CABINET

Report subject	**Poole Crematorium: Detailed Options for the replacement of cremators**
Meeting date	8 March 2023
Status	Public
Of Executive summary	In September 2022, Cabinet requested a report detailing options for the replacement of cremator(s) at Poole Crematorium be brought to Cabinet in the next 6 months, with the aim of working towards new cremator(s) being installed in the next 18 months. This report provides reports back on an independent feasibility study on the technological options for crematoria installation and asks Cabinet to consider the potential options for investment and to agree which to take forward.
Recommendations	**It is RECOMMENDED that:** **a) Cabinet agrees an investment of up to £3.3M be built into the future capital programme and up to £725k per annual revenue costs from 2024/25 for the provision of cremators at Poole Crematorium.** **b) Cabinet notes that a business case will be taken to the Future Infrastructure Board to request CIL funding for the approved option.** **c) Cabinet notes the CDS Group feasibility study for cremator replacement at Poole Crematorium.** **d) Cabinet considers the options set out in this report and agrees which to invest in:** • **Option 1: No investment; continue as a ceremonial venue.** • **Option 2: Invest in two gas cremators.** • **Option 3: Invest in two electric cremators.** • **Option 4: Invest in the latest electric cremator technology to be released to the UK market in the Summer 2024.** **e) Cabinet agrees to a detailed business case on the agreed option be brought back to Cabinet.**

Reason for recommendations	The recommendations of this report seek to ensure provision of cremators to meet the needs of the whole BCP Community.

Portfolio Holder(s):	Councillor Mark Anderson Portfolio Holder for Environment & Place
Corporate Director	Jess Gibbons – Chief Operations Officer
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Wards	Council-wide
Classification	For information and decision

Introduction

1. Cabinet on the 28 September 2022 agreed the following recommendations:
    a. Cabinet recommends investment be built into the future capital programme for the provision of cremators to meet the needs of the whole BCP Community.
    b. Cabinet commits to bringing forward the reinstatement of cremators at the Poole Crematorium facility, subject to a continuing review of demand, emerging green technologies and the preferred future location(s) and appropriate timeframe for this investment.
    c. Cabinet requests a report detailing options for the replacement of cremator(s) be brought to Cabinet in the next 6 months, with the aim of working towards new cremator(s) being installed in the next 18 months.

Background

<u>Current Poole Crematorium operating model</u>

2. Poole crematorium ceased operating as a crematorium in April 2020. This was due to the age of the cremation equipment, which had become uneconomical to repair with replacement parts being obsolete or unavailable.
3. Poole Crematorium has since been operating as a ceremonial and memorial location only and a location for the scattering or interring of cremated remains within its memorial grounds.

4. Since April 2020, 2790, funeral services have taken place at Poole, following which 1794 deceased have been conveyed by Bereavement Care Services to Bournemouth Crematorium for cremation at no additional fee and 996 deceased conveyed directly by the family-appointed funeral directors for which a fee may have been levied to the family. The usage data confirms the position that the venue remains a popular choice for funeral services amongst local families despite not currently offering an on-site cremation service.
5. The Poole crematorium site suspended all operations in March 2022 to undertake a significant refurbishment. These works were in line with Phase 1 of the Bereavement Services Business Plan. The facility re-opened on the 26 September 2022 for ceremonies.
6. Since reopening, The Halo ceremonial hall has undertaken 231 funeral services, following which 196 deceased have been conveyed to Bournemouth Crematorium by the Bereavement Care team at no additional cost to the families.
7. In March 2022 a public petition was launched to 'Save Poole Crematorium 'Petition · Save Poole Crematorium. Install a new cremator. · Change.org 3394 signatures have been added to the petition as of 16th January 2023. (3172 in September 2022)

Options Appraisal

8. CDS Limited were commissioned to carry out a feasibility analysis following the Cabinet decision in September 2022. The findings are set out in the full report in Appendix 3.
9. The report includes:
    - A quantitative review of current cremation facilities.
    - An overview of the latest Government guidance on air quality, emissions, and controls for crematoria.
    - The potential of installing gas cremators, electric cremators, or alternative cremator technology (subject to a Non-Disclosure Agreement) the financial costs and their greenhouse emissions of each.
    - A review of local electrical power supplies to ensure sufficient power is available to support electric cremators.
    - A review of structural alterations to the building that may be required to install new cremators.
    - Architectural review for the installation of either gas or electric cremators.
    - Full cost analysis of the various options against a business case analysis.
    - Cost for the removal of existing cremator equipment and any potential cost recovery.
    - A summary review and breakdown of new technology.
    - SWOT analysis for the installation gas or electric cremators, including long term risks and financial costs.

