard Project Officer; confirm priority list of 328 homes by need and feasibility.

Phase 2 (Months 4-10): Assessment & Design

- Whole-dwelling assessments (HEM-ready); moisture/heritage/ventilation checks; archetype "pattern books" and medium-term improvement plans per home.

Phase 3 (Months 8-22): Fabric First

- Deliver insulation, airtightness, ventilation, and (where consented) glazing/doors. Package works by archetype/area to reduce cost and disruption.

Phase 4 (Months 10-28): Clean Heat & Micro Renewables

- Install air-source heat pumps or improved modern electric systems where appropriate; consider PV/solar thermal/batteries; ensure commissioning and resident handover.

Phase 5 (Months 20–30): Validation & Handover

- Post-works assessment (HEM when available), resident training, warranties, snag resolution; publish outcomes dashboard to the community.

4.5 Heating Pathway – Decision-Making

Situation	Outcome
Property is unlikely to connect to a future heat network	Evaluate an individual ASHP or improved modern electric systems, considering fabric upgrades first.
Property is likely to be in a future network zone	Prioritise fabric upgrades now; prepare for a network connection later; support safe life-extension or contingency replacements for failing boilers.
Where homes cluster well	Explore shared ground-loop or small district options, with clear ownership and maintenance plans.

4.6 Funding & Affordability

To maximise the impact of the community benefit support available in East Lammermuir this project can consider:

- Blending community benefits with available support (e.g., Home Energy Scotland grants/loans; Warmer Homes Scotland for qualifying households) to extend reach of support.
- Use the Project Officer to actively help residents navigate the right scheme at the right time and to prevent "hand-off" fatigue.

Appendix B provides a high-level budget view for typical archetype retrofit packages based on cost ranges provided by the Energy Saving Trust and other publicly available information. This is only an indication and costs for the East Lammermuir area may vary.

4.7 Local Partnerships

It is also recommended that the project explores working with a few partners to enhance delivery and meet some of the communities' secondary social, economic and environmental objectives. These can include:

- Local firms that provide apprenticeships to people from the local area
- People completing training at local colleges to support gaining experience
- Local suppliers that provide local and sustainable materials
- Healthcare providers to help support those with health-related conditions or who need help managing the installation process

5. Key Risks and Mitigations

Here is an example of some of the key risks that should be considered when delivering this type of project. It is recommended that the project team led by the project officer and the appointed work contractor(s) maintain their own RAID logs or project documentation and this is reviewed at monthly intervals during the project.

Risk	Mitigation
Planning / heritage delays	Early pre-application engagement; develop standardised heritage-sensitive details; consider grouped applications.
Contractor availability / quality	Appoint a delivery partner with proven capacity; PAS-aligned QA; resident handover and aftercare; annual service checks.
Limited availability of key materials	Check the appointed contractor can: <ul style="list-style-type: none"> - Diversify their supplier base to avoid single-source dependency. - Engage suppliers early and secure long-term or framework agreements. - Build contingency into procurement schedules and maintain safety stock. - Identify substitute materials or alternative design options
Low engagement or trust	Named Project Officer; clear communications; simple leaflet drops and village pop-ups; use trusted local channels; protect residents from scams.
High costs in hard-to-treat homes	Archetype procurement to lower unit costs; targeted use of grants/loans; explicit remedials allowance (weathertightness, damp).

6. Measuring Success – KPIs & Outcomes

An energy efficiency project should look to establish a set of KPIs and measure performance against outcomes. These can include but are not limited to:

- Resident outcomes: self-reported comfort and bill impacts; "warmth satisfaction" scores; reduction in cold spots/draughts; post-install support satisfaction.
- Technical: pre/post energy demand and running cost estimates (HEM when available); airtightness/ventilation checks; commissioning sheets; fault call-backs within SLA.
- Delivery: number of homes completing "quick wins" in first 12 weeks; number of homes through fabric packages per quarter; average cost per home by archetype; planning consent turnaround time.

7. Conclusion

The East Lammermuir Community Priority Workshop has provided a clear and well-informed foundation for progressing energy efficiency and decarbonisation measures across the 328 homes within the project area.

