

Email to: national-public-energy-agency@gov.scot

15 February 2022

To whom it may concern,

National Public Energy Agency: Response to Call for Evidence

Scottish Renewables is the voice of Scotland's renewable energy industry, working to grow the sector and sustain its position at the forefront of the global clean energy transition. We represent around 270 organisations across the full range of renewable energy technologies in Scotland and around the world, ranging from energy suppliers, operators and manufacturers to small developers, installers, and community groups, as well as companies throughout the supply chain.

Scottish Renewables welcomes The Scottish Government's vision to create an agency to drive the transformational change that is needed to decarbonise heat in buildings.

In responding, we would like to highlight the following points:

- The transition to low-carbon heat needs a programmatic approach
- There is a need for a trusted, central coordinator to define low-carbon heating solutions and technologies and facilitate their deployment across Scotland.
- A key consideration is working within The Scottish Government devolved powers and with close coordination with UK reserved powers to enable the NPEA to take on a broad coordination and delivery facilitating role around low carbon heat.
- A crucial enabler for this work is to have buy-in and support from the distribution and transmission bodies.

Scottish Renewables would be keen to engage further with this agenda and would be happy to discuss our response in more detail.

Yours sincerely,



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Call for Evidence Questions

1) What is needed to achieve the transformational change that is necessary for heat decarbonisation in Scotland?

The Scottish Government has been making positive moves recently in the heat landscape, with publication of a Heat in Buildings Strategyⁱ and a final report by the Heat Pump Sector Deal Expert Advisory Groupⁱⁱ. Despite these, there is an overwhelming sense that something more is required to kickstart the 'transformational change' that is needed.

Work is not happening fast enough to meet the reduction targets being suggested, with the Climate Change Committee statingⁱⁱⁱ that the Heat in Buildings targets are so ambitious and stretching that there are significant delivery risks. 2030 is only eight years away and we are concerned about the achievability of the targets.

There are many moving parts in the heat landscape resulting in confusion for consumers or ambivalence about decarbonising. Therefore, a mechanism is needed to initiate the actions, drive the change needed and provide strategic direction as set out in the Heat in Buildings Strategy.

In Scotland, responsibilities and obligations are fragmented and much of the obligation to decarbonise has defaulted to consumers. In the context of the cost-of-living crisis facing UK consumers for the coming years, with rising energy bills and potential increases in fuel poverty, this reliance on consumers taking individual action is likely to lead to continuing stasis.

The transition to low-carbon heat needs a programmatic approach. We support the idea of a new public body (as set out in the draft Heat in Buildings Strategy) driving this and working with the energy companies to drive this transition through 'heat as a service'. However, greater clarity is needed on the agency's role, function, and responsibilities, particularly on the administration and running 'heat as a service'. We would envisage the NPEA working with major energy retailers in Scotland to facilitate this approach, and we welcome future consultation on the agency's establishment.

2) How can the new dedicated Agency best support this change programme?

What is described in this call for evidence document is the best suggestion we have seen for this change programme. It promises to bring together all the stakeholders to make tactical deployment of strategy. However, the NPEA needs to have resources to support the scale of change and powers of enforcement. The consultation document is not clear about what kind

of executive authority the NPEA would have. Without these executive powers, we are not confident the NPEA would have any more success in terms of delivering change in the way that it is needed to meet the legally binding net-zero target.

There is a need for a trusted, central coordinator to define low-carbon heating solutions and technologies and facilitate their deployment across Scotland. It needs to be able to direct various entities to act, including directing the electrical systems to address implications for the power grid.

It also needs to produce synergies and support the work of local authorities. There is much proactive work that could be undertaken, preparing for the work that is needed. It is also important to set up collaborations with funding agencies, as sources of finance are fragmented. In terms of consumer protection, there will need to be assurances that consumers get the best possible technical solution for their homes.

We agree with The Scottish Government that the name of the agency should change to more appropriately reflect its remit. It may be preferable to build upon and improve the name recognition of Energy Efficient Scotland, which already exists within The Scottish Government, to convey the remit of this new public body more appropriately.

3) What are the opportunities and challenges for delivery presented by this agenda, and how might these best be overcome through the Agency?

Some of the delivery challenges concern the skills base not only for heat decarbonisation across the sector but also for setting up and supporting the NPEA. The skills needed for this type of work are very different from the skills needed traditionally in the heat sector. The skills relating to public engagement as well as the general understanding of the transformational change that is coming and how to do it, are non-traditional public sector skills.

