



## Public Sector Decarbonisation Scheme: Application Form - Guidance Notes

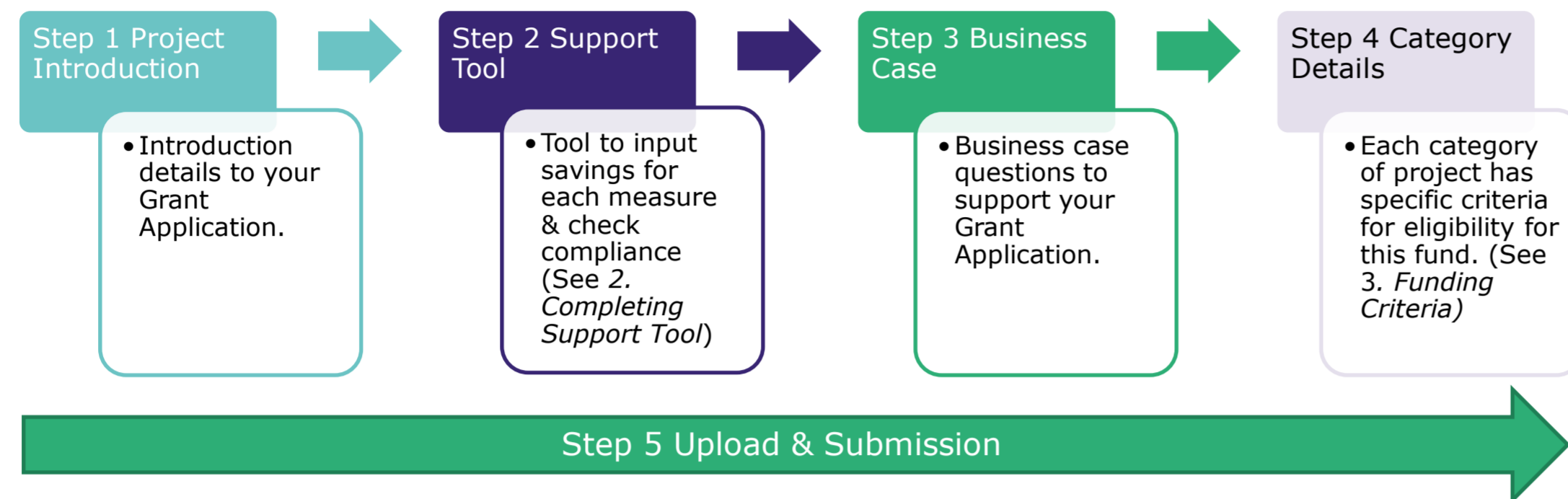
The following section is designed to give some clear guidance on how to fill out the Application Form for the Public Sector Decarbonisation Scheme. Any questions regarding the below please contact grants@salixfinance.co.uk.

Please [Enable Editing](#) in order for this Tool to fully function. This is a standard requirement when downloading excel files.

### Index:

1. Steps for completing an application
2. Guidance on completing 'Step 2 Support Tool'
3. Completing 'Step 4 Category Details'
4. Low Carbon Skills Fund
5. Strategic Approach
6. Additionality Criteria
7. Mitigating Fraud
8. Carbon Saving Methodology
9. Definitions

### 1. Steps for completing the Application Form



### 2. Completing 'Step 2 Support Tool'

Enter project details as shown in the example below.

Start Date	Completion Date	Site Life	Project Description
1/1/20	1/5/21	30	Building improvements and energy efficiency works

For Category 1, 2 & 4 (any projects directly saving carbon), enter information for each work type required for the project in the first table. Up to 10 work types may be entered here. Contact technical@salixfinance.co.uk if more measures are to be applied for.

Description of Work	Energy Type	Current p/kWh	Category	Project Type	Technology - Work Type	Annual kWh Pre-Project	Annual kWh Post-Project	Annual kWh savings	% kWh savings	Project Value
Building Fabric	Gas	2.80	2	Insulation - building fabric	Cavity wall insulation	1,000,000	850,000	150,000	15%	£50,000.00

The cells to the right show the calculated values for each work type.

Annual Financial Savings	Payback in Years	tCO <sub>2</sub> e pa	£/tCO <sub>2</sub> e LT
£4,200	11.90	27.58	60.43

Missing information for a work type will be flagged up in the 'Data Entry Check' column. The compliance check cannot be completed until all information is entered.

Payback in Years	tCO <sub>2</sub> e pa	£/tCO <sub>2</sub> e LT	Data Entry Check
11.90			Check all fields completed correctly
7.14	183.87	86.74	OK

Once all of the required information has been entered correctly, the cells at the top will show the final project figures and whether or not the project is compliant.

	Total Salix Funding Requested	Total Project Value	Payback in Years	Total Financial Savings	Total tCO <sub>2</sub> e pa	£/tCO <sub>2</sub> e LT	Compliance
Category 1, 2 & 4	£850,000.00	£850,000	15.69	£54,189	255.83	177.27	Compliant
Category 3	£6,000.00	£6,000	Total Project Value	£856,000.00	Total Grant Value	£856,000.00	

If you have a technology that is affecting more than one fuel, please enter each fuel into a separate line in the Compliance Tool.