The insights gathered—from planning challenges and trusted advice needs to residents' views on fabric measures, heating options, and micro-renewables—highlight the importance of a carefully phased, community-focused approach.

The report recommends a whole-house, fabric-first strategy, supported by detailed HEM assessments and dedicated community-facing roles, positions the project to deliver high-quality, future-proofed outcomes.

Early engagement with planning authorities, strong governance structures, and proactive access to external funding streams will be essential to overcoming constraints and maximising the value of the £4 million community benefit fund across the four community priorities.

By adopting these recommendations, the project can deliver meaningful improvements in comfort, affordability, and sustainability for residents while supporting long-term regional energy goals.

Appendix A – Workshop Group Notes (Verbatim)

A1 Fabric measures

Group 1

- External Wall Insulation could be unpopular in an area of stone-built cottages.
- Some properties in the area appear to have external insulation (rendered) but might be social housing or more modern properties.
- Trusted advice from a trusted person is important
- Planning permission in the area is challenging, especially with lots of individual applications. Statutory backlogs at the council are a risk.
- Changing a front door is very difficult in the area due to restrictions.
- How to get quotes from trusted tradesperson. Local couple used renewables installer tool (Energy Saving Trust tool).
- Local couple have had internal insulation which caused minor disruption, “glad we did it, our home is warm and bills lower”.
- Loft and floor is an unknown, but it will depend on the property/owner preferences.
- Windows would be popular. Local issue (drafty) affecting about 50% of properties.

Group 2

- Planning issues for windows in a conservation area
- Access to right advice is important

Group 3

- Planning permission for windows
- You need a proper heating and home engineers to do proper assessments – EPCs are not good enough
- Skateraw Cottages are in a poor state of repair and the big house is listed
- New door and windows would be popular; can people visit properties or see examples to understand the changes.
- A door to door assessment needed because 50% is estimated
- Assess archetypes and do specific studies that can tell you with a high degree of certainty
- Mechanical Heat recovery systems could be considered

- Looking for mass solution per archetype to drive prices down
- R3 might be able to help with purchasing power and use of local companies
- Quick wins are insulation, windows and doors

Group 4

- Engagement of all local residents will be a challenge
- Fear of cost, people will have to contribute. Especially elderly residents
- Dialogue
- Information needed including how much it will save
- £7.5k government funding available
- Random phone calls fear of scams
- Timing, may not want disruption, only need funding when renovations planned and need information ahead of time

Room feedback

- Individual approach needed for each property. EcoCosy programme referenced. It should be a needs basis for each property.
- Trusted support for individual householders
- Social housing/private landlord properties, should they be included (responsibility) and the tenant's benefit.
- Planning, listed properties and a conservation area. Collective approach to speed up projects or does it need to be an individual approach?
- EPC yardstick not suitable for all options
- Condition of properties a concern and gap for remediation costs.
- Right advice and timing to plan works is important
- Trusting the person at the door is giving the right advice.
- Planning permission raised multiple times
- Assessments should include a proper energy assessor and not just a EPC assessor.
- Targets/solutions for different property archetypes.
- Good procurement with larger (collective) procurement to increase savings.
- Windows/doors are popular but expensive for the area with restrictions.

A2 Decarbonisation of heat

Group 1

- Larger district heat network will be challenging. Laying of pipes vs distances a challenge.
- Local couple have ASHP installed and are happy with it.
- Other resident has oil and has just replaced their boiler so happy to wait for a heat network.
- Forms of electrical heating for suitable properties could work.
- ELHN might not happen, needs heat sources
- Interim solutions?
- Other technical solutions, individual/community/larger district
- Give householders the choice
- Available grants from HES will incentivize homes to install ASHPs which will reduce the heat demand and business case.

