Briefing Note to	Cabinet
Briefing Note of	Elliott Grimshaw, Project Lead
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1 Introduction

This briefing note provides an update on the next opportunity for Public Sector Decarbonisation Funding which will open on 12th October 2022. The opening date was formally announced on 10th October. The briefing note will cover:

- 1. PSDS3b Funding Criteria Key changes
- 2. Lancaster City Council Eligibility & Preparedness
- 3. Capital Contributions, CO2 and Energy Savings

1 PSDS3B FUNDING CRITERIA – KEY CHANGES

In 2021/22 the council received funding through the Public Sector Decarbonisation Scheme (Phase 1) to decarbonise Salt Ayre Leisure Centre. The scheme was centred around replacing gas boilers with decarbonised heating solutions and also included building fabric upgrades.

There was no 'cap' on project costs, although Local Authorities had to demonstrate that measures would cost no more than £500 per tonne of CO2 saved. No financial contribution was necessary and electrical upgrades needed to facilitate new decarbonised heating solutions *i.e. DNO upgrades, substations etc*, (Cat 3) were exempt from the £500 tCO2 threshold. A raft of supporting documentation and evidence was also needed to support any bids.

Since the launch of the first phase of PSDS funding, a further two have followed (PSDS2, PSDS3a). Each time, eligibility and criteria has changed. For PSDS3b key changes in criteria are as follows:

- Project costs should be no more than £325 tCO2
- LA's can contribute more funding for schemes that exceed £325 tCO2 threshold
- Funding will only cover gas boilers that have reached end of life
- Category 3 works will not be exempt from the cost per tonne CO2 threshold
- Projects can be multi-year, but must be completed by March 2025
- Supporting information needed for applications included new heating system schematics, flow temperatures, product specifications, price assurance, DNO consultation and project plans

2 LANCASTER CITY COUNCIL ELIGIBILITY & PREPAREDNESS

In July 2022, Salix Finance announced that a new PSDS3b funding opportunity would become available in September 2022. This was later deferred to October 2022.

Officers anticipated that further opportunities would arise and during the final stages of the Salt Ayre Project, secured £114k of funding through the Low Carbon Skills Fund to develop a Heat Decarbonisation Plan (HDP).

The objective of the HDP was to review all of the council's gas emitting buildings (Scope 1) and identify what technologies and fabric measures could be implemented to decarbonise the sites to support future PSDS applications.

Consultants were commissioned to develop the plan around PSDS criteria, identifying when gas boilers were due for replacement, providing costs for decarbonisation and illustrating how the council's energy profile would change as it transitioned towards electrically powered heat pumps. The plan was completed in March 2022 and is available to view on the council's website: What we're doing.

The Heat Decarbonisation Plan also highlighted the equivalent gas boiler replacement costs for each site. This was included because officers noted that PSDS criteria had changed since the first wave and Local Authorities now needed to make a gas boiler equivalent financial contribution.

In light of this, officers submitted a report to Cabinet on 22nd June 2022 titled "Heat Decarbonisation: Baseline Capital Funding." This sought to establish capital budgets for buildings that had gas boilers reaching end of life. Sites included: Palatine Hall, The Storey and Williamson Park. Cabinet and Council approved the proposal which totalled to £300k based on equivalent gas boiler replacement costs In the HDP.

On 5th August 2022 Salix Finance launched a series of PSDS3b webinars and invited Local Authorities to attend, providing an update on key eligibility criteria (summarised under section 1 of the report). Salix confirmed that end-of-life gas boilers are considered to be those that are '10 years or older' and for the city council, this provided the opportunity for Morecambe Town Hall to be considered.

On 16th August officers commissioned Unify Group, energy management consultants, to review the Heat Decarbonisation Plan and carry out more detailed work which included assessing the electrical demand, grid requirements, updating the costs in light of recent market changes and provide the supporting information needed for the application. The final report was completed on 29th September 2022. A full PSDS application is now ready for submission on 12th October.

3 CAPITAL CONTRIBUTION, CO2 AND BUILDING ENERGY SAVINGS

<u>Capital Contribution</u>

In total, five sites can be considered eligible, in line with PSDS3b criteria: Morecambe Town Hall, The Storey, City Lab, Palatine Hall and Williamson Park. The total cost to decarbonise these sites is estimated to be £4.2M.

Due to the changes in funding criteria, the council would be expected to contribute £2.7M, or around 57% for all five sites. Equivalent gas boiler replacement costs for all five sites is estimated to be £547,400.

	Capital	MRP	4.1% Interest	Total P/A
Decarbonisation	£2,700,00	£135,000	£110,700	£245,700
Gas Boiler	£547,400	£27,370	£22,443	£49,813
Diff:	£2,152,600	£106,630	£88,257	£195,887

Contributions can be reduced by dropping sites from the application, focussing on those that would require the smallest contribution and generate the highest CO2 savings.

Appendix 1 illustrates how the contribution needed per site differs depending on the amount of CO2 saved.

