

Ownership is Integral

The case for public-civic equity vehicles in a just energy transition

Department for Energy Security and Net Zero, Warm Homes Fund innovative finance call for evidence.

An abridged response from Repowering London and Dark Matter Labs



Summary



The Department for Energy Security and Net Zero (DESNZ) recently put out a call for evidence to gather information and views that will help inform the design of the Warm Homes Fund (WHF) “so that it best meets government aims”.

Specifically, the call sought views and evidence on: the draft aims and scope of the Warm Homes Fund; the strategic opportunities and challenges of utilising government finance to drive forward the deployment of domestic solar, batteries, clean heat and energy efficiency measures; and specific use cases and target groups where the Warm Homes Fund might have the most impact.

This document presents a summary of a response to DESNZ prepared collaboratively by Repowering London and Dark Matter Labs. You can [read our full response here](#)

Our specific interest in the WHF is related to the funding and nurturing of high-capital, high-complexity local energy systems that integrate multiple decarbonisation technologies and are rooted in community ownership.

The WHF strategic case, aims and scope

Q: Do you agree with our assessment of the strategic opportunities, challenges and risks presented by warm homes financial transactions?



Broadly we agree with the overall direction, but there are three fundamental limitations in the assessment that, if left unaddressed, will cause the WHF to underdeliver – and may in some cases actively harm those it's designed to serve:

①

The assessment frames the strategic opportunity primarily in terms of market stimulation: using public capital to de-risk a sector and crowd in private finance that will then deliver benefits to consumers. This is a coherent goal, but it treats ownership as incidental to delivery. The assessment should explicitly address the ownership question and recognise that public capital used to build infrastructure that is then privately owned is not a neutral outcome.

②

Characterising the challenge as primarily one of demand is incomplete.

In our experience working on heat networks and community energy development, the more fundamental constraint is not that households do not want warm, cheap, low-carbon homes but that they do not trust the delivery vehicles available to them. Residents are more willing to connect to a heat network when they have a genuine governance stake in the system and when they can see that the financial benefits accrue locally.

③

Preference for non-subsidised finance risks a structural bias against models most capable of delivering social value. If the fund's default evaluation criterion is return to government, these models will be systematically passed over. This is particularly true of heat decarbonisation in the residential sector in high-density urban areas that will likely be underserved by electrification and have disproportionately higher levels of deprivation. It should be made explicit that some allocation of the fund will operate on a different logic where long-run social and ownership outcomes are weighted alongside financial returns.

Q: What wider loan or equity-based interventions in the warm homes market could unlock demand at scale?



We identify four specific intervention types that could unlock demand at scale within this framing.

- ① **Public-civic equity vehicles.** The fund should offer equity investment into joint venture vehicles co-owned by local councils and community energy organisations.
- ② **Patient long-term debt facilities for community energy vehicles.** A dedicated long-term loan facility – at near-gilt rates, secured against the asset and revenue stream, with twenty-five-to-thirty-year terms – would enable community energy organisations to develop infrastructure at a scale they currently cannot reach.
- ③ **Area-based blended finance with a collective ownership requirement.** Rather than financing individual household upgrades one by one, the fund should test area-based approaches in which an entire neighbourhood or estate is treated as the investment unit.
- ④ **Guaranteed revenue floors for community-owned assets.** Government guarantees or minimum revenue floors, underwriting a minimum income stream from a community-owned heat network or solar scheme for an initial period, would dramatically improve the financeability of these projects without requiring ongoing subsidy.

Q: How should the WHF ensure that it includes an offer suitable for those on low incomes?



The most effective and equitable route to warm homes for low-income households is not individual finance but collective infrastructure that low-income households can access as consumers, not as debtors. This means the £600 million low-income allocation should prioritise:

- **Area-based infrastructure investment in fuel-poor neighbourhoods**, in which the funded asset provides below-market energy to all residents in the area, with targeted tariff support for the most vulnerable households.
- **Health-housing-energy partnerships** that use NHS and social care savings as part of the business case and potentially as co-funders.
- **Grant-loan blends for community energy buildings** that serve low-income populations – community centres, foodbanks, social housing common areas – where the building hosts generation assets that provide cheap power to residents and to the wider neighbourhood.