10. The report concluded that Poole crematorium:
    a. Is likely to complete 1463 cremations per annum, using 45-minute service slots.
    b. The most suitable number of cremators is two.
    c. Either gas or electric cremators could be installed.

d. That electric cremation is the lowest carbon option for cremation on the current market.
e. Electric cremation requires an initial higher capital outlay.
f. That electric cremators are the only technology available in the UK market which would allow the council to meet their carbon emissions targets.
g. That a newer generation of electric cremators are due to be released to the UK market in July 2024, which will be less disruptive to install at Poole crematorium and financially advantageous, requiring less capital outlay.

11. The impact on market share by installing cremators at Poole is outlined below:

a. Drive time analysis shows that the two nearest competitors to Poole Crematorium are Bournemouth Crematorium (BCP Council) & Purbeck Crematorium (Harbour View).

b. Poole Halo Ceremony venue has undertaken 2790 ceremonial funeral services since April 2020, during its 28 months opening period to December 2022 (closed March 2022 to Sept 2022). This is an average 99.64 services per month and equates to circa 1195 services per annum, with the deceased being conveyed to Bournemouth for cremation.

c. It is reasonable to conclude that any installation of cremators at Poole, would correspond in a reduction in cremations at Bournemouth Crematorium of 1195 cremations per annum. As the need for conveyancing would cease.

a. This will reduce the total number of cremations currently being undertaken at Bournemouth Crematorium from 3730 per annum in 2022 to circa 2535 cremations per annum once Poole Crematorium becomes fully operational. With currently four operating cremators this would mean Bournemouth would then be operating significantly below its maximum capacity.

b. There is therefore potential scope for BCP Bereavement Care to attract an additional market share of circa 200-500 cremations per annum to be won through open market competition, bringing Poole Crematorium back to funeral and cremations numbers recorded in 2019 prior to Poole ceasing cremations in April 2020.

c. It must be noted that the impact of New Milton Crematorium opening in April 2022 is beginning to be understood, with cremation numbers dropping at Bournemouth from 4500 to 3730 cremations per annum in the last 12 months.

d. It is anticipated long term that consideration as to the number of cremators required at Bournemouth Crematorium (currently 4) will be needed to reflect the reduced service demand at the point of their planned replacement in 2027/28.

12. The benefits of reinstating cremators at Poole Crematorium are:

- Would cease the need to convey the deceased from Poole to Bournemouth Crematorium.
- Would provide greater choice and competition within the local bereavement market of Poole and wider North & East Dorset.

- Would increase local cremator capacity by 1463 cremations per annum and increase overall BCP Bereavement Care service resilience.
- Would reduce demand on Bournemouth crematorium allowing for an expansion in and greater variation in funeral service time spans thus reducing any perceived pressure on bereaved families to leave the site to allow for the next service during peak demand.
- Would provide the greatest service resilience in maintenance scheduling, breakdowns, and overall service planning, when considered in conjunction with Bournemouth crematorium.

Options analysis

Option 1: No investment; continue as a ceremonial venue.

Benefits

13. This is the current position and has been operational since April 2022. Following the completion of the current investment programme the site provides an enhanced ceremonial facility for bereaved families with conveyancing of the deceased to Bournemouth Crematorium for an unattended cremation offered by BCP Bereavement Care

Impacts

14. Non reinstatement of a cremation facility at the location will result in a level of local community and Funeral Director disappointment and dissatisfaction in the loss of a valued asset as evidenced through the public petition and local press articles.
15. A decision to formally adopt this option would require BCP Council to:
    a. Cease using the name 'Poole Crematorium' and rename the facility to comply with the 2008 Regulations.
    b. Decommission the old cremator equipment to comply with health and safety, remove hazardous materials and comply with environmental legislation and the 2008 Regulations and enable the space to be alternatively utilised.
    c. Formally serve notice of closure of the site as a Crematorium pursuant to the 2008 Regulations.

Option 2: Invest in two gas cremators.

16. The detailed analysis of this option is summarised in the SWOT analysis for natural gas cremators in the table below.
17. That an initial investment of £1,494,625 would be required to install two natural gas cremators, without the inclusion of contingencies, additional refurbishment cost or the purchase of subsidiary crematory equipment that is not included within the breakdown of cremator replacement costs.

