Aberdeenshire Council

Integrated Impact Assessment

Local Heat and Energy Efficiency Strategy (LHEES)

Assessment ID	IIA-000776
Lead Author	Yvonne D'Ambruoso
Service Reviewers	Claudia Cowie
Subject Matter Experts	Susan Forbes, Claudia Cowie, Kakuen Mo, Caroline Hastings, Annette Johnston, Christine McLennan
Approved By	Claudia Cowie
Approved On	Friday February 02, 2024
Publication Date	Friday February 02, 2024

1. Overview

This document has been generated from information entered into the Integrated Impact Assessment system.

This report details potential impacts in developing a Local Heat and Energy Efficiency Strategy (LHEES) and associated delivery plan, the first iteration of which is to be published following consultation in early 2024 and revised thereafter at least once every five years.

During screening 8 of 10 questions indicated that detailed assessments were required, the screening questions and their answers are listed in the next section. This led to 5 out of 5 detailed impact assessments being completed. The assessments required are:

- Childrens' Rights and Wellbeing
- Equalities and Fairer Scotland Duty
- Health Inequalities
- Sustainability and Climate Change
- Town Centres First

In total there are 41 positive impacts as part of this activity. There are 0 negative impacts, all impacts have been mitigated. The impact on 2 groups is not known, information is provided in the detailed sections of this document.

A detailed action plan with 1 points has been provided.

This assessment has been approved by claudia.cowie@aberdeenshire.gov.uk.

The remainder of this document sets out the details of all completed impact assessments.

2. Screening

Could your activity / proposal / policy cause an impact in one (or more) of the identified town centres?	NotSure
Would this activity / proposal / policy have consequences for the health and wellbeing of the population in the affected communities?	Yes
Does the activity / proposal / policy have the potential to affect greenhouse gas emissions (CO2e) in the Council or community and / or the procurement, use or disposal of physical resources?	Yes
Does the activity / proposal / policy have the potential to affect the resilience to extreme weather events and/or a changing climate of Aberdeenshire Council or community?	Yes
Does the activity / proposal / policy have the potential to affect the environment, wildlife or biodiversity?	Yes
Does the activity / proposal / policy have an impact on people and / or groups with protected characteristics?	Yes
Is this activity / proposal / policy of strategic importance for the council?	Yes
Does this activity / proposal / policy impact on inequality of outcome?	Yes
Does this activity / proposal / policy have an impact on children / young people's rights?	No
Does this activity / proposal / policy have an impact on children / young people's wellbeing?	Yes

3. Impact Assessments

Children's Rights and Wellbeing	No Negative Impacts Identified
Climate Change and Sustainability	No Negative Impacts Identified
Equalities and Fairer Scotland Duty	No Negative Impacts Identified
Health Inequalities	No Negative Impacts Identified
Town Centre's First	No Negative Impacts Identified

4. Childrens' Rights and Wellbeing Impact Assessment

4.1. Wellbeing Indicators

Indicator	Positive	Neutral	Negative	Unknown
Safe		Yes		
Healthy	Yes			
Achieving		Yes		
Nurtured		Yes		
Active		Yes		
Respected		Yes		
Responsible		Yes		
Included		Yes		

4.2. Rights Indicators

UNCRC Indicators upheld by this activity / proposal / policy	Article 24 - Health and health services Article 27 - Adequate standard of living

4.3. Positive Impacts

Impact Area	Impact
Healthy	The strategy drives progress towards better insulated homes, requiring less energy to heat, reducing fuel poverty, benefitting occupants. In addition, the strategy shows potential pathways to heating systems with low or zero carbon emissions which will reduce air pollution, improving air quality for all.

4.4. Evidence

Type	Source	It says?	It Means?
Other Evidence	World Health Organisation research	https://www.who.int/teams/ environment-climate-change-and-health/healthy-urban-environments/housing/ strategies	Well designed strategies can reduce energy use and create healthier environments for occupants and increase health equity and support achieving an adequate standard of living as per articles 24 and 27

4.5. Information Gaps

Further assessment of potential heat network zones will be required prior to the Council making the decision about designating any potential zones as Heat Network Zones as per the separate requirement.

4.6. Measures to fill Information Gaps

Measure	Timescale

Measure	Timescale
There will be further analysis and scrutiny of the potential zones and other highlighted areas of interest in the LHEES to produce a detailed delivery plan over the next year.	12 months

4.7. Accounting for the Views of Children and Young People
There will be a public consultation on the draft Local Heat and Energy Efficiency Strategy and delivery plan. All are welcome to read and respond.

4.8. Promoting the Wellbeing of Children and Young People
The strategy is not specifically aimed at children and young people but on improving energy efficiency of buildings and driving a reduction in fuel poverty which will have a positive impact on all. Improving insulation levels in the home reduces the amount of fuel required to achieve comfort. Improved comfort is attributed to better health (https://www.who.int/teams/ environment-climate-change-and-health/healthy-urban-environments/housing/strategies).