Description of Work	Energy Type	Fuel Cost p/kWh	Category	Project Type	Technology - Work Type	Annual kWh Pre-Project	Annual kWh Post-Project	Annual kWh savings	% kWh savings	Project Value
1 Boiler to Heat pump	Gas	2.80	1	Heating	Air Source Heat Pump (air to water)	1,000,000	0	1,000,000	100%	£200,000.00
2 Boiler to Heat pump	Electricity	11.00	1	Heating	Air Source Heat Pump (air to water)	0	300,000	-300,000	0%	£0.00

For Category 3 (enabling works), please provide a detailed description of the project and technology each work type is enabling. Please include the number of the project being enabled, this can be found in the far right column of the support tool table. Up to 10 work types may be entered here.

Description of Work	Project Type	Technology - Work Type	Details of Projects Enabled	Project Number	Project Value	Data Entry Check
Sub-metering	Metering	Flow Meters	Low carbon heating	1	£1,000.00	OK
Battery to support solar array	Battery Storage	Battery in combination with renewable	Solar Array	4	£5,000.00	OK

### 3. Completing 'Step 4 Category Details'

Completion of 'Step 4 Category Details' will depend on which category your project(s) fall into:



#### Technology Categories:

##### Category 1:

Technologies that directly contribute to the heat decarbonisation of a building by installation of low carbon heating.

##### Category 2:

Technologies that do not directly contribute to the heat decarbonisation of a building but reduce overall energy demand so will support future heat decarbonisation.

##### Category 3:

Technologies that do not reduce carbon emissions but enable future heat decarbonisation projects to take place - these technologies are exempt from the requirement to meet £500/tCO<sub>2</sub>e lifetime savings.

##### Category 4:

Technologies that are only permitted if:

- (a) they are used to replace coal-fuelled heating systems or oil-fuelled heating systems, AND
- (b) if, in Salix's reasonable opinion, it has been demonstrated that it is not viable for a low-carbon heating system to be installed within the building as a replacement for the coal or oil-fuelled heating system.

Projects that fall into Category 2 and Category 3 must meet either one of criteria A, B or C as outlined below. Supporting commentary and evidence is needed to demonstrate each Category 2 and 3 project meets any one of the criteria. The criteria are outlined below, including advice on supporting information required.

#### Category 2 and Category 3 Projects

##### Criteria A: Category 2 and 3 measures are combined with measures in Category 1:

In this section, provide an overview of how each Category 2 and 3 measure facilitates the implementation of the Category 1 project.

##### Criteria B: Category 2 and 3 measures are for buildings that already use low-carbon heating for all their heating requirements:

In this section, provide a detailed description of these buildings including their heating systems and requirements.

##### Criteria C: A written commitment is made to future heat decarbonisation for the buildings in which measures are installed, which includes all of the following:

(i) A commitment to produce and submit to Salix, a Heat Decarbonisation Plan by **30th September 2021**.

(ii) An explanation within the Heat Decarbonisation Plan setting out how the building(s)' fossil fuel heating systems will be replaced by low carbon heating when the fossil fuel system(s) reach the end of their natural lifetime. It is important to consider what will happen when your current heating plant has reached the end of its life and suitable upgrades have not been made to your building to manage this. The type or types of low carbon heating systems, and the likely timescale for this, must be identified. A template for this Heat Decarbonisation Plan is provided if there isn't an existing document, and this can be used to help create this plan if support is needed.

(iii) The Heat Decarbonisation Plan must include details of how it has been approved by their public body, how this plan is going to be implemented, and that there is a commitment to apply for and utilise funding where available to deliver the Heat Decarbonisation Plan. The Heat Decarbonisation Plan will enable public bodies to plan their approach to decarbonisation and their contribution to meeting the 2050 net zero target.

# Step 1: Project Introduction



Project Title:	<input type="text" value="Sheffield City Council Multiple Projects"/>	
Applicant:	<input type="text" value="Sheffield City Council"/>	
Submission date:	<input type="text" value="11 January 2021"/>	
Will you need further use of the Low Carbon Skills Fund?	<input type="text" value="Yes"/>	<a href="#">Low Carbon Skills Fund</a>
Please provide an estimate of how many jobs will be supported by these projects.	<input type="text" value="50"/>	
Grant value requested (£)	<input type="text" value="£1,010,860.00"/>	
Is the project dependent on any other funding streams?	<input type="text" value="Yes"/>	

If the project is dependent on any other funding stream, please provide details below.  
The Council will need to contribute towards the shortfall.