CDS Consultancy SWOT Analysis of Natural Gas Cremators

Strengths	Weaknesses
Existing technology used for cremation at Bournemouth Crematorium which is operated by BCP; minimal staff training required.	High CO_2 emissions from gas combustion, which would mean that the council missed their carbon emission targets.
Cremation time is consistent and takes 90 minutes.	High NO_x emissions from gas combustion.
The capital cost of the machines is estimated between £500,000 to £575,000.	Maintenance costs for the machines can be costly over time.
Opportunities	**Threats**
Short lead time from purchase to installation.	Uncertainty regarding the future of global gas supply.
Potential to switch to either Hydrogen or Bio LPG as an alternative fuel source on the same cremators in the future.	Uncertainty regarding the future of national gas prices.
There may be potential to retain some of the existing infrastructure from the existing gas cremators, which may lower the cost of the installation.	Threat of future carbon taxes (from national government) on industry's that use natural gas to promote electrification.

Option 3: Invest in two electric cremators.

18. The detailed analysis of this option is summarised in the SWOT analysis of electric cremators table below.
19. That an investment of £2,437,516 would be required to install two electric cremators, without the inclusion of contingencies, additional refurbishment cost or the purchase of subsidiary crematory equipment that is not included within the breakdown of cremator replacement costs.

CDS Consultancy SWOT Analysis of Electric Cremators

Strengths	Weaknesses
Electric cremation on a green energy tariff reduces CO_2 emissions by 80%. Electric cremation releases 33% less NO_x emissions.	Electric cremators have a higher capital cost.
Based on the energy unit prices that Poole operate on electric cremation would be approximately £17 cheaper per cremation than a gas cremation.	Electric cremators require more space due to the requirement for the separate filters and fans and abatement system.
Because of the combustion technique, there is a smaller risk of fires due to the operation of the machine.	The length of cremation times is longer, approximately average 2 hours.
If future legislation is to change where all crematoria must switch away from gas or switch to a greener gas, then Poole would have already overcome this issue by switching to electric.	**The lead times for purchasing electric cremators are estimated to be >9 months.**
Maintenance costs of electric cremators are thought to be lower in the long term due to the reduction in heat fluctuation which reduces stress on the refractory lining of the brickwork.	Less effective for heat recovery systems to be used in heating the building or heating other buildings due to the efficiency of the electric cremators in retaining heat.
Opportunities	**Threats**
The future UK gas prices are expected to increase due to the reduced availability of gas in global markets. Gas prices are increasing at a higher rate than electricity.	A STATS upgrade may be required, which may require the digging up of roads, causing disruption. The upgrade may also come at a high financial cost – which is currently unknown.
To the knowledge of CDS no crematoria in Dorset offers electric cremation, therefore if marketed suitably to funeral directors, Poole could claim to offer the 'greenest' cremation process in Dorset. This would mean that Poole has a competitive advantage over other crematoria in the area.	Due to the weight of the electric cremators, the foundations of the building may need to be reinforced to withstand the additional weight of the electric cremators.

Option 4: Invest in the latest electric cremator technology to the released to the UK market in the Summer 2024.

20. CDS Group, provided a review and breakdown of new cremator technology, which remains commercially sensitive at this moment in time.
21. This highlighted a new range and generation of electric cremator technology which was due to be released to the UK market in the summer of 2024.
22. CDS Group advised that this new generation would be the most appropriate electric cremators to be installed at Poole.
23. Characteristics for these new electric cremators for installation at Poole Crematorium, would include the following:

a. The cremators could be constructed inside the crematory; therefore, in theory, no alterations would be required to the existing roof or doorways (similar to current gas cremators on the market).

b. Utilise waste heat to provide hot water to the site.

c. Be a cremator which is manufactured in the UK and therefore wouldn't be subject to international import tariffs or changes to exchange rates.

Key Benefits

24. Reduced initial capital costs in comparison to current generation of electric cremators, due to the reduced requirement to undertake modifications to current the building infrastructure and that they will be manufactured in the UK.
25. Reduced amount of time it takes the cremator to reach the required temperature for cremation, meaning cremators will be offline for shorter periods of time following scheduled or reactive maintenance, preventing the need to hold over cremations for significant periods of time.
26. Shortened cremation times, in line with gas cremators, allowing for greater throughout per day or shorter operational hours, reducing staffing costs.
27. Produced in the UK, reducing purchase and on-going maintenance costs.
28. Reduced CO2 and NOx emissions.
29. Lower cost per cremation than gas.
30. Unique selling point in offering greener cremations.
31. Electricity prices are thought to be increasing at a slower rate than gas.
32. More resilient to future legislative changes in emissions standards.