CO2 & Building Energy Savings

The decarbonisation of all five sites would eliminate natural gas and generate annual energy savings of 1.1M kWh's. CO2 savings are estimated to be in the region of 374 tonnes per annum and 7,487 over the lifetime of the heat pumps.

Electricity consumption is expected to be 578,000 kWh using Air Source Heat Pumps. Based on current costs (22/23) this would generate a modest revenue saving of £20k p/a over gas.

The sliding scale shown in **Appendix 2** highlights how the changing energy market could alter savings in the future. As an example, should gas prices rise to 25p kWh and electricity rise to 50p kWh the council could expect to save over £110k p/a from the decarbonisation approach.

Note: Officers expect new gas prices to be confirmed in February 2023. It is expected that the current rate of 10.8p kWh will increase. Officers already have some indication from the YPO of what electricity prices could be by April 2023. Current estimates are 50p kWh.

Appendix 1: PSDS3b Calculator

Building	Total Grant Requested	Eligible Grant Value	Carbon Cost Threshold Compliant Grant Value	Total Net Financial Impact	Total Project Cost	Maximum Possible CCT Value	Total Annual Direct Carbon Savings	Total Lifetime Direct Carbon Savings	Carbon Cost Threshold	Minimum Client Contribution	Total Client Contribution	Client Contribution %	Gas Boiler like for like
WP	£946,387.00	£946,387	£946,387	£10,372	£1,188,874	£946,388	148.57	2,911.96	£325.00	£142,665	£242,487	20%	£140,097
PH	£468,626.00	£468,626	£468,626	£900	£682,828	£468,626	71.88	1,441.93	£325.00	£81,939	£214,202	31%	£103,583
St	£677,115.00	£677,115	£677,115	£74,551	£1,620,131	£677,115	100.47	2,083.43	£325.00	£194,416	£943,016	58%	£125,824
CL	£205,869.00	£205,869	£205,869	£2,442	£693,251	£205,869	31.67	633.44	£325.00	£83,190	£487,382	70%	£70,844
MTH	£135,172.00	£135,172	£135,172	£15,580	£939,851	£135,172	20.8	415.91	£325.00	£112,782	£804,679	86%	£107,048
	£2,433,169.00	£2,433,169.00	£2,433,169.00	£103,845.00	£5,124,935.00	£2,433,170.00	373	7,487	£1,625.00	£614,992.00	£2,691,766.00		£547,396.00

Appendix 2: Building Energy Savings

	Gas Savings: Impact of 4p incremental rise (kWh)										
	£0.108	£0.148	£0.188	£0.228	£0.268	£0.308	£0.348	£0.388	£0.428		
The Storey	61,809.48	£84,701.88	£107,594.28	£130,486.68	£153,379.08	£176,271.48	£199,163.88	£222,056.28	£244,948.68		
Williamson Park	46,269.36	£63,406.16	£80,542.96	£97,679.76	£114,816.56	£131,953.36	£149,090.16	£166,226.96	£183,363.76		
Morecambe Town Hall	12,214.80	£16,738.80	£21,262.800	£25,786.800	£30,310.800	£34,834.800	£39,358.800	£43,882.800	£48,406.800		
Palatine	42,603.84	£58,383.04	£74,162.24	£89,941.44	£105,720.64	£121,499.84	£137,279.04	£153,058.24	£168,837.440		
City Lab	18,679.68	£25,598.08	£32,516.48	£39,434.88	£46,353.28	£53,271.68	£60,190.08	£67,108.48	£74,026.88		
Net (Saving)	181,577.16	£248,827.96	£316,078.76	£383,329.56	£450,580.36	£517,831.16	£585,081.96	£652,332.76	£719,583.56		
			Elec	tricity Costs: Im	pact of 5p incr	emental rise (k\	Nh)				
	£0.280	£0.330	£0.380	£0.430	£0.480	£0.530	£0.580	£0.630	£0.680		
The Storey	55,641.25	£65,577.19	£75,513.13	£85,449.06	£95,385.00	£105,320.94	£115,256.88	£125,192.81	£135,128.75		
Williamson Park	41,651.94	£49,089.79	£56,527.64	£63,965.49	£71,403.33	£78,841.18	£86,279.03	£93,716.88	£101,154.72		
Morecambe Town Hall	10,995.83	£12,959.38	£14,922.917	£16,886.458	£18,850.000	£20,813.542	£22,777.083	£24,740.625	£26,704.167		
Palatine	38,352.22	£45,200.83	£52,049.44	£58,898.06	£65,746.67	£72,595.28	£79,443.89	£86,292.50	£93,141.111		
City Lab	15,181.44	£17,892.41	£20,603.39	£23,314.36	£26,025.33	£28,736.30	£31,447.27	£34,158.24	£36,869.22		
Net (Cost)	161,822.69	£190,719.60	£219,616.51	£248,513.42	£277,410.33	£306,307.24	£335,204.15	£364,101.06	£392,997.97		