Q: Do you agree with the proposed list of activities the WHF could support and are there any other types of activities that should be supported?



The list has a significant gap: it treats all activities as happening downstream of the decision to build and the capacity to develop.

- **Pre-development and feasibility;** heat mapping, building surveys, demand analysis, and the technical assessment work that determines whether a project is viable. This is genuinely high-risk work that neither private operators nor community organisations can be expected to absorb without dedicated funding.
- **Governance design and legal structuring;** setting up a non-profit CLG, CBS, co-op., or joint public-civic vehicle requires specialist legal and governance expertise that most councils and community organisations do not have in-house. The fund should support the cost of this work.
- **Community engagement and co-design;** connection rates on heat networks which determine financial viability depend critically on whether residents trust the operator and understand the proposition. Community engagement is not a soft add-on to technical delivery – it is a core determinant of project viability.
- **The next generation of flexible, local energy systems;** The WHF should support local authorities and civic organisations in developing integrated local energy plans that treat the neighbourhood or district as the unit of system design.

Q: Do you agree with the proposed list of groups that the WHF may support and are there any other groups which should be supported?



We would propose two specific amendments and additions that are necessary to make the list fit for purpose:

- ① **Public-civic joint venture vehicles should be added as an explicit eligible group.**
These vehicles are typically structured as non-profit CLGs, CICs, community benefit societies, or co-operatives. They are jointly established by a local authority and one or more community energy organisations to develop and operate local energy infrastructure.
- ② **'Heat networks' in the eligibility list should be amended to distinguish between consumer/community-owned heat networks and privately-operated ones.** A consumer-owned heat network co-operative has financing needs (pre-development grants, long-term patient debt, government equity) that differ substantially from a private heat network operator seeking construction finance.

Heat Networks

Q: How could the WHF support the market growth of heat networks as set out in the WHP?



The WHF can most effectively support heat network development by **enabling a new type of developer: public-civic partnerships in which local authorities and one or more community energy organisations act as co-developers and long-term co-owners**, alongside private heat network developers and operators.

This model is being developed in several locations across the country, including our ongoing work in Newham, London (**Repowered Community Newham**), Lothian Heat in Scotland, and in Tanygrisiau, N. Wales (Tanygrisiau Community Heat).

The WHF should therefore treat consumer and community owned models not as a niche variant of heat network delivery, but as a primary route to scale residential heating decarbonisation. We envision the WHF could support this by:

- Providing dedicated pre-development and feasibility funding for public-civic joint ventures
- Establishing or backing a support 'unit' offering embedded technical, legal and governance expertise to councils and community organisations starting this work
- Offering or guaranteeing capital arrangements on terms that preserve community benefit over the asset life
- Coordinating across local authority areas to enable demand aggregation and network use at scale.

Q: Would investment in heat networks – whether for connection costs, compliance with Heat Network Technical Assurance Scheme requirements, capital support – contribute to the draft Warm Homes Fund aims? When could benefits be realised, and what risks need to be considered?



Investment in heat networks can contribute strongly to the WHF aims – particularly around affordable warmth, decarbonisation of heat, and building local economic capacity – but **only if the ownership structure is designed to ensure those benefits are retained by a combination of local authorities, consumers and local communities**. Heat networks are capital-intensive upfront but, once the debt is repaid, they offer very low operating costs and a stable revenue base.

Network development that is supported by the WHF should require that any investment is conditional on binding governance protections (e.g. asset locks, community veto rights on disposal, and surplus distribution rules), building in step-in rights and transparent mechanisms if governance fails, and making community or consumer ownership a precondition for concessional capital associated with residential heating supply.

Q: Is there a need for finance here, and what are the barriers that prevent the private sector from filling it?



There is a clear and substantial financing gap that the private sector cannot and will not fill on terms compatible with the WHP's public-value goals.

Private capital in this market gravitates towards large, high-density schemes with predictable anchor demand (typically commercial or high-density residential), shorter payback periods, and maximum operational flexibility for the operator. Whilst heat network zoning has encouraged this demand as a market accelerator, it is our belief that this will both delay and discourage the supply of low-carbon heat to existing residential properties, and risk jeopardising the aims and time-bound targets of the WHP.