Key Impacts

33. Information will not be available until the summer of 2024.
34. lead in time similar to current electric cremators.

Summary of Financial Implications

35. Bereavement Care Services was budgeted to generate a surplus of £2.3m in 21/22 with the Crematorium & Cemeteries operations delivering a net income of £1.8m. Since the creation of BCP Council there has been an under-recovery of £602,911 this is due to historically profiled expected income budget which has not been realigned following Local Government Reorganisation (LGR) in April 2019. In 21/22 this pressure was in part offset by savings of £93,276 achieved on expenditure.
36. Borrowing repayment costs would create additional revenue pressures within the Council's Medium Term Financial Plan (MTFP) (excluding the one of decommissioning costs of £120k). The increase annual revenue costs would

range from £569k in option 2 to £699k for option 3. The revenue costs for option 4 will need to be accurately calculated at the time of forming a decision.

37. Market analysis currently estimates a long-term additional revenue pressure on the service, due to increased staffing, long term maintenance liabilities and increased utility costs of between £250K and £275k per annum. These costs exclude the repayment of prudential borrowing.

38. The annual prudential borrowing repayments would also need to be added to the MTFP as a pressure for options 2, 3 & 4 these are expected to be between £294k and £449k per annum. As interest rates are currently rising this estimate could increase prior to the scheme being finalised.

39. Unless alternative funding sources are identified, capital investment for options 2, 3 and 4 (although for option 4 timelines are not yet determined) would still need to be funded from additional prudential borrowing.

40. One option for alternative funding is through the Community Infrastructure Levy. A business case will be taken to the Future Infrastructure Programme Board requesting CIL funding for the Cabinet agreed option.

41. Any funds allocated via CIL could reduce the remaining capital spend that would need to be funded by additional prudential borrowing. This reduction in borrowing would reduce any future repayments reducing the long-term revenue pressures on the service and thus the Councils Medium Term Financial Plan.

42. Following advice from accountancy, decommission cost & fees cannot be capitalised as the CIPFA code of practice confirms in Module 4 that Assets decommissioned should be written off to the Operating Expenditure line in the Comprehensive Income and Expenditure Statement as part of gain or loss on disposal. There is no provision within current revenue budgets to absorb the one-off cost of decommissioning the cremators & associated fees.

43. Cremation services are exempt from VAT which means that a replacement of a cremator will directly impact the Council's partial exemption position. Based on the current projection it is certain that the 5% limit would be breached if the project is delivered within one financial year. This would result in an additional cost of nearly £2.2m representing irrecoverable VAT that the Council would need to repay back to HMRC because of going over the statutory threshold. To mitigate this risk construction will be phased over two accounting periods.

44. With regards to option 4 a detailed VAT analysis would need to be undertaken closer to the time. It is likely that a reduction in public spending and organisational changes would, in the long term, push the Council closer to the 5% threshold. As a result, the replacement of the cremators would either need to be spread over 3 financial years or the Council would need to adopt a 7-year average approach to avoid the resultant cost of irrecoverable VAT.

The table below summarises the breakdown of cost(s) for the options tabled for consideration:

Table of Options and implications

(note: financial implications are those additional to any already agreed)