Group 2

- When will the heat network be available?
- Crowhill example multiple homes joining together
- HES – don't phone out you contact them
- Eco funding is means tested
- HES grants means tested?
- Information needed to make decisions, need clarity on timescales
- Public information provision part of feasibility
- General residents don't have all the information and are frightened of costs
- Where to share information?
- Flu clinics
- More local?
- Trusted people in the community
- Farmers with tenants are going to have people needing simple information (leaflets)
- People might wait for a heat network if knew it would cost less
- System plans to install used boilers in the meantime
- Will people with electric heating go for this if they have to install wet system?
- Electric heating is expensive compared to gas (wet systems)
- Future proofing air to air system (cooling) but no funding
- Insulation = overheating
- Other countries make heat networks work through buy-in and belief

Group 3

- Skateraw shared ground loop system
- We want to know for the heat network what the timeline is? How long is the research?
- Range is tremendous for pipes in the area
- Can we use the time not to stand still and carry on with Home assessments
- Probably happy to see if Heat Network will come.
- House inspections should be about the state of the boilers with plans for those in crisis and/or those with broken boilers
- Non heat network areas need to know and a plan for shared loop or individual ASHPs
- Support to have a plan and design
- Urgency of plans to show what's happening in the next 12 months

Group 4

- Too disruptive to have radiators changed
- Are ASHPs efficient and do I need insulation first?
- Crowhill
- Shared GSHP
- Initiated by Local residents
- Issue was not all on board
- Air source heat pump communal system would be expensive
- Issue of ownership of communal land

Room feedback

- Replacements could be provided by Heat Network project
- Roadmap with low hanging fruit needed
- Trusted person leading this.

- ASHPs are being installed in the area
- Communication of priorities. Cost information and provision. How will this happen and be communicated
- No wet systems what happens?
- Air to air systems – cooling could become important
- Shared systems a feasible but need a body to lead deliver and look after the system
- We shouldn't lose more time and start carrying out assessments. Not just EPCs but boiler lifetime planning
- Plan needed for non-heat network properties.

A3 Solar PV & Battery Storage

Room discussion (due to time restrictions)

- Planning engagement important. Solar PV is installed in the village so in principle yes for solar PV.
- Solar panel efficiency has increased significantly in the last 10 years and it moves an EPC up ~10 points (case dependent).
- Would benefit electric-only properties and/or those with an EV.
- Great payback for homeowners and 0% loans available.
- Batteries would enable access to agile tariffs.
- Embedded carbon needs to be recorded i.e., for materials we could use hemp insulation.
- What will be the supplier + material procurement routes?
- What are the ethics behind the materials?
- Community solutions Solar/wind discussed.
- Solar/battery discussed and case studies needed.
- Solar – ELC relaxed planning restrictions on solar if not visible from the road.
- Community Solar or energy generation to share, ~1 MW.
- Fred Olsen decommissioning two sites; local landowners may host it.

Appendix B – Budget View by Archetype Package

This appendix provides a high-level budget view for typical archetype retrofit packages based on cost ranges included in the workshop documentation. These figures are indicative and intended for early planning and procurement across multiple property types. Actual costs for the area of East Lammermuir might be impacted by a variety of factors which increase or decrease the price ranges provided which are based on Energy Saving Trust main website figure and publicly available cost information.

Pre-1919 stone/rubble cottages

- Internal wall insulation (£8k–£10k)
- Loft insulation (£0.6k–£1k)
- Floor insulation (£1.5k–£3k)
- High-performance glazing/doors (£0.6–£1.2k per window; £1.5–£3k per door)
- Air Source Heat Pump (£8k–£12k)

Interwar / post-war homes

- Cavity wall insulation (£2.5k–£3k)
- Loft insulation (£0.6k–£1k)
- High-performance glazing/doors (£0.6–£1.2k per window; £1.5–£3k per door)
- ASHP or modern electric heating (£8k–£12k)

Modern dwellings

- Loft top-up (£0.6k–£1k)
- Airtightness (£1k–£3k)
- Solar PV (£5k–£8k)
- Battery storage (£8k–£14k)

Converted buildings / mixed archetypes

- Mixed fabric measures
- Ventilation strategy (£1k–£3k)
- ASHP (£8k–£12k)
- Solar PV (£5k–£8k)

Indicative Volume Pricing Bands

Indicative Volume Pricing Bands

- Small batch (5–15 homes): 0–5% reduction in measure costs.
- Medium batch (15–50 homes): ~5–12% reduction.
- Large batch (50+ homes): 10–20% potential reduction depending on contractor availability.

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