

Scottish Government Net Zero, Energy and Transport Committee: Inquiry into the role of local government and its cross-sectoral partners in financing and delivering a net-zero Scotland

UK Energy Research Centre response

Authors: Dr Jess Britton, UKERC, University of Edinburgh and Prof Jan Webb, UKERC, University of Edinburgh

21 January 2022

About UKERC

The UK Energy Research Centre (UKERC) carries out world-class, interdisciplinary research into sustainable future energy systems.

UKERC is a consortium of top universities and provides a focal point for UK energy research and a gateway between the UK and the international energy research communities.

Our whole systems research informs UK policy development and research strategy.

UKERC is funded by the UK Research and Innovation Energy Programme.

Introduction

We welcome the Scottish Government Net Zero, Energy and Transport Committee's inquiry into the role of local government and its cross-sectoral partners in financing and delivering a net-zero Scotland. The Scottish Parliament has agreed statutory targets to make Scotland a net zero nation by 2045, including an interim target of a 75% overall reduction in carbon emissions by 2030 (against baselines set in 1990 and 1995). Local government and place-based action will be central to the delivery of these targets, with the Climate Change Committee indicating that approximately a third of emissions are under the influence of local government¹. Despite this evidence suggests that local government action varies considerably and is hampered by a lack of clarity in the allocation of responsibilities between central and local government (and other local actors). In our response we provide research evidence regarding the variation in local government response to climate change mitigation and the energy system benefits of local government activity in this area.

Answers to consultation questions:

1. How effective are councils at strategic planning, budgeting, and making procurement decisions that align with net zero goals? If there are barriers what are they?

It is increasingly clear that many of the critical actions needed to deliver net zero are place-based; these include the development of smart, local energy systems² which incorporate demand reduction, decarbonised heat and transport, and flexible system operation. Often the best combination of actions is highly dependent on context, based on existing infrastructure, opportunities and local priorities. Our research has concluded that local and regional authorities can contribute substantively to delivering net-zero commitments in their area, hence easing the job of central governments in meeting nationally determined targets, as well as regenerating local and regional economies³.

To date 23 of the 32 Scottish local authorities have declared a climate emergency⁴ and either developed, or are in the process of developing, strategic delivery plans for net zero. However there is a lack of evidence regarding the extent to which these strategies embed net zero across all local government strategic plans and procurement.

Local government has a significant role in local energy planning, particularly in relation to heat, and many are working with local businesses, (G)DNOs and housing and community organisations to develop Local Heat and Energy Efficiency Strategies (LHEES). LHEES are an opportunity to develop a more strategic approach to energy efficiency and heat decarbonisation at the local level.

¹ https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/

² https://ukerc.ac.uk/news/net-zero-strategy-and-local-gov/

³ Tingey, M., & Webb, J. (2020) *Net zero localities: ambition & value in UK local authority investment*. CREDS, https://www.energyrev.org.uk/outputs/insights-and-tools/net-zero-localities-ambition-value-in-uk-local-authority-investment/

⁴ https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-citizens/

In relation to the barriers to a more strategic approach, our research indicates that limited local resources and a lack of detail on the allocation of responsibilities between central and local government are significant challenges. Considerable economic, social and environmental value would be secured from the following changes to empower local authorities (see Q7 response for more detail):

- 1. A central government policy mandate for net zero carbon localities
- 2. Institutionalised local net zero carbon planning & implementation through statutory powers and devolved resources
- 3. Investment in local authority net zero teams
- 4. Evaluation of all local & regional public expenditure using net zero principles
- 5. Directing local and regional Covid-19 recovery strategies to investment in net zero carbon infrastructures.

Q2. What role can the local government planning system and local development plans do to help us reach net zero? Could the planning system do more?