4.9. Upholding Children and Young People's Rights
Article 7 - right to be cared for by their parents. In progressing with this strategy, there is a higher likelihood of implementation of projects to promote fabric improvement projects and heat networks which can improve the affordability of thermally comfortable proeprties.

4.10. Overall Outcome
No Negative Impacts Identified.

This impact assessment is related to a strategy development which aims to guide improvements in building fabric and uptake of less polluting technologies for achieving comfort in buildings. The strategy will drive progress in reducing fuel poverty which will improve living conditions for those affected.

5. Equalities and Fairer Scotland Duty Impact Assessment

5.1. Protected Groups

Indicator	Positive	Neutral	Negative	Unknown
Age (Younger)	Yes			
Age (Older)	Yes			
Disability		Yes		
Race		Yes		
Religion or Belief		Yes		
Sex		Yes		
Pregnancy and Maternity		Yes		
Sexual Orientation		Yes		
Gender Reassignment		Yes		
Marriage or Civil Partnership		Yes		

5.2. Socio-economic Groups

Indicator	Positive	Neutral	Negative	Unknown
Low income	Yes			
Low wealth	Yes			
Material deprivation	Yes			
Area deprivation		Yes		
Socioeconomic background		Yes		

5.3. Positive Impacts

Impact Area	Impact
Age (Older)	Following the strategy and delivery plan will improve thermal comfort for dwelling occupants, younger and older people are considered at higher risk from low and high temperature environments. Keeping the indoor temperature comfortable by improving building fabric will have knock on positive effects.
Age (Older)	Younger and older persons are more affected by excessive cold and heat. This strategy aims to drive fabric improvements of buildings which will make achieving thermal comfort easier and less costly.
Age (Younger)	Following the strategy and delivery plan will improve thermal comfort for dwelling occupants, younger and older people are considered at higher risk from low and high temperature environments. Keeping the indoor temperature comfortable by improving building fabric will have knock on positive effects.

Impact Area	Impact
Age (Younger)	Younger (and older) people feel the effects of extremes of temperature the most and have the most to gain from improving the fabric of buildings to keep them thermally comfortable.
Age (Younger)	Younger and older persons are more affected by excessive cold and heat. This strategy aims to drive fabric improvements of buildings which will make achieving thermal comfort easier and less costly.
Low income	Low income families may be able to access funding to improve the thermal fabric of their property which in turn will reduce required energy input to maintain comfort.
Low wealth	Similar to low income, those with low wealth may qualify for funded programmes aimed at improving the energy efficiency of properties which in turn reduces the cost of keeping the property at a suitable temperature.
Material deprivation	Part of the strategy is to promote areas that may be suitable for heat networks. The government aim is that these provide low cost warmth to properties in the area (that opt in) with low connection costs.

5.4. Evidence

Type	Source	It says?	It Means?
Other Evidence	Development of the strategy	The world health organisation have stated that younger and older persons are most affected by extremes of temperature. Improving the fabric of buildings to ensure that indoor comfortable temperatures can be maintained with less energy usage will benefit everyone including these specific ages.	Though all people will benefit from improved building fabric which will maintain more stable indoor temperatures, older and younger people are most affected by extremes of temperature and therefor will have the most to gain from building improvements driven by the strategy.

5.5. Engagement with affected groups
The draft strategy is to go out for public consultation in the coming weeks. This will be an open consultation for all to respond.

5.6. Ensuring engagement with protected groups
In the development of the strategy engagement has mostly been with internal and social landlord stakeholders to date. The consultation will be done along with a topic report for the Local Development plan to try and ensure as many people engage with it as possbile.

5.7. Evidence of engagement
The consultation is imminent, the report being presented to committee is of the draft strategy.

5.8. Overall Outcome

No Negative Impacts Identified.

Improvement of building fabric and indoor temperature stability and cost will not have negative impacts on those groups identified.

5.9. Improving Relations

Promoting the strategy and highlighting that the changes are beneficial for all . Should there be a heat network zone identified it would be good to ensure those in the specific area are kept informed of the potential benefits of such a system and how to ensure they are included if they wish to connect.

5.10. Opportunities of Equality

Promoting improvement of building fabric and increasing awareness of funding opportunities will ensure that those that cannot afford the improvements to their homes can access funding to increase energy efficiency and potentially reduce fuel poverty.

