

Environmental Impact assessment

1. Name of activity:	<i>Decarbonisation Phase 2</i>				
2. Main purpose of activity:	<i>To decarbonise (remove direct use of fossil fuels from) the council's key buildings, particularly Hitchin Town Hall and North Herts Museum and the learner pool at North Herts Leisure Centre. This will be achieved by replacing existing gas boilers with air source heat pumps or other clean, electricity-based heating, install measures to reduce energy consumption, such as secondary glazing, and measures to generate renewable electricity, e.g. solar panels. The project also covers the district council offices.</i>				
3. List the information, data or evidence used in this assessment:	<i>This assessment is based on the funding application form to Salix, the government body, where carbon savings were calculated.</i>				
Area of Potential Impact	Examples to Consider (non-exhaustive)	Neutral (X)	Negative (X)	Positive (X)	<i>Describe the contribution/impact on the area that the decision may have - assess whether this impact is a negative or positive or neutral one.</i> Negative: What are the risks? Positive: What are the benefits?
1. Impact on greenhouse emission and support adaption to the effects of climate change	Will energy needs be met through renewable sources?			X	Negative
	Will it reduce emissions through retrofitting new technology?			X	
	Will it reduce greenhouse gas emissions by reducing energy consumption and the need to travel?			X	Positive
					Installation of a small solar array on Hitchin Town Hall will lead to generation of renewable electricity The intervention will lead to a net annual reduction in CO2e emissions of around 100 tonnes in year one,

					increasing annually as the electricity grid moves to low carbon sources. This results from a reduction of 175-190 tCO2e from gas use and increase of 84 tCO2e from additional electricity use based on current conversion factors. Crucially, installation of heat pumps will involve replacing fossil fuel (and climate change causing) based gas boilers with electricity based air source heat pumps which overall reduce energy consumption.
2. Use of natural resources including water and energy	Will it reduce water consumption?	X		X	Negative
	Will it reduce energy consumption?				
					Positive
3. Minimisation of flood risks to the area (i.e. promotion of SUD's. protect surface and ground water quality)	Will it minimise flood risk from all sources of flooding?	X			
	Will it reduce property damage due to storm events/ heavy rainfall by improving flood resistance and flood resilience?	X			Positive
4. To protect, enhance and create environments that encourage and support biodiversity	Will it protect, enhance and increase biodiversity and protect habitats?		X	X	Negative
	Will it improve access to and promote	X			Loss of some grass area next to the learner pool at North Herts Leisure Centre.

	educational value of sites of biodiversity interest?				Positive As part of the planning condition for North Herts Leisure Centre, a planting scheme of native hedging will be planted to shield the heat pump enclosure, replacing grass and so improving biodiversity on site.
5. To improve Air Quality <i>(air quality describes how polluted the air we breathe is)</i>	Will it improve air quality?			X	Negative There are likely to be some local air pollutants released from construction related vehicles e.g. for transporting contractors, the crane that will be used and delivery vehicles. However, the contractor that has been appointed for the pre-construction period has a fleet that is 50% or more fully electric and has highlighted that they would encourage car sharing for site visits.
	Will it reduce emissions of key pollutants?			X	Positive Burning natural gas e.g. through gas boilers leads to emissions of key local air pollutants, particularly Nitrogen Oxides, which are known to cause harm to human health. Replacing gas boilers with air source heat pumps would reduce emissions of these local air pollutants, helping to improve air quality in the area.
6. To reduce need to travel, the use of private motorised vehicular transport as well as	Will it encourage increased walking, cycling and use of public transport?	X			Negative
	Will it increase the proportion of journeys using modes other than a car?	X			

<i>encourage walking, cycling, and use of public transport</i>					Positive

<i>7. To reduce waste production and increase recycling, recovery and reuse of waste</i>	Will it lead to reduced consumption of materials and resources?	X	X	X	Negative
	Will it reduce household waste?				The project will involve removal of old plant e.g. gas boilers and an air handling unit and installation of new resources.
	Will it reduce construction waste?				Positive
	Will it increase recovery recycling and re-use?				Old plant that is removed will be assessed by the leisure contractor at NHLC to see if anything can be used elsewhere and similarly by property services for Hitchin Town Hall. The contractor delivering the pre-construction element of the works identified that 70% of the components of an air source heat pump can be full recycled at the end of their working life. The contractor will also record and report on embodied carbon.
<i>8. To enhance the public realm and street improvements</i>	Will it reduce litter?	X			Negative
	Will it enhance the quality of public realm?	X			
					Positive

<i>9. To protect, enhance and seek opportunities to increase open space</i>	Will it improve open space? Will it improve landscape character? Will it minimise development on Greenfield sites?	X X X			Negative
					Positive
<i>10. To reduce noise and impact of noise</i>	Will it reduce noise pollution from vehicles?		X		Negative
					There are likely to be some noise pollution from construction related vehicles.
					There will also be ongoing noise from operation of the air source heat pumps but acoustic testing has identified that noise levels will be within planning limits with measures to be installed on the heat pumps at Hitchin Town Hall to reduce noise levels.
					Positive

6.0 Results			
	Yes	No	
Were positive impacts identified?	☒	☐	The key positive impact is related to reduced carbon emissions.
Were negative impacts identified (what actions were taken)	☒	☐	The main negative impact is increased noise levels both during construction and during operation. However, the air source heat pumps at Hitchin Town Hall will be fitted with measures to reduce noise levels.
7.0 Consultation, decisions and actions			
Describe the decision on this activity (refer to section 3.2)			
No major change			
List all actions identified to address/mitigate negative impact or promote positive impact			
Action	Responsible person		Completion due date
Ensure noise mitigation in place for air source heat pumps at Hitchin Town Hall	Climate Change Project Manager to oversee		Mid-December 2026
Ensure contractor, if appointed to main contract, delivers on commitments related to EVs and car sharing	Climate Change Project Manager to oversee		January 2027
Ensure contractor, if appointed to main contract, delivers on commitments related to resource consumption and circular economy	Climate Change Project Manager to oversee		January 2027
Ensure monitoring in place related to reduction in carbon emissions so that realises proposed benefits	Climate Change Project Manager to oversee		February 2028
When, how and by whom will these actions be monitored?			
Climate Change Manager to monitor delivery of these actions. Firstly, ensuring noise mitigation in place when detailed designs are complete. Then ensure main contract includes requirement to fulfil sustainability commitments from contractor and lastly to ensure monitoring is in place for energy consumption and related carbon emissions reductions.			