Ensuring net zero priorities are embedded in local development plans is critical to delivery. Local development planning needs to be aligned with net zero GHG targets, prioritising developments with lowest 'whole life cycle' carbon footprint, including materials production and transport to site, construction, in-use GHG emissions, and renovating/decommissioning/ repurposing⁵.

There is a need to institutionalise, and apply consistently, the patchwork of best practice in development planning for net zero. This includes aligning national, regional and local land use appraisal and prioritisation; a 'one public sector' approach, establishing a duty to co-produce and co-deliver existing and proposed spatial plans and shared accountability; streamlining access to data/digital resources; and coordinating utility investment at Scottish Government level so that planned developments can proceed. There is particular scope for planning to support the delivery of LHEES, including heat network zoning and the enforcement of building regulations

Q3. What innovation, skills and capacity are needed in the local government workforce when it comes to making net zero achievable? Does that capacity exist or are there gaps?

Research has indicated that there are capacity gaps in the ability of local government to deliver net zero⁶⁷. Whilst considerable skills relevant to net zero delivery do already exist within some local authorities, this is often patchy and funding for teams competes

⁵ as set out in https://www.gov.scot/publications/national-mission-local-impact-draft-infrastructure-investment-plan-scotland-202122-202526/pages/3/.

⁶ Tingey, M., & Webb, J. (2020). Governance institutions and prospects for local energy innovation: laggards and leaders among UK local authorities. *Energy Policy*, *138*, https://doi.org/10.1016/j.enpol.2019.111211.

⁷ Kuzemko, C., & Britton, J. (2020). Policy, politics and materiality across scales: A framework for understanding local government sustainable energy capacity applied in England. *Energy Research and Social Science*. https://doi.org/10.1016/j.erss.2019.101367.

with numerous other priorities⁸⁹. Our evaluation of the LHEES pilots demonstrated a number of examples where the current staffing capacity and expertise within local authorities was not sufficient to develop and deliver an LHEES, even with additional external support through national support programmes and consultancy expertise¹⁰.

Our analysis of the ELENA technical assistance programme demonstrates the potential benefits of investment in local energy teams, indicating that investment in local government officer time and technical support has the ability to leverage in finance from the private sector at a 1:37 investment ratio¹¹. As well as additional staffing resources, our research indicates that additional skills are required relating to:

- Finance and business case development including robust methodologies for incorporating social value. A useful example is available in the Carbon Trust draft methodology for socio-economic assessments for LHEES, but local skills are needed to enable best use of such methods and multi-criteria analyses¹²;
- Modelling and scenario development not as a one off event but a regular process, through LHEES, to evaluate changing conditions and integration with wider national developments.

Partnering to achieve net zero goals

Q4. How well do councils leverage in support and finance from the private sector for net zero delivery? Are City Region Deals being used effectively for this? What mechanisms or forums are there for sharing opportunities and good practice?

As discussed in our response to question 3, there is evidence that well-resourced local government energy teams can secure significant private sector investment. For example, the EU ELENA technical assistance programme has proved to be a very effective in supporting net zero implementation. Our analysis shows that technical assistance worth €23 million from ELENA grants led to €859 million investments in local energy (across Birmingham, Bristol, Bristol city region/SW, Cheshire East, Greater Manchester, Leeds city region, Greater London and the Welsh Government). Based on this investment ratio of 1:37 this suggests that a £1m investment in each of the 32 local authorities in Scotland would produce investment of around £1.2bn. Analysis of the ELENA local support programme also indicated that such investment

⁸ Tingey, M., & Webb, J. (2020a). *Net zero localities : ambition & value in UK local authority investment*. CREDS, https://www.energyrev.org.uk/outputs/insights-and-tools/net-zero-localities-ambition-value-in-uk-local-authority-investment/

⁹ Webb, J., Tingey, M., & Hawkey, D. (2017). What We Know about Local Authority Engagement in UK Energy Systems: Ambitions, Activities, Business Structures & Ways Forward.