**Please answer yes/no to the following questions, if any require additional commentary please include this in the box provided:**

1. Have you or your team worked with Salix before?	<input type="text" value="Yes"/>
2. Can you confirm your organisation owns the buildings where you wish to undertake these measures?	<input type="text" value="Yes"/>
3. Can you confirm that your organisation pays the energy bills for these buildings?	<input type="text" value="Yes"/>
4. Can you confirm that the proposed measures have not yet started?	<input type="text" value="Yes"/>
5. Upon award of funding, do you have access to frameworks to procure the measures against?	<input type="text" value="Yes"/>
5a. If no, are you in a position to place orders having gone through a procurement process in line with financial regulations?	<input type="text"/>
6. Does the project require planning consent?	<input type="text" value="No"/>
7. Have you secured all necessary internal sign off for this project proposal?	<input type="text" value="Yes"/>

If no, please provide detail below

8. Does the project include any Private Finance Initiative (PFI) buildings, if yes please provide detail below.	<input type="text" value="No"/>
---	---------------------------------

**Additional Commentary**

# Step 2: Support Tool

Version 1.4



Applicant:	Sheffield City Council
Project Phase	Pre-tender
Compliance Criteria:	£500 /tCO <sub>2</sub> e LT

Planned Start Date	Planned Completion Date	Site Life	Project Description
1/2/21	31/3/21	50	Sheffield City Council Multiple Projects

	Total Grant Funding Requested	Total Project Value	Payback in Years	Total Financial Savings	Total tCO <sub>2</sub> e pa	£/tCO <sub>2</sub> e LT	Compliance
Category 1,2 & 4	£1,010,860.00	£1,073,365.00	16.22	£62,319	159.44	500.00	Compliant
Category 3		£0.00	Total Project Value	£1,073,365.00	Total Grant Value	£1,010,860.00	

## Category 1,2 and 4 projects

	Description of Work	Energy Type	Fuel Cost p/kWh	Category	Project Type	Technology - Work Type	Annual kWhrs Pre-Project	Annual kWhrs Post-Project	Annual kWh savings	% kWh savings	Project Value	Annual Financial Savings	Payback in Years	tCO <sub>2</sub> e pa	£/tCO <sub>2</sub> e LT	Data Entry Check
1	Netherthorpe LED Lighting	Electricity	15.00	2	LED lighting	LED - new fitting	61,858	17,794	44,064	71%	£31,150.00	£6,610	4.71	3.11	400.37	OK
2	Netherthorpe ASHP	Gas	2.50	1	Heating	Air Source Heat Pump (air to water)	218,607	104,756	113,851	52%	£448,800.00	£2,846	157.68	20.93	1,709.65	OK
3	Netherthorpe ASHP	Electricity	15.00	1	Heating	Air Source Heat Pump (air to water)	0	31,775	- 31,775	0%		-£4,766	-	3.11	-	OK
4	Netherthorpe TRV	Gas	2.50	2	Heating	Heating - TRVs	104,756	89,043	15,713	15%	£3,475.00	£393	8.85	2.89	175.84	OK
5	Netherthorpe TRV	Electricity	15.00	2	Heating	Heating - TRVs	31,775	27,009	4,766	15%		£715		0.52	-	OK
6	Moor Market LED lighting	Electricity	15.00	2	LED lighting	LED - new fitting	146,905	42,938	103,967	71%	£52,350.00	£15,595	3.36	7.34	285.17	OK
7	Moor Market 32kWp PV	Electricity	15.00	2	Renewable energy	Solar PV	30,400	0	30,400	100%	£33,680.00	£4,560	7.39	2.24	668.33	OK
8	Town Hall LED lighting	Electricity	15.00	2	LED lighting	LED - new fitting	252,201	79,053	173,148	69%	£154,120.00	£25,972	5.93	12.23	504.11	OK
9	Town Hall BMS	Gas	2.50	2	Building management systems	BEMS - remotely managed	1,472,000	1,251,200	220,800	15%	£43,900.00	£5,520	7.95	40.60	128.41	OK
10	Town Hall TRV	Gas	2.50	2	Heating	Heating - TRVs	1,251,200	1,126,080	125,120	10%	£4,570.00	£3,128	1.46	23.01	29.04	OK
11	Acre Hill Store LED lighting	Electricity	15.00	2	LED lighting	LED - new fitting	33,623	9,404	24,219	72%	£14,320.00	£3,633	3.94	1.71	334.87	OK
12	Acre Hill Store ASHP	Gas	2.50	1	Heating	Air Source Heat Pump (air to water)	296,361	0	296,361	100%	£264,550.00	£7,409	35.71	54.49	387.15	OK
13	Acre Hill Store ASHP	Electricity	15.00	1	Heating	Air Source Heat Pump (air to water)	0	80,970	- 80,970	0%		-£12,146	-	7.93	-	OK
14	Acre Hill 20kWp Solar PV	Electricity	15.00	2	Renewable energy	Solar PV	19,000	0	19,000	100%	£22,450.00	£2,850	7.88	1.40	712.78	OK
15										0%						
16										0%						
17										0%						
18										0%						
19										0%						
20										0%						
21										0%						
22										0%						
23										0%						
24										0%						
25										0%						

## Category 3 projects

If you have more than 10 projects you wish to apply for, please contact: [grants@salixfinance.co.uk](mailto:grants@salixfinance.co.uk)

	Description of Work	Project Type	Technology - Work Type	Details of Projects Enabled	Project Number	Project Value	Data Entry Check
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							



[Category 1](#)   [Category 3](#)

[Category 2](#)   [Category 4](#)

Please click on the links above to get a comprehensive list of all technologies included as part of each category

# Step 3: Business Case



## 1. Project Cost Breakdown

If pre-tender please provide cost estimates, and final costs to be provided when available.