6. Health Inequalities Impact Assessment

6.1. Health Behaviours

Indicator	Positive	Neutral	Negative	Unknown
Healthy eating		Yes		
Exercise and physical activity		Yes		
Substance use – tobacco		Yes		
Substance use – alcohol		Yes		
Substance use – drugs		Yes		
Mental health		Yes		

6.2. Evidence

Type	Source	It says?	It Means?
Other Evidence	Strategy development	The strategy is about improving the energy efficiency of buildings and decarbonising heating systems.	None of the health behaviours are directly impacted by the development of this strategy.

6.3. Overall Outcome

No Negative Impacts Identified.

This is a strategy on improving the thermal efficiency of buildings and decarbonising heat sources.

7. Sustainability and Climate Change Impact Assessment

7.1. Emissions and Resources

Indicator	Positive	Neutral	Negative	Unknown
Consumption of energy	Yes			
Energy efficiency	Yes			
Energy source	Yes			
Low carbon transition	Yes			
Consumption of physical resources	Yes			
Waste and circularity	Yes			
Circular economy transition		Yes		
Economic and social transition	Yes			

7.2. Biodiversity and Resilience

Indicator	Positive	Neutral	Negative	Unknown
Quality of environment	Yes			
Quantity of environment		Yes		
Wildlife and biodiversity		Yes		
Infrastructure resilience	Yes			
Council resilience	Yes			
Community resilience	Yes			
Adaptation	Yes			

7.3. Positive Impacts

Impact Area	Impact
Adaptation	Adapting our heating systems to low and zero carbon and improving the energy efficiency of buildings will support the wider drive to achieve net zero by 2045 and also mean that building occupants can achieve better thermal comfort using less energy.
Adaptation	Improving the fabric of buildings to increase energy efficiency ratings and moving away from fossil fuels are both positive adaptations in behaviour which are steps towards reaching Net Zero by 2045.
Council resilience	Improving the energy efficiency of Council buildings will improve their resilience. Public buildings are likely to be necessary to drive the economics of heat networks and will benefit from the resilience from the electricity network should they be installed in Council properties.

Impact Area	Impact
Council resilience	Part of the requirement for heat networks is to have 'anchor load buildings'. It is likely that some of these anchor loads would be Council buildings and being part of a heat network gives resilience from dependence on fossil fuels. Additionally, the improvement of the fabric of council buildings will also give some resilience to heat loss.
Council resilience	Council resilience will be improved where the building fabric energy efficiency is improved in line with the strategy and also if Council buildings are used as anchor loads for heat networks.
Infrastructure resilience	Better insulated properties can hold onto warmth for longer periods which will give resilience should there be power cuts that affect heating. Heat Networks can produce both electricity and heat for circulating which would give resilience from the national grid should they be employed.
Infrastructure resilience	Should viable heat network areas be identified, they are often producers of electricity with heat being a by product. In these circumstances, there is potential that they would have resilience from the national grid should there be a power outage.
Infrastructure resilience	The strategy aims to reduce use of more polluting heating fuels, with one specific aim being to increase heat networks. Heat Networks are often supplying heat as a by product of electricity production meaning that the systems themselves are not reliant on the wider electricity grid or fuel input. This builds resilience.
Quality of environment	The strategy directs people to take up low and zero carbon emitting heating systems which will reduce pollutants and particulates in the air.
Quality of environment	Moving society towards low and zero emission heat sources will improve the air quality locally. The improvement of building fabric with insulation measures will also improve the indoor environment by using less energy to achieve a level of comfort.
Quality of environment	The strategy aims to influence property owners to move towards clean heating systems which produce low or zero carbon emissions which will reduce localised air pollution, improving air quality.
Community resilience	Part of the strategy involves highlighting areas that would benefit most from improved energy efficiency measures and identifying those where heat networks could be possible. Employing either measure on an area basis will give better resilience to that place and community.
Community resilience	Areas are highlighted for targeted improvements in energy efficiency installation which in turn would improve the resilience in the community to heat loss from the building and also fuel poverty.
Community resilience	Communities where heat networks are installed will have a level of resilience to increasing energy prices due to the fact that heat tends to be a by product of energy production for heat networks.