A related challenge is the gaps in the heat supply chain skills base and how the NPEA can facilitate the skills programmes that are in development. If one of the remits of the NPEA is leading the coordination of existing heat and energy efficiency delivery programmes, there is a need to ensure that the skills programmes reach all geographies and all sectors. However, if the NPEA takes more of a public engagement role, then there is a similar engagement that is needed on the supply chain side, especially the more disparate local parts of that supply chain.

Opportunities presented by this agenda include the fact that a virtual agency inside The Scottish Government will be established in 2022 and that it may ultimately be placed on a

statutory footing. Much of this agenda will be based on the 'learning by doing' principle as there is not an existing model to emulate.

It will be vital to have a central organising point that will work with local authorities on their Local Heat and Energy Efficiency Strategies (LHEES) and help to bring the pieces together and provide the critical momentum that is needed to move this agenda forward. It could be more effective to treat Scotland as a whole rather than looking individually at opportunities or looking at individual local council areas. This type of whole settlement or whole systems approach needs a dedicated agency with specialist expertise.

As seen in the evaluation of the LHEES pilots^{iv}, local authorities reported a wide gap between strategizing and implementation. The LHEES pilots report that a coordinating body would need to have a plan for implementation and powers to effectively carry out the work.

Local authorities' capacity is heavily constrained in this new area and a joined-up, national approach rather than multiple local approaches could help to alleviate this. We recognise however that a collaborative approach with local authorities would be beneficial. We envisage the NPEA being an organisation to champion and coordinate the heat transition and would overcome issues related to inconsistent approaches applied at local levels, issues around council boundaries (see Midlothian/Edinburgh example) and potential duplication of effort.

A key consideration is working within The Scottish Government devolved powers and with close coordination with UK reserved powers to enable the NPEA to take on a broad coordination and delivery facilitating role around low carbon heat. This includes its impact on the electricity sector. It is widely accepted there are considerable dependencies on electricity supplies and grid to enable low carbon solutions to be viable. There could still be a critical role in the national coordination of energy efficiency improvements for existing and new build properties that the NPEA could deliver and, under current circumstances, have the powers to control.

A crucial enabler for this work is to have buy-in and support from the distribution and transmission bodies. DNOs have existing licence obligations to support net-zero, and in terms of strategic planning, they have funding available to them through the current price control to deliver decarbonisation of heat.

Additionally, the DNOs are already carrying out heat decarbonisation activities so this work needs to be harnessed and included under this agenda. This will also be useful in terms of testing flexible connections for new housing developments and low carbon heating – DNOs are reviewing having more leeway around how they address the decarbonisation of heat.

They have significant ambitions concerning the installation of heat pumps and provision for reinforcements to the network to manage the anticipated take up of heat pumps.

The NPEA would need to effectively interface with the DNOs and transmission network operators, as well as the energy service providers, including the inclusion of whole systems planning and the development of heat networks.

There is also a challenge around awareness and acceptance. There is a sense of defeatism and despondency that needs to be addressed via a public awareness campaign, and engagement with industry and construction to become a key part of The Scottish Government's Heat in Buildings Strategy. There is a need to be proactive in articulating the benefits of heat decarbonisation, including the opportunities for skilled jobs, good and decent work and fair pay and contributing to the just transition of Scotland's workforce agenda.

There are potential challenges around the devolution of powers from local authorities to the NPEA and vice versa. As mentioned above, we are concerned about the gaps in skills, including for the NPEA itself. We are also concerned about constraints in funding and staffing in local authorities.

4) Based on the proposed purpose, remit and objectives of the dedicated Agency, do you have any evidence, or insights based on experience, that demonstrate the need and potential added value of a new public body of this nature in the heat decarbonisation delivery landscape?

There have been many reports and commissioned research and valuations on the need and added potential over the last decade. Some of these include the Danish Energy Agency, which Scotland already has a track record of engaging with. Scotland has already established experience and dialogues, including a Memorandum of Understanding with Denmark. DENA, the German Energy Agency provides a model <https://www.dena.de/en/about-dena/>.

The Scottish Government may also wish to consider approaches taken by Efficiency Maine Trust^v, which has seen high recent rates of heat pump uptake across the State of Maine through its heat pump rebate scheme.

5) Are you aware of any case studies – UK or international – or research that can help inform design of a new public sector delivery body to ensure it is able to delivery effective outcomes, and to be consumer focused across its operations? What do you think are some of the key factors that need to be built into the strategic framework – and corporate design – of the new body to best enable this?

Case studies could include that of The Infrastructure Commission for Scotland and the delivery findings report^{vi} on potential models for organisation and strategy. This includes examples from Australia and New Zealand and compares public-led bodies with independent models.