Design and engineering costs (£)	£107,340.00	10%
Main equipment capital costs (£)	£644,020.00	60%
Installation & commissioning costs (£)	£214,670.00	20%
Project delivery costs (£)	£53,670.00	5%
Contingency costs (£)	£53,670.00	5%
Other project costs (£)	£0.00	0%
Total projects costs	£1,073,365.00	100%

## 2. Cost Breakdown

Please provide commentary on the project cost breakdown. Salix appreciates that at this stage these costs may not be firm. Please provide commentary around how the costs have been estimated.

ASHP - A site survey was carried out and a detailed investigation was provided into the suitability of installing a ASHP at each site, where applicable. The ASHP was sized based on the existing heat load and boiler capacity and then considered weather compensated temperatures and building heat demand during milder weather temperatures to determine the baseload which will be met by the ASHP and a breakdown of the cost of this system was determined for each station. The proposed ASHP is a hybrid system at Netherthorpe Primary School which retains the existing radiators and the use of gas boilers to contribute towards the heating when the outside air temperature falls below 5oC. The proposed heat pump system at Acre Hill Store is to entirely replace the high level gas fired air heating.

The cost of the lighting has been calculated based on a like for like replacement and specifying Dextra lighting who provide competitively priced LED light fittings. A full lighting design will be carried out once funding approval has been provided. A cost breakdown is included in the attached spreadsheet.

## 3. Project Details

Project background - please give detail on how this project was selected compared to alternative low carbon solutions.

A site survey was carried out on 5 sites. An ASHP is viable at 2 sites as 2 of the other sites are connected to district heating and the Botanical Gardens boilers are in good condition and do not need to be replaced and a heat decarbonisation plan is required for this site and to assess the carbon emissions from the district heating network. The LED and PV will help to further reduce the electrical load and reduce carbon emissions.

## 4. Details of Project Energy Saving Calculations

Describe how the programme energy and carbon savings have been calculated, detailing any assumptions. Please attach savings calculations and product specifications alongside your application.

The ASHP savings have been calculated using the formula:

Existing gas consumption - DHW load = kWh gas usage through boilers

(kWh gas usage through boilers x boiler efficiency) - DHW = Boiler kWh heat output

Assumed ASHP/boiler contribution to heat load is 60/40

Electrical kWh heat output / CoP of ASHP = ASHP kWh consumption

Total kWh consumption - 15% (savings from new BMS) = ASHP kWh consumption of end solution

The savings from the lighting have been calculated by identifying the existing lighting type and numbers to calculate the total kW output of the lighting. The kW output of the

## 5. Energy and Carbon Monitoring Plan Post-completion

- Post-completion do you have plans in place for monitoring your projects?
- Do you agree that you will participate and cooperate with those people who are assessing this project from BEIS?

The sites have a range of monitoring capabilities which comprise of half hourly electricity meters and standard dial meters. We plan to use consultants to support us in calculating the existing electricity and gas usage of the building and monitoring the usage post-completion to identify the savings achieved. The gas savings will be adjusted by degree days to give an accurate representation of savings achieved.

We agree to participate and cooperate with BEIS post-completion.

## 6. Project Governance

Please define the project team and their roles in the delivery of the project (e.g. consultants, contractors, senior manager etc.).

- Please outline the organisation structure in terms of who has the authority to approve the project and any changes.
- Has a Project Execution Plan been drawn up to state exactly how the project will be managed?
- Please provide commentary to demonstrate how the teams overseeing the works are appropriately trained and skilled for the proposed technologies.
- Please attach a copy of your internal project plan.

The Council uses the Gateway Process to approve spending. This consists of Essential Compliance & Maintenance Board, Capital Programmes Group and finally Cabinet approval of the projects. When project approval in place then any spend changes up to 10% of the project cost can be approved by Director (Nathan Rodgers). Any spend changes above 10% would require approval via the Gateway Process again.

A project execution plan would be drawn up once a full tender exercise was in place for the works. This would be carried out via our in house Capital Delivery Service (CDS) or via our consultant APSE Energy.

APSE Energy - APSE Energy and its Associates are experienced in full-service energy management and building services engineering. They consult on new-build, refurbishment

## 7. Previous Experience

Describe any previous experience that you may have with the proposed energy efficiency measure.

- Please also outline the experience members of the project team have with managing projects of a similar scale, including that of any third-party support.

Sheffield City Council has a SALIX recycling fund which has been successfully used to finance over £1.55 million of energy efficiency schemes to date. These consist of LED lighting in Manor Lane depot, Moorfoot Offices, Swimming Pool covers in schools. Richard Newton (Fund Manager), Chris Johnson (Service Manager) along with colleagues in our energy monitoring team & CDS have successfully delivered and monitored the outcomes of these projects.

APSE Energy - APSE Energy Associates have similar experience in designing and delivering similar projects which include large heating replacements and renewable energy.

## 8. Procurement process

What are your plans for procuring the services needed for this project?