Impact Area	Impact
Consumption of energy	The strategy highlights the importance of improving energy efficiency of the fabric of buildings which in turn reduces the amount of energy required to maintain comfort within.
Consumption of energy	Reduced energy consumption required for better insulated buildings.
Consumption of energy	Improvement of energy efficiency of buildings will reduce the energy required to maintain thermal comfort.
Energy efficiency	Improving energy efficiency of the built environment is a key aim of this strategy.
Energy efficiency	The strategy aims to improve energy efficiency and drive building owners to make changes to achieve this.
Energy efficiency	Part of the strategy is to identify key areas where building energy efficiency is low and drive improvement and uptake of funding to improve this on an area basis.
Energy source	The strategy drives building owners and occupants to move to lower carbon energy sources, principally electric and heat networks. For Heat Networks to receive funding and approval, there is a requirement for them to be fuelled with renewable sources.
Energy source	Part of the strategy includes designating areas as having potential for heat networks, these are required to use low or zero carbon energy sources.
Energy source	Driving the change to low and zero carbon heating systems includes a drive to increase the number of heat networks. These are now required to use renewable heat sources. This will be particularly impactful where they are deployed in 'on gas network' areas.
Economic and social transition	Part of the strategy has identified a skills gap in our region which we have highlighted to Scottish government so that investment in training and upskilling people in installing and maintaining low and zero carbon systems can be facilitated. With the North East already being a centre of excellence for energy, it is envisaged that it will develop into a centre of excellence for renewable energy and systems too.
Low carbon transition	The Local Heat and Energy Efficiency strategy will drive change towards low carbon heating.
Low carbon transition	The strategy is a key instrument in the low carbon transition and will promote use of low and zero carbon technologies.
Low carbon transition	The entire LHEES strategy is in line with the low carbon transition.
Consumption of physical resources	The strategic drive to zero carbon fuelled heat sources means there will be a reduction in fuel deliveries to rural (off grid) properties, reducing delivery mileage and associated energy consumption as well as the fact that clean energy sources do not have the same filters to replace during servicing that oil and gas boilers contain, thus reducing consumption of physical resources.

Impact Area	Impact
Consumption of physical resources	As the strategy is driving a change to low carbon technologies to heat properties, there will be less kerosene and LPG used. In addition, there will be less fuel filters requiring replacement during servicing.
Consumption of physical resources	Less fuel filters will require replacement dues to the switch over to low and zero carbon heat sources. In addition, with heat networks there will be less individual boilers required to be installed as they are not required for that type of heating system
Waste and circularity	As identified in the consumption of physical resources section, there will be less waste arising from the renewable heat sources than those running on fossil fuels.
Waste and circularity	Driving an increase in zero and low emission heating sources will mean that there are less oil boilers being used which means less fuel filters to be replaced and disposed of.

7.4. Evidence

Type	Source	It says?	It Means?
Other Evidence	Various sources in development of the strategy.	Much data has been reviewed and used in the development of the LHEES. The ultimate aim of which is to support progression to Net Zero by reducing the environmental impact of heating (and cooling) in buildings.	This strategy if followed will help ensure buildings in Aberdeenshire improve in energy efficiency and reduce carbon emissions by switching to low and zero carbon heat sources.

7.5. Overall Outcome

No Negative Impacts Identified.

The strategy is part of the drive to lowering carbon impacts of heating on the environment and improving the fabric of those buildings so that they require less energy to maintain comfortable living and working environments.

8. Town Centre's First Impact Assessment

8.1. Local Factors

Indicator	Positive	Neutral	Negative	Unknown
Town centre assets				Yes
	Will find out by: This would come to light should an area be identified as a potential heat network zone.			
Footfall		Yes		
Changes to road layouts		Yes		
Parking		Yes		
Infrastructure changes				Yes
	Will find out by: If a particular town becomes the location of a heat network, the infrastructure to support the system would be installed in that location. Only after further assessment and investigation will this become apparent.			
Aesthetics of the town centre		Yes		
Tourism		Yes		
Public safety		Yes		
Town centre business		Yes		
Cultural heritage and identity		Yes		
Social and cultural aspects		Yes		

8.2. Evidence

Type	Source	It says?	It Means?
Other Evidence	Development of the strategy.	The aims of the strategy are to improve the energy efficiency of buildings and reduce the carbon emissions from heating them.	From a town centre perspective, it is unlikely that there would be negative impacts from improving the fabric of buildings and reducing emissions from heat sources.

8.3. Information Gaps

Part of the detailed delivery plan will be to identify which areas should be designated heat network zones. From there, any affected town centres would then be known.
Further information will be required to identify which potential areas go on to be designated heat network zones. This will then inform which town centres are affected.

8.4. Measures to fill Information Gaps

Measure	Timescale

Measure	Timescale
Further work on identification of the best locations for heat networks which will then identify which (if any) town centres are impacted.	12 months

8.5. Overall Outcome

No Negative Impacts Identified.

At present there are no negative impacts identified from producing the strategy. Should some of the outcomes of the strategy come to fruition such as provision of a heat network in an area, impacts of the specific project would be assessed at that point.

9. Action Plan

Planned Action	Details	
Gather feedback internally and externally on the draft strategy. Incorporate feedback and note any mitigations required or responses to feedback prior to presenting the strategy to Full Council to agree.	**Lead Officer**	Yvonne D'Ambruoso
	Repeating Activity	No
	Planned Start	Wednesday January 03, 2024
	Planned Finish	Sunday March 24, 2024
	Expected Outcome	A refined strategy with incorporated comments fit for Council adoption.
	Resource Implications	Time to review comments and suggestions for incorporation.