 $[\]underline{\text{http://www.ukerc.ac.uk/publications/what-we-know-about-local-authority-engagement-in-uk-energy-systems.html}$

¹⁰ Wade, F., Webb, J., & Creamer, E. (2019). *Local Heat and Energy Efficiency Strategies: Phase 1 Pilots. Social Evaluation Report*, https://www.gov.scot/publications/local-heat-energy-efficiency-strategies-phase-1-pilots-social-evaluation/

¹¹ Tingey, M., & Webb, J. (2020a). *Net zero localities: ambition & value in UK local authority investment*. CREDS, https://www.energyrev.org.uk/outputs/insights-and-tools/net-zero-localities-ambition-value-in-uk-local authority-investment/

¹² see https://www.gov.scot/publications/guidance-strategy-level-socio-economic-assessments-draft-methodology/pages/3/

enables projects to be combined into local programmes to attract finance on affordable terms.

However, analysis of City Deals suggests that the deals agreed to date have not prioritised climate action¹³. Although climate change mitigation and adaption priorities are evident in the high level themes of some City Deals they tend to be less prominent than priorities relating to growth and investment, skills, transport, housing and innovation. In Scottish Deals climate change mitigation and adaption were the 7th and 8th ranked priorities. Climate change has not increased in priority level within these strategies between 2012 and 2020. Despite this there are some areas of good practice that may provide scope for further learning, this includes Stirling and Tay Cities Deals demonstrating strong integration of climate mitigation and transport priorities through the promotion of active travel and living labs. However, overall the City Deal process appears so far not to be an effective means to enable joint working on net zero and integration with innovation and enterprise.

Q5. How well do councils partner with the voluntary sector and social enterprises to work towards net zero goals? Are there instances of good practice you can point to or areas where opportunities are being missed?

There are examples of innovative practice in collaboration between social enterprises and councils in the Energy Efficient Scotland Pilot Projects, where organisations such as Changeworks, the Wise Group, Warmworks Scotland, SCARF (Aberdeen and North East) and the Energy Agency (Ayr) have partnered with local councils to engage communities, plan and implement home energy upgrades. Funding is often based on one financial year at a time, which works against planning and implementation of more demanding, but urgent, area-based building upgrades.

Q6. How well do councils involve local communities in decisionmaking on major net zero projects and how do they support community-led initiatives?

The Scottish Government have demonstrated considerable commitment to social justice and place-based climate action through the development of the Just Transition Commission and the ongoing roll out of LHEES. Local government could play an important role in delivering energy justice through local place-based policymaking and strategies if properly enabled to do so. However, research suggests that LAs would currently struggle to deliver on this due to a lack of statutory powers, funding constraints, local political disagreements and other competing operational priorities¹⁴. The Just Transition Commission report highlights the need to 'empower and resource local authorities to deliver a just and green recovery' and the Scottish Government need to continue to develop work with CoSLA and council executive teams to

¹³ Connor Smith, Dan Van Der Horst, Matt Lane, & Mags Tingey. (2021). *Climate action, city regions* and central government: a comparative analysis of the UK City Deals.

¹⁴ Bray, R., & Ford, R. (2021). *Energy Justice POINTs: Policies to create a more sustainable & fairer future for all*, https://strathprints.strath.ac.uk/76421/

¹⁵ Scottish Government. (2021). *Just Transition Commission*. 1–40. https://www.gov.scot/groups/just transition-commission/

understand the spatial dimensions of a just transition, integrate the recommendations of the Commission, and complete the local governance review.