The Council utilises the YorBuild & Constructionline frameworks along with it's own procured framework of contractors for tender and/or mini competition dependant on the scale/value of the project. Works of this nature are usually delivered via a JCT Design & Build, Minor Works or similar contract.

To deliver selected projects by 31st March 2021 we propose to issue a specification and drawings to 3-5 installing contractors to provide a price. The appointed contractor will be appointed based on a scoring matrix of cost (70%) and quality (30%).

## 9. Project Risks & Mitigation

If you have an existing risk register for this project please share this with Salix. If a risk register is not available at this time please provide a provisional date for when you will share a copy with us. Risks and mitigations associated with project timescales will be required due to the importance of projects completing on time.

Do you have a risk register for this project?  
(Yes/No) Yes \_\_\_\_\_

If "No" please confirm when you expect this will be available.

Provisional Date \_\_\_\_\_

**10. Mitigating Fraud**

Please provide detail on the checks in place to mitigate fraud, including checks to ensure false representation and failure to disclose information is mitigated against. Please declare any conflicts of interest as part of this application. To confirm that there has been no abuse of position in the application process or selection of suppliers, please sign on supporting Signature Document which will be sent to you after Application.

All work will be tendered or undertaken via means of a framework. There is a record of declarations of interest maintained and checked at all capital projects.

There is a mature capital governance structure (The Gateway Process), to which all schemes have to report to. This is overseen by the Essential Compliance & Maintenance Group and the Capital Programmes Group. This system is also conducted with oversight with the Council's audit committee.

All contractors are selected by means of qualification and ability references are requested and accreditation to professional bodies evidenced.

All work is proposed to be undertaken with the assistance of a Quality Surveyor. This will allow for the checking of materials and ensuring adherence to specification and \_\_\_\_\_

## Step 4: Grant Funding Criteria



For further guidance on individual category criteria please see: [Guidance Notes tab](#)  
Please complete Sections 1 to 2 unless otherwise specified.

### 1. Category 1 Projects - If you have not applied for Category 1 projects, please move on to section 2

Provide detailed commentary and supporting evidence for how the proposed work(s) fit into the estate wide decarbonisation strategy. Can you comment on how the site(s) will be made compatible for the low carbon heating system(s)?

The Council has declared a Climate Change emergency and given the go ahead for a wide range of tough-tackling measures intended to reduce the authority's impact on climate change.

A Heat Decarbonisation Plan is required to develop a strategy to move away from fossil fuels at sites where gas/oil boilers are operational and to develop a strategy to decarbonise the district heating network. A Heat Decarbonisation Plan will be submitted before September 2021 which will detail the programme to replace gas boilers with a low carbon heating system prior to them reaching the end of their useful life.

The Council would like to request funding from the Low Carbon Skills Fund to support with completing the Heat Decarbonisation Plan and to deliver this project.

### 2. Category 2 or 3 projects - If you have not applied for Category 2 or 3 projects, please move on to Step 5.

These technologies will only be eligible for funding where one of the following criteria (A,B or C) applies:

Please input details below for the option where **yes** is selected.

<p><b>Criteria A:</b> Do you have both Category 1 and Category 2/3 measures in your application <b>AND</b> do the Category 2/3 measures support measures in Category 1?</p> <p>If yes, please provide an overview outlining how each Category 2/3 project relates to and facilitates the implementation of Category 1 measure.</p>	<p>Yes</p>	<p>A range of carbon reduction measures are proposed at all sites. We propose to install a new ASHP in selected sites and reduce the electricity usage by installing LED lighting and solar PV.</p>
<p><b>Criteria B:</b> Are the Category 2/3 measures for buildings that already use low-carbon heating?</p> <p>If yes, please provide a detailed description of these buildings including their heating systems and requirements.</p>	<p>Yes</p>	<p>Moorfoot and the Town Hall are connected to a district heating network. A Heat Decarbonisation Plan is required to investigate how to decarbonise the network.</p> <p>A low carbon solution is not ready for the Botanical Gardens as further investigations are required on how to decarbonise the heating system of this listed building, maintain humidity and upgrade the heat emitters laid out in trenches. This will be detailed out in the Heat Decarbonisation Plan.</p>
<p><b>Criteria C:</b> If you have answered no to Criteria A and B, please provide your heat decarbonisation plan for all buildings involved in category 2/3 projects.</p> <p>Select Yes to confirm that this heat decarbonisation plan has been provided with your application.</p>		<p>If No is selected, please sign the Signature Document (which will be sent to you after Application) as a written commitment to produce and submit to Salix, a Heat Decarbonisation Plan by 30 September 2021.</p>

### 3. Category 3 Projects - If you have not applied for just Category 3 projects, please move onto Step 5

Please provide commentary on why low carbon heating measures cannot be implemented on site presently.

Moorfoot and the Town Hall are connected to a district heating network. A Heat Decarbonisation Plan is required to investigate how to decarbonise the network.

A low carbon solution is not ready for the Botanical Gardens as further investigations are required on how to decarbonise the heating system of this listed building, maintain humidity and upgrade the heat emitters laid out in trenches. This will be detailed out in the Heat Decarbonisation Plan.