Findings state that most structures can work if there is political will, adequate resources, a clear remit and public evidence of integrity. Long term continuity beyond a Parliamentary term is important to help sustained planning and implementation however this needs annual reviews and adaptation to challenges, open access to data/reports and lessons learned and needs to highlight a continuous improvement model. The lack of devolved powers for Scotland across the energy sector does make international comparisons more complex.

On the consumer-focussed aspect, there is a low level of awareness as to the implications of a migration away from fossil fuels for consumers and businesses. Consumer hesitancy and concerns around up-front capital investment need to be addressed, through improved communications and policy interventions. For example, there are only approximately 3000 heat pump installations a year and this needs to scale up significantly to meet targets of at least 200,000 installations a year in the late 2020s.

The public awareness campaign could take the form of myth busting renewable heating technology negative beliefs, for example. This campaign could also bring much needed clarity to the LHEES process. There needs to be a strategic overview of how to convert buildings to low carbon heat at a national scale, as there is a lack of forward momentum at present.

With regards to heat pumps, The Scottish Government and whatever form the NPEA takes need to be more specific about how they intend to address segments within the different tenures of housing; for example, new builds, the recently built, high density domestic, low density domestic, industrial, high density commercial. Each segment has different business models to reach net-zero. Some segments are relatively easy to address while others will be more challenging for achieving net-zero. These challenges need to be openly acknowledged.

6) What tools and support will the dedicated Agency need in order to effectively establish leadership and coordination of heat decarbonisation in Scotland?

As we said in our answer to Q.5, the Infrastructure Commission for Scotland's reports details the tools and support needed. The NPEA needs to have the ability to gather appropriate funding arrangements together, such as funding from the Scottish National Investment Bank (SNIB), relevant delivery partners and various finance streams. Existing funding and the routes to that funding need to be streamlined.

The public engagement strategy is needed for giving clear and detailed factual information about various renewable technologies. Public information tools would be useful including interactive maps showing characteristics of specific neighbourhoods across Scotland and their potential heat decarbonisation options based on archetypes, gas-grid access, building and heat demand density, etc.

Consumer-driven tools would allow consumers and businesses to register their interest in heat decarbonisation helping developers to understand levels of local interest in the same way as utility providers sought to establish thresholds of customer interest in upgraded communications infrastructure.

The NPEA could lead on collaborative working and joined up decision making and enforcing this. A full demonstration or exemplar project for low carbon heat working at whole city or town scale would be useful to effectively establish a process for how large scale heat decarbonisation could work.

The role of LHEES in relation to the NPEA needs to be considered; the NPEA could have oversight of local authorities' zoning responsibilities and ensure consistency of implementation at a national scale.

7) Do you have any evidence, or further insights regarding the potential added value that the functions set out can deliver within the heat decarbonisation landscape? This may include both examples of where these types of functions have, or have not been conferred on a national body as part of leading a programme of delivery and change, and the resulting implications (positive or negative).

Evidence regarding the potential added value that the functions could deliver within the heat decarbonisation landscape can be seen in the evaluations of the LHEES Phase 1, 2 and 3 pilot projects. A national body could ensure consistency and minimise risk of duplicated effort at the local level.

It could maximise the potential for knowledge sharing of good practice. Access to data was highlighted as a gap so a single data hub would be critical to streamlining plans, but this would also have added value in maintaining case studies of best practice for learning and demonstrating continuous improvement and there is also potential for streamlining the procurement of materials to manage costs.

Managing the planning and distribution of district heating systems would bring added value in that as renewable heating schemes increase, costs decrease.

8) Do you have any evidence, or case studies that demonstrate the effectiveness or not of new regulatory standards being enforced at a national versus local level? This may include international comparisons.

One of our members, Vattenfall has been working with Midlothian Council to plan and develop a district heating system in that area. They reflect that where heat networks are located on the cusp of several local authority boundaries there should be opportunities to coordinate across authorities in relation to planning, consenting, permitting and licensing of heat networks. This would ensure that district heating networks that cross boundaries are given the same standing by each local authority. For example, if a consent conveys utility powers on the network investor/operator then these powers would need to be recognised and accepted across the three authorities.

The NPEA could take an oversight role in smoothing out these types of boundary issues, ensuring consistency across all local authority areas, and relating this to the LHEES for the area.

As we said in our answer to Q.6, the Infrastructure Commission for Scotland reports are relevant here. We would agree that delivery and enforcement need clear separation and management in order to be robust and accountable. There is a need to consider whether an agency model works, where Scottish Ministers hold final responsibility with the actual enforcement devolved to the local authority and to reskilled and properly equipped building control officers.