LHEES represent a significant opportunity to work with local communities on net zero planning. The long-term, whole system approach of LHEES, as well as the potentially disruptive nature of some of the interventions arising from LHEES (e.g. street-works, upgrading buildings' fabric, changing heat supply vectors and technologies), suggests there is a case for integrating participatory planning in the development of these strategies. Mechanisms that give local people a say over choices made in LHEES (such as citizens juries) would mean they both respond to local conditions and are more likely to be broadly acceptable to the public. Indeed, local authority officers involved in the Energy Efficient Scotland pilots have told us they see local public engagement around LHEES as critical. Participatory processes may also help raise awareness of the SEEP programme, ensuring that when the programme comes to an area people understand what is being asked of them in the context of changes across Scotland¹⁶. There is growing experience of participatory approaches to net zero within local governments (for example through local climate assemblies) and ongoing research into various approaches¹⁷. However local governments would benefit from best practice and case studies being brought together into easily accessible resources.

Role of the Scottish Government and its agencies

Q7. What is the Scottish Government doing to help the local government sector deliver on net zero goals? What, if anything, could it do more of to help the sector?

The Climate Change Committee indicates that the Sixth Carbon Budget cannot be met without central Government, regional bodies and local authorities working together (Committee on Climate Change, 2020). Local governments and other public bodies, under the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, must now report:

- their target date for achieving zero direct emissions from their own operations;
- targets for reducing indirect emissions, for example from their supply chain;
- how their spending aligns with emissions reduction;
- their contribution to Scotland's Adaptation Programme.

However, there remains a lack of clarity regarding the division of responsibility between the Scottish Government and local authorities on delivering net zero.

The majority of Scottish local authorities have recognised the necessity for action, through <u>Climate Emergency</u> declarations and ambitions for Net Zero Carbon Localities. These are a start, but fulfilling them will need central government support

¹⁶ Hawkey, D., Bush, R., Tingey, M., & Webb, J. (2018). Response to Scottish Government's "Second Consultation on Local Heat & Energy Efficiency Strategies, and Regulation of District and Communal Heating." https://heatandthecity.org.uk/resources/

¹⁷ see http://wp.lancs.ac.uk/climatecitizens/ and https://ukerc.ac.uk/research/see/

through clear policy direction, combined with necessary powers and resources, and opportunities for mutual learning. Evidence from European practice shows that coordination between local and national governments is critical to the efficient operation of more distributed energy systems. However, based on our research, we conclude that the following are needed to make local authority energy ambition a reality¹⁸:

- A policy mandate for net zero carbon localities. Explicit (stable) policy to establish coordination across national, regional and local governments. Critically, this will reduce uncertainties for businesses, investors and communities.
- Establish local 'net zero carbon' planning and implementation through statutory powers and resources for long term benefits. Back this up with regional and national coordination and support functions.
- **Invest in local authority net zero teams**. Make funds available for technical assistance, and development capital, to implement net zero carbon plans.
- Require all local and regional public spending to be evaluated against net zero principles. This requires new metrics for decision making across local development planning, services and spending.

These recommendations are derived from examining the evidence about the public value of investment to rebuild local authority skills and capacities. In a recent report, we suggest that local governments (and other local actors) are particularly well placed to coordinate net zero delivery and the integration of economic and social objectives. If appropriately supported (as above), they could capitalise on the following:

- Local knowledge: Local Government and local actors (such as community groups and distribution network operators) hold data, knowledge and assets that can inform green and resilient recovery strategies that deliver on multiple local and national objectives. Smart technologies expand the potential to collect and update local data.
- Effective engagement and trust: Local government and local actors have significant local trust. It can be easier for parties to interact and collaborate when all the actors are in the same spatial scale, and trust can support participation in and uptake of smart products and services.
- Coordinated local planning: Considering a green and resilient recovery
 from a local perspective makes sense in that it is possible to adopt a whole
 (local) system planning approach, combining energy generation, mobility,
 heat, wider environmental and otherobjectives (for example economic
 objectives). Smart technologies support efficient management of these linked
 systems.
- Unlocking co-benefits: Local actors, particularly local government, have multiple objectives and thus are motivated (and able) to capture the cobenefits of smart local energy systems. Smart systems can help evidence these co-benefits.
- **Economic strategy:** A local focus on green and resilient post-pandemic

¹⁸ Tingey, M., & Webb, J. (2020a). *Net zero localities : ambition & value in UK local authority investment*. CREDS, https://www.energyrev.org.uk/outputs/insights-and-tools/net-zero-localities-ambition-value-in-uk-local authority-investment/

economic recovery enables alignment with LEP strategies regarding local business initiatives, development of workforce skills and other identified training needs, (local and national) supply chain development and innovation strategy.