## Step 5 Submit Application

You can upload the completed Public Sector Decarbonisation Scheme Application Form and any further supporting documentation to the Salix online application portal:

[Application Portal](#)

Category List



Project Type	Work Type	Persistence Factor	Status/Comments
<b>Category 1</b>			
Heating	Air Source Heat Pump (air to water)	12.54	Use a separate line for each fuel type
	Ground Source Heat Pump	16.72	Use a separate line for each fuel type
	Water Source Heat Pump	16.72	Use a separate line for each fuel type
	Connect to existing district heating	28.50	
	Heating - Electric Heating	9.50	
<b>Category 2</b>			
Building management systems	BEMS - bureau remotely managed	9.00	
	BEMS - not remotely managed	6.84	
	BEMS - remotely managed	8.42	
Compressor	Compressed Air: air compressor upgrade	14.44	
Computers & IT solutions	CRT to LED monitors	7.20	
	Energy Efficient File Storage Replacement	9.00	
	Energy Efficient Server Replacement	9.00	
	Evaporative cooling for ICT	13.68	
	Free Cooling for ICT	13.68	
	Hot aisle/cold aisle containment	10.83	
	LED monitors instead of LCD (cost difference)	7.20	
	Multi Functional Devices	4.50	
	Network PC power management	4.00	
	Thin client	9.00	
	Uninterruptible Power Supplies	18.00	
	Virtualisation	9.00	
Cooling	Cooling - control system	6.84	
	Cooling - plant replacement/upgrade	8.21	
	Energy Efficient Chillers	14.44	
	Free cooling	13.68	
	Replacement of air conditioning with evaporative cooling	13.68	
Energy from waste	Anaerobic digestion	15.20	
	Incineration	15.20	Use a separate line for each fuel type
Hand Dryers	Hand Dryers - replacement to more efficient type	8.21	
Heating	Heat recovery	10.83	Use a separate line for each fuel type
	Heating - discrete controls	6.84	
	Heating - distribution pipework improvements	15.20	
	Heating - TRVs	6.84	
	Heating - zone control valves	11.88	
	Replace steam calorifier with plate heat exchanger	28.50	
	Steam trap replacements	15.20	
	Thermal Stores	18.00	
Hot water	Flow restrictors	14.00	
	Hot Water - chlorine dioxide dosing and biocide treatment	9.50	
	Hot Water - distribution improvements	18.00	
	Hot Water - Efficient taps	11.00	
	Hot Water - point of use heaters	9.50	
Industrial kitchen equipment	Energy efficient combi-oven	8.10	
	Energy efficient convection-oven	10.30	
	Steriliser to dishwasher replacement	10.80	
Insulation - building fabric	Cavity wall insulation	30.00	
	Double glazing with metal or plastic frames	28.00	
	Dry wall lining	30.00	
	Loft insulation	27.00	
	Floor Insulation - suspended timber floor	27.00	
	Floor Insulation - solid floor or other type	30.00	
	Roof insulation	30.00	
	Secondary glazing	7.92	
Insulation - draught proofing	Insulation - draught proofing	29.25	
Insulation - other	Air Curtains - ambient	11.40	
	Air Curtains - heated	10.83	
	Automatic speed doors	8.45	



	Automatic/revolving doors	<b>8.45</b>	
	Draught Lobby (external)	<b>29.25</b>	
	Draught Lobby (internal)	<b>29.25</b>	
	Radiator reflective foil (external walls)	<b>8.00</b>	
Insulation - pipework	Heating pipework insulation (external)	<b>9.00</b>	
	Heating pipework insulation (internal)	<b>22.50</b>	
Lab Upgrades	Diode pumped solid state lasers	<b>6.80</b>	
	Energy Efficient Drying Cabinets	<b>12.80</b>	
	Energy Efficient Freezers (-25°C)	<b>12.83</b>	
	Energy Efficient Freezers (-86°C)	<b>8.55</b>	
	Energy Efficient Fume Cupboards	<b>16.25</b>	
	Energy Efficient Growth Cabinets	<b>10.80</b>	
	Energy Efficient X-Ray Generator	<b>10.00</b>	
	Fume Cupboards - Auto Sash Closing + PIR	<b>6.84</b>	
	Fume Cupboards - VAV Controls + Inverter Drives	<b>10.26</b>	
	Heat Recovery on Extract System	<b>10.83</b>	
LED lighting	LED - new fitting	<b>25.00</b>	
	LED - same fitting	<b>13.00</b>	
Lighting controls	Lighting - discrete controls	<b>8.89</b>	
	Lighting control system centralised	<b>10.26</b>	
Motor controls	Fixed speed motor controls	<b>11.40</b>	
	Motors - flat belt drives	<b>11.40</b>	
	Variable speed drives	<b>10.26</b>	
Motor replacement	Motors - high efficiency	<b>15.00</b>	
Office equipment	Office equipment improvements for non-ICT	<b>3.00</b>	
Renewable energy	Small Hydropower	<b>22.80</b>	Use a separate line for each fuel type
	Solar PV	<b>22.50</b>	
	Solar Thermal	<b>17.10</b>	
Time switches	Time switches	<b>6.84</b>	
Transformers	Low loss	<b>30.00</b>	
	Low loss (cost difference)	<b>30.00</b>	
	Low loss+voltage management	<b>30.00</b>	
	Low loss+voltage management(cost difference)	<b>30.00</b>	
	Transformer tapping change	<b>30.00</b>	
Ventilation	Fans - air handling unit	<b>23.75</b>	
	Fans - high efficiency	<b>14.25</b>	
	Phase change material	<b>23.75</b>	
	Ultrasonic Humidifiers	<b>7.22</b>	
	Ventilation - distribution	<b>30.00</b>	
	Ventilation - presence controls	<b>6.84</b>	
<b>Category 3</b>			
Battery Storage	Battery in combination with renewable	<b>N/A</b>	
	Standalone Batteries	<b>N/A</b>	
	Upgrade uninterruptible power supply	<b>N/A</b>	
Electrical Infrastructure	Capacity Improvements	<b>N/A</b>	
	Electrical Distribution	<b>N/A</b>	
	Incoming Electricity Provision	<b>N/A</b>	
Metering	Flow Meters	<b>N/A</b>	
	Heat Meters	<b>N/A</b>	
	Metering Other	<b>N/A</b>	
	Metering Software	<b>N/A</b>	
<b>Category 4</b>			
Boilers	Boilers - control systems	<b>6.84</b>	
	Boilers - replacement combination	<b>7.22</b>	
	Boilers - replacement condensing	<b>14.44</b>	
	Boilers - replacement modular	<b>10.83</b>	
	Boilers - retrofit economiser	<b>10.83</b>	
Combined heat & power	CHP Private Wire Connection	<b>30.00</b>	
	Gas Turbine	<b>11.40</b>	
	Gas Engine CHP	<b>15.20</b>	
Heating	Oil to Gas - boiler fuel switching	<b>7.92</b>	Use a separate line for each fuel type