9) Are you aware of any existing, or previous, public bodies that exercise both an advisory and regulatory role within the same organisation – and how this dual remit has been translated at an operational level to avoid any risks relating to conflicts of interest, governance and lines of accountability? This may include examples from the international landscape, and/or UK context.

A Scottish example that both advises and carries out regulatory functions is the Scottish Environment Protection Agency (SEPA). Scottish Water is another example, which both delivers Ministerial objectives and carries out project delivery.

10) Are you aware of any case studies, or recent research that considers the opportunities and challenges of establishing a public sector body that is tasked with programme delivery functions on a statutory footing?

As mentioned in our answer to Q.9, SEPA is a Scottish example of a statutory public sector body that has programme delivery functions. Scottish Water again is another excellent Scottish case study.

Other examples are the Infrastructure Commission for Scotland, the Climate Change Committee with its Carbon Budget reports, The Scottish Futures Trust, and the UK-led Competitions and Markets Authority.

11) In terms of potentially establishing the dedicated Agency on a statutory footing as part of future proofing it to be able to take on any new functions or responsibilities as heat decarbonisation delivery progresses over the coming decades, are there any other considerations related to this that you think we need to be aware of and why? This may include, for example: upcoming evidence and research, other strategic policy developments and targets, wider industry and sector led developments in the heat and energy efficiency landscape or related delivery areas.

A future entity that the NPEA would need to collaborate with is the Future System Operator (currently being consulted on), and we encourage Scottish and UK governments to work constructively to streamline and standardise approaches as much as possible to achieve economies of scale.

In terms of the legislative framing of the NPEA, there is a risk that other entities could step in if the framework is not designed appropriately. To add to this, the future role of Ofgem needs to be considered in terms of regulating the heat decarbonisation sector in Scotland. The powers and remit need to be effectively articulated in such a way to give primacy to the NPEA.

Other considerations involve the role of consumer protection agencies and consumer protection in general, as this is reserved to the UK Government. This has some bearing on how consumers are treated in Scotland and the NPEA may not have the right or the powers to legislate directly.

12) Who will the Agency need to work closely with in order to best facilitate delivery of the transformational change required, and how do you think this should work in practice?

It is important that the NPEA, which will be primarily tasked with delivering the Heat in Buildings Strategy, works with the UK and other devolved governments to standardise approaches, where practical, to build the supply chain at pace and scale. For example, we would encourage a standardised approach to accreditation across the UK for heat pump

installers, and believe there is value in considering the MCS, Each Home Counts PAS and TrustMark frameworks.

There are many Scottish organisations that will need to work closely with the NPEA, such as local government and COSLA especially with regards to LHEES. The NPEA also needs to have good communication with trade associations in many sectors, and needs to work closely, as we have said throughout this consultation response, with the network and transmission companies.

It is also sensible to engage with organisations that grant third party access to land for heat networks, such as the Highways Authority, the Coal Authority, and Network Rail. The Crown Estate Scotland, Scottish Canals and Scottish Water would be key to any large-scale river source heat pump deployment. It would be valuable too to work with Audit Scotland, to check that public money is spent effectively.

On the public engagement side, third sector organisations, charities and community groups who are already active in working on energy efficiency upgrades to the Scottish building stock, would be valuable collaborators.

It will also be important to engage with the universities and colleges sector, as there is much pressure there to decarbonise, and instead of buildings or campuses decarbonising individually, there is considerable potential to decarbonise larger areas collectively in partnership with neighbouring bodies.

Indeed, across the public sector, there is a tendency for organisations to focus on decarbonising their own assets independently rather than considering an area-based approach. Without a national 'champion' the concern is that organisations will continue to focus on their own interests at the expense of the wider potential for large scale schemes such as district heat networks servicing the needs of whole neighbourhoods or settlements.

There is a tendency for larger bodies not to report locally, instead they report within their own sectors. Therefore, there is no incentive presently for them to collaborate across a geographic location. Larger bodies all have different performance metrics that work at a national rather than local level. Unless there is legislation requiring local collaboration, it is unlikely to proceed, and the heat landscape will continue to be fragmented. This fragmentation could be addressed by a national delivery plan using a whole systems approach.

As we said in our answer to Q.8 there are two distinct functions to the NPEA: (1) regulatory functions such as accountability, taking action, having enforcement powers and (2) policy

support, engagement and public awareness. There also needs to be a publicly controlled delivery body otherwise the NPEA would be relying on action being taken by commercial players in a more piecemeal fashion where commercial drivers make this viable. Without new policy intervention to change the commercial landscape, a reliance on this approach will not deliver the transformative change required.