The barriers to private sector participation in public-purpose heat network models are structural, not incidental:

- Achieving adequate connection rates in residential settings requires sustained community engagement, which private operators do not have an incentive to do at the depth required.
- The governance structures required to maintain consumer benefit are incompatible with private ownership models seeking to maximise returns.
- Feasibility work, legal structuring of public-civic joint ventures, community engagement, and heat mapping are expensive and risky at early stages.

Public and community-interest organisations cannot absorb these costs without dedicated pre-development funding. This is a particularly acute market failure because the social value of getting the development phase right – establishing durable governance, securing connection commitments, future-proofing the heat source – far exceeds what any individual investor would rationally pay for it.

Q: How could government finance address this gap with repayable finance where the government earns a return? Where possible, please describe how this model could work.



The key is to **deploy capital at different stages and in different forms, calibrated to the risk profile and ownership structure of each stage**. At the pre-development stage, grant or returnable grant funding for feasibility, legal structuring and community engagement is appropriate.

This is genuinely high-risk, pre-commercial work where the social returns (schemes that would otherwise never be built, governance that locks in community benefit for decades) vastly exceed the financial returns.

Any structure in which government earns a return should include clear conditions on ownership and governance at the point of finance. Equity stakes by government or a public development institution in a joint-venture vehicle with a local authority and community energy organisation provides direct leverage to enforce these conditions over the asset's lifetime.

Q: What are the wider policy barriers that may need to be overcome to realise the benefits from the outlined investments into heat networks? Please consider any specific areas of law, regulation or other policy which may need to change.



Three policy areas present the most significant barriers:

- ① **The scope of heat network zoning policy is designed around demand designation but does not adequately address supply-side architecture or ownership.** Zones should also be able to specify minimum ownership and governance requirements as a condition of development rights.
- ② **Government needs to be explicit that some portion of the WHF is not a revolving investment vehicle but a social infrastructure fund,** and therefore willing to accept lower or longer horizon returns in exchange for durable public/civic ownership and consumer protection outcomes.
- ③ **A statutory framework for both consumer and local community benefit in heat network governance should be developed,** requiring that any heat network development vehicle, model or organisation receiving public capital adopt a governance structure with minimum protections; an asset lock, a consumer representation mechanism, publicly reported pricing methodology, and restrictions on network disposal without consumer consent.

Community Energy

Q: How would investments in community energy projects (including generation and flexibility) or community buildings support the draft Warm Homes Fund aims, when could benefits be realised, and what risks need to be considered?



Financing needs to acknowledge and support innovation projects, delivering high risk pre-development work and significant social value returns, and **with more patient and flexible funding structures** (e.g. development, capacity building, or social infrastructure funds) that are accommodating of longer payback periods, more complex pre-development periods, and lower financial returns than commercially-operated equivalents.

Q: Is there a need for finance in community energy, and what are the barriers that prevent the private sector from filling it?

Government finance is needed to scale the sector and the positive impacts that it delivers for communities. **Available private finance comes with prohibitively high returns which undercut social value.** Private finance also isn't funding innovation work.

The Warm Homes Fund needs to financially back a sector that has been a pioneer of decarbonisation in the UK. **Finance needs to be flexible, affordable, and recognise social impact over returns** – taking a triple bottom line approach (people, planet, profit).

Q: How could government finance address this gap with repayable finance where government earns a return? Where possible, please describe how this model could work.



Repowering London operates in tandem with a sister organisation, Repowering Finance – an innovative financing pathway for installing urban solar energy. This loan facility acts as bridging finance, providing upfront capital to install solar assets on behalf of local community groups. These assets are then held in trust for the local group until it can raise the capital required to purchase the assets.

Government finance could lend into organisations like Repowering Finance, increasing the size of the rolling fund and allowing the vehicle to offer upfront capital that helps de-risk larger scale community energy projects (such as networks integrating multiple decarbonisation technologies) in their early stages. This will help bring in senior debt (such as social impact investors, banks, and ESG) for long-term financing to pay back into the revolving fund.