## Salix Finance: Terms of Use for Salix Application Form

© Salix Finance 2021

### **Intellectual property rights**

Salix are the owner or the licensee of all intellectual property rights in our tools, and in the material found within them. Salix' tools are available to use free under licence. The look and feel, the integral data, the embedded calculations and algorithms, and resulting compliance guidance have been created by Salix Finance who own all the Intellectual Property contained within them for the exclusive use of its existing and potential clients.

All rights are reserved. No part of the tools may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written

Applicant:

**Salix Commentary**

**Step 1: Project Introduction**

Supporting Employment	Amber	Score Green for High Quality, Amber for OK and Red for Requires Improvement Application form indicates 50 jobs are to be supported by this project. Appears reasonable for the size and scope - no further information provided.
-----------------------	-------	---

**Step 2: Support Tool**

Technical Feasibility & Future Resilience	Green	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Measures applied for are well understood technologies. Site surveys have taken place to ensure suitability. Assessor has no concerns surrounding the technical feasibility or future resilience of the project.
---	-------	---

Project Cost Savings Calculations with particular reference to the fuel prices being considered	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Electricity = 15p/kWh Gas = 2.5p/kWh Fuel prices specified are within typical benchmarks however no information to evidence these costs provided.
---	-------	---

Is cost of carbon in line with similar projects	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement £496.55/tonne is at the upper end of compliancy. Assessor notes the applicant is funding part of the project to ensure eligibility. As the project is pre-tender this should be carefully monitored to ensure the compliancy limit is not exceeded, if so the applicant may have to fund a larger proportion of the project.
---	-------	--

**Step 3: Business Case**

1.1 Design & Engineering Costs	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement
--------------------------------	-------	--

1.2 Main Equipment Costs	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement
--------------------------	-------	--

1.3 Installation and Commissioning Costs	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement
--	-------	--

1.4 Project Delivery Costs	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement
----------------------------	-------	--

Comments on Project Costs (1.1-1.4):		ASHP: Pre-tender cost estimate prepared by Salvis. Detailed breakdown provided however assessor is aware that a number of additional items have been included within the costs i.e. office radiators, warehouse fan coil units, anti-freeze etc. LED: LED upgrades have been calculated based on a like for like replacement. Acres Hill = £/fitting = £76.05, £/installed W = £3.0. Netherfield = £/fitting = £76.66, £/installed W = £4. Town Hall = £/fitting = £61.84, £/installed W = £5. Moor Market = £/fitting = £75.02 £/installed W = £4. Moorfoot = £/fitting = £71.8, £/installed W = £5. Solar PV: Costs were based on area of the roof and the number of suitable panels that could be installed. Breakdown for all sites provided in supporting information. Includes a 10% contingency.
--------------------------------------	--	---

2. Evidence of Firm Pricing or close budgets having been received	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Project is pre-tender and therefore pricing is not firm.
---	-------	--

3. Project Description including any background material	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Projects were determined following a number of site surveys to confirm suitability.
--	-------	---