13) Are you aware of any case studies that demonstrate (in)effective partnership working by a public body to coordinate a broader delivery landscape to achieve a shared goal? What lessons can be taken from these examples?

An example of a public body coordinating a broader delivery landscape to achieve a shared goal is the National Parks Agencies which represent many different organisations within a defined geographical area, while also having regulatory powers. We understand that NatureScot has powers over national park areas in terms of their planning and management. The NPEA need similar but more geographically extensive powers over the coordination, enforcement and communication of low carbon heat solutions.

14) What role do you see your organisation playing in relation to the Agency once established?

We would hope that the NPEA would work collaboratively with all organisations and would share their expertise and experiences with them.

15) What role do you see for your organisation during the development process of the Agency, and do you have any examples of the type of collaborative approach to design of a new public body or delivery programme that you would like to see implemented? What lessons can be taken from these?

SR can help to communicate relevant information to its members, in particular product and service suppliers, in Scotland's heat sector as the Agency evolves and the landscape changes.

The NPEA should make it easier for other organisations to decarbonise heat on a large scale. It needs to find common interests and share where the best knowledge can be found to create the potential for collaboration.

All parties are technically willing to collaborate but there is a common fear of wasting money. There is an impetus to create a positive example in the creation of the NPEA, highlighting the positive benefits.

16) What types of approaches to civic participation do you think could work most effectively in supporting development of the dedicated Agency, and why? How can these be best implemented to work alongside wider stakeholder engagement? Please provide any examples, or case studies you may have to support your response.

There are already community organisations, community development trusts, community councils and charitable trusts that have been active in the energy efficiency and fuel poverty landscape for some time and are seen as trusted face to face intermediaries.

Collaborating with such bodies would provide an effective approach to civic participation and are more likely to work effectively as they are trusted locally. Third sector bodies like Changeworks (see for example their work in West Linton) demonstrate they can act as trusted organisations for larger scale roll-out of energy upgrade work.

In the absence of a public energy delivery body, ideally, we need a network of trusted third sector energy bodies across Scotland that can provide the support and information to consumers and businesses 'on the ground'.

17) Other than those listed, are there any other specific functions that you think the virtual Agency should be tasked with delivery ahead of the dedicated Agency, and why? If you have any supporting evidence that demonstrates the potential added value – or make clear the current gap in delivery – of such a function pre-regulations, please provide.

The virtual agency should be tasked with initiating and continuing existing crucial connections with BEIS and the UK Government as these are of critical importance to how the agency will work.

While the preparatory work for this Agency is being carried out, real delivery must continue. The Virtual Agency must not slow down decarbonisation work that is ongoing across Scotland. Indeed, this needs to step up and scale up to meet the various targets.

There are concerns that the establishment of the virtual and subsequent physical Agency could potentially be a distraction in terms of resource and policy effort which could otherwise be directed towards actual delivery of heat decarbonisation using teams within The Scottish Government and other existing agencies. Its development could also potentially be used as a 'valid reason' why progress rates are lower than expected and future targets are missed.

18) Do you have any examples, or insights based on experience, that demonstrate the potential added value of an “interim” delivery body in advance of a dedicated public body, and how this can best be achieved?

The key benefit of having an interim agency, as described in the consultation document of being in-house in The Scottish Government giving advice and information to renewable heat early adopters, is that its start-up time should be reduced ensuring there is a clear coordination body in existence sooner instead of having to wait until the physical Agency in 2025.

The existence of an interim body should provide a clear marker to the external market as to the direction of travel which should help with longer-term planning. It should also smooth the path towards the creation of a physical body with lessons being learnt over the next few years.

As we said in our answer to Q. 17, the work on this agency must not hold back activity linked to delivery on the ground.

19) Do you have any examples, or insights based on experience, of effective change management practices relating to a public sector initiative that required a shift in the existing national and/or local delivery landscape, managed over time? What lessons can be learnt?

No comment.

20) What do you see as the key steps, and/or considerations that will need to be reflected in the transition Route Map, and why?

No comment.

ⁱ Scottish Government. Heat in Buildings Strategy. October 2021

ⁱⁱ Scottish Government. Heat Pump Sector Deal: Final Report. December 2021

ⁱⁱⁱ CCC. Progress in reducing emissions in Scotland: 2021 Progress Report to Parliament. December 2021

^{iv} Scottish Government. Synthesis evaluation of the Local Heat and Energy Efficiency Strategy (LHEES) pilot programme. January 2022

^v <https://www.energymaine.com/>

^{vi} Infrastructure Commission for Scotland.

https://infrastructurecommission.scot/storage/267/Phase2_Appendix_G.pdf