Statutory duty

The Scottish Government have already consulted on proposals for a local authority duty to produce a LHEES and to report on progress toward its fulfilment. There is now a draft LHEES Statutory Order under discussed, in line with Heat in Buildings Strategy commitments. However the currently arrangements do not propose that local authorities be given a statutory duty to make progress on energy efficiency and heat decarbonisation (e.g. to meet targets). Whilst there is a complex balance to be struck with any statutory duty, between a) creating certainty and mobilising resources, and b) limiting local discretion and creativity, we support the development of a broader duty to make progress on LHEES, if meaningful resources allocated to local governments to support this.

Delivery Agency

We welcome the commitment by the Scottish Government (in the Heat in Buildings Strategy) to establish a National Public Energy Agency, particularly its remit to coordinate national, regional and local government delivery of heat decarbonisation and energy efficiency. However, the detail of the Agency's relationship with local government is critical. The Agency should provide an aggregate perspective on LHEES to ensure a whole-systems approach is taken and administrative boundaries do not prevent development of effective schemes (for example, ensuring opportunities for district heating schemes that cross local authority boundaries are not missed). It should also ensure consistency in decision making, both through defining and updating methods of socioeconomic assessment, and providing standard contracts and data curation functions. The Agency should streamline access to the accurate building-level data necessary to develop LHEES. Data sharing agreements need to be negotiated at Scottish level, rather than this work being unnecessarily duplicated in each LA, resulting in delay and uncertainty about compliance with data protection laws.

Although many local authorities pursue sustainable energy strategies in order to fulfil local social, economic and political needs, they also require clarity on their systematic contribution to national energy and climate delivery. We would advocate for establishing the Agency as a matter of priority and bringing forward the establishment of a dedicated body to earlier than 2025.

Q8. What is the role of enterprise agencies or other public bodies as enablers of joint working on net zero goals by local government and its cross-sectoral partners?

No response

Local government work on net zero in particular areas

Q9. How are councils working with cross-sectoral partners to decarbonise heat in buildings and to ensure they have greater energy efficiency?

There are many examples of local government working with partners across industry and NGOs on heat and energy efficiency projects. In particular the development of both LHEES and heat networks requires councils to coordinate the involvement of a range of public and private across and to integrate across long-term heat decarbonisation options and energy efficiency. Useful examples include:

- the recently established green energy services company joint venture between Mid Lothian Council and Vattenfall initially to develop district heating infrastructure, using residual heat from the waste treatment facility at Millerhill.
- West Dunbartonshire Energy Services Company working with Star Energy heat pump manufacturer to provide water source district heating systems in Clydebank.
- And the longest established, and highly regarded, Aberdeen Heat and Power Ltd¹⁹ (not for profit) company which works with cross sector partners to generate, distribute, and retail affordable heat and hot water to public and private customers across the city of Aberdeen via the network of communal and district low-carbon heat networks. AHP is also increasingly taking on a wider skills and capacity development role with contractors, architects and property developers to accelerate progress on heat decarbonisation and energy efficiency.

Q10. How are councils working with cross-sectoral partners to decarbonise transport (including encouraging active travel) and to improve air quality?

No response

Q11. How are councils working with cross-sectoral partners to promote recycling and a "circular economy"?

No response

Q12. How are councils working with cross-sectoral partners to use the natural environment (its "green infrastructure") to achieve net zero targets?

No response

¹⁹ see https://www.aberdeenheatandpower.co.uk