4. Energy/Carbon Savings Calculations	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement ASHP: Savings based on an estimated CoP of 2.8 (lower than typical, will need to be confirmed at the post-tender stage through material specifications) and boiler efficiencies of 80-90% across the buildings. Savings appear reasonable at this stage, breakdown of proposed savings provided for each site. LED: Lighting schedules provided for each building. Savings based on reduced Wattage with the like for like replacement to LED. PV: Savings based on desktop modelling based on the performance of the proposed panels. It is assumed 950kWh will be generated per kWp. Both sites are using 100% of generation on site. BMS: kWh savings based on industry benchmarks. 15% savings is reasonable. TRV's: kWh savings based on industry benchmarks. 10-15% savings is reasonable.
---------------------------------------	-------	--

5. Energy/Carbon Monitoring Plan	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Half hourly electricity meters and standard dial meters are existing at the sites receiving upgrades. Existing electricity and gas usage of the building will be determined and monitoring of usage post-completion will identify the savings achieved. The gas savings will be adjusted by degree days to give an accurate representation of savings achieved. The applicant agrees to participate and cooperate with BEIS post-completion.
----------------------------------	-------	---

6. Is the project governance sufficient for the size and complexity	Amber	Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement
---	-------	--

of the work to be completed?		APSE Energy are managing the project, they are experienced in full-service energy management and building services engineering. Unable to comment on the governance of the contractor as the project is pre-tender.
7. Applicant/Contractors' previous experience capability		Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement The council have previous experience with the Salix recycling fund which has been successfully used to finance over £1.55 million of energy efficiency schemes to date. APSE Energy Associates have similar experience in designing and delivering similar projects which include large heating replacements and renewable energy.
8. Has a robust procurement policy been demonstrated?		Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement YorBuild & Constructionline frameworks will be used along with the Council's procured framework of contractors for tender and/or mini completion dependant on the scale/value of the project. Works of this nature are usually delivered via a JCT Design & Build, Minor Works or similar contract.
9. & 10. Project Risks & Mitigations including Fraud		Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Risk register provided outlining 10 key risks. Outlines the risk owner, likelihood and mitigation. Accounts for the impact of COVID-19. Assessor is satisfied all significant risks have been accounted for.  With regards to fraud mitigation all work will be tendered or undertaken via means of a framework. There is a record of declarations of interest maintained and checked at all capital projects.
<b>Step 4: Category Details</b>		
Category Criteria		Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Assessor is satisfied category criteria has been met at this stage.
<b>From Supporting Information</b>		
Material provided on the technology, has the final product been chosen?		Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Material specifications have not been provided at this stage. Supporting information indicates likely models/manufacturers. Material specifications will form a condition of funding.
Project Implementation / Schedule - Timings included; for example key milestones for installation and commissioning		Score Green for High Quality, Amber for With Conditions and Red for Requires Improvement Indicative project programme provided. Accounts for 11 weeks on site to complete the works - programme is reasonable at this stage. Assessor would have liked to have seen contingency accounted for. An updated programme will be required post-tender.
<b>Board/councillors approval?</b>	<b>Yes</b>	Sign off received.
<b>Assessor review and recommendations</b>		
Based on the overall score achieved, the business case for this project is:		Green = Passed Amber = Passed with conditions Red = Requires improvement
Based on evidence provided, is project completion realistic and feasible:		Green = Passed Amber = Passed with conditions Red = Requires improvement
Assessor Opinion - Consider this project for funding:	Passed with Conditions	Assessor's confirmation of scoring outcome or over-ride if assessor has reservations over scoring. Normally a Not Sound outcome from the scoring will result in further information being required or a recommendation that the project is not taken any further.
<b>Assessor summary including improvement points:</b>		
Overall, this is a well evidenced pre-tender application. Assessor is satisfied the project can be progressed with conditions.		
<b>Conditions (if any further information required) for passing business case:</b>		
<p>Conditions of funding include:</p> <ul style="list-style-type: none"> <li>*Provide project programme including contingency plan.</li> <li>*Risk Register - Full risk register to be provided post-tender. COVID impact to be included.</li> <li>*Data Sheets - To be provided once contractor on board and product specifications and manufacturers confirmed.</li> <li>*Firm Pricing - Quotations for all of the technologies must be provided from the appointed contractor(s) to confirm final pricing for each technology. This should be broken-down into equipment, installation and any other costs.</li> <li>*Energy Saving Calculations - Any changes to the proposed savings must be communicated once contractor(s) on board and final product selected.</li> <li>*Experience and Governance - Must be received for the contractor(s) once appointed.</li> <li>*Updated Application Form post tender must be provided to Salix with any changes.</li> <li>*Energy and Carbon Monitoring Plan - Monitoring approach will need to be specified in a greater level of detail to confirm appropriate monitoring of savings.</li> </ul>		
<b>Project Completion Commentary:</b>		

--

**Disclaimer**

This assessment is made on the information as provided by the applicant. Whilst reasonable steps have been taken to ensure that the information provided within this assessment is correct, Salix, the assessor, and the Government give no warranty and make no representation as to its accuracy and accept no liability for any errors or omissions.

**To be completed by Salix/Technical Contractor Assessor**

<b>Project reference</b>	ABC-2039-BH
<b>Time Allocated</b>	3.00 hours
<b>Assessor</b>	Eleanor Turner
<b>QA</b>	
<b>Approved by</b>	Hayley Marks
<b>Date</b>	10 February 2021