	Option 1, Current (Do nothing)	Option 2	Option 3	Option 4
Description	**To continue to promote and market the Poole site as a ceremonial venue only**	**Install two gas cremators at Poole now**	**Install two electric cremators at Poole now**	**Commit to bringing forward the reinstatement of electric cremators at Poole Crematorium, subject to a review of new technology and emerging green technologies being made available to the UK market in July**
Capital Investment (CDS report)		**£'000**	**£'000**	**£'000**
Demolishment of existing cremators	100	40,000	40,000	40,000
STATS upgrade			196,500	196,500
Installation & Rebuild of walls to install creators		60,000	60,000	60,000
Main contractor OHP		16,125	45,600	45,600
Project Management		7,500	7,500	7,500
Cremators X 2		1,075,000	1,600,000	1,300,000
M & E works		40,000	80,000	80,000
Internal structural changes		60,000	60,000	60,000
Main contractor construction works (15 Weeks)		120,000	234,000	120,000
Main contractor construction works (26 Weeks)				.
Professional Fees (Architects, planning, SE, PM, QS)		65,000	98,900	65,000
off site Staff Allowances		11,000	15,000	11,000
Sub-Total		**1,494,625**	**2,437,500**	**1,985,600**
Capital Investment (refurbisment & crematrium equipment)				
UPS Generator		100,000	100,000	100,000
Additional upgrades to subsidory crematorium equipment		140,000	140,000	140,000
Redecortaion & refurbishments		60,000	60,000	60,000
Sub-total	**100**	**300,000**	**300,000**	**300,000**
Total Capital Investment		**1,794,625**	**2,737,500**	**2,285,600**
20% Contingency	120	358,925	547,500	457,120
Total capital costs	**120**	**2,153,550**	**3,285,000**	**2,742,720**
Revenue Implications				
Employee costs		105,000	105,000	105,000
Utility costs		125,000	100,200	100,200
Maintenance/servicing		45,000	45,000	45,000
Prudential Borrowing Repayments*		294,300	449,000	374,800
Total annual revenue costs (year 2 onwards)		**569,300**	**699,200**	**625,000**
One off cost to ddecommison existing cremators	120			
Total year 1 revenue costs (excl Prudential borrowing repayments)		275,000	250,200	250,200
*cost of borrowing at 'medium' invest to save risk rate (7%) over a 15 year term on a maturity basis.				

Summary of legal implications

45. There is no statutory duty on a local authority to provide burial or cremation facilities, but if they do so, the management is governed by the Local Authorities' Cemeteries Order 1977 and the 2008 Regulations. Local authorities are defined as burial authorities and/or cremation authorities and given the power to provide services by virtue of the Local Government Act 1972.

46. The Cremation (England and Wales) Regulations 2008, state that the cremation authority must ensure that a crematorium is:

    a. maintained in good working order.

    b. provided with a sufficient number of attendants.

    c. kept in a clean and orderly condition.

47. If the site does not remain a crematorium and in order to comply with the 2008 Regulations, the Council must serve notice that it no longer remains a crematorium. It can continue to market the location for services and committals only, with deceased convey to Bournemouth Crematorium for cremation.

48. The Council should if a decision to defer an investment decision is taken undertake the necessary steps to formally change the operating status of the site pursuant to the Regulations (Cremation (England and Wales) Regulations 2008 to include the publication of required notices and notification to the secretary of state. The Council can at a future date apply to reintroduce the cremation facility through the same Regulations.

Summary of human resources implications

49. An individual crematorium must be certified and licenced as a stand-alone facility for the cremation and disposal of human remains in compliance with the Cremation England and Wales) Regulations 2008.

50. As such the site must be provided with sufficiently trained, and competent staff who must be present when active cremations are being undertaken.

51. The two crematorium sites managed by BCP Council could therefore not be operated under a single licence, but the sharing of resources, IT systems and ancillary services would be possible, with an uplift in staffing resources to facilitate the management of two separate facilities.

52. It is anticipated this would require an additional:

- 1 x Site Responsible Officer
- 2 x Crematorium Technicians
- 2 x Ceremonial Attendants

53. It is anticipated that if all conveyancing from Poole Crematorium ceases, members of staff currently undertaking this role, could be redeployed to 2 of the roles highlighted above. This has been reflected in the financial modelling.

Summary of sustainability impact

54. A full Decision Impact Assessment has been undertaken, ID 412 resulting in the identification of two major negative impacts.

55. Every cremation produces NOx due to the coffin materials used by manufacturers – both nitrogen monoxide and nitrogen dioxide – the same air polluting chemicals released by diesel cars. The latest figures published in Pharos, the cremation industry's house magazine, show that just one cremation emits approximately 500g of NOx gas.

56. An electric cremator produces 50-80% less CO2 emissions than the gas cremator, the range is dependent on the number of cremations processed per day and energy tariff used and produces 33% less NOx emissions. Alternative fuels, such as hydrogen blend and biogas may be feasible in reducing emissions in certain cases, however, they are not viable solutions for the UK industry at this time.

Summary of public health implications

57. This report continues to support the work that Bereavement Care Services undertakes within the community in delivering a range of services, which provides the appropriate closure at a time of heightened emotional distress and supports a healthier grief recovery process.

Summary of equality implications

58. An Equality Impact Conversational Tool has been completed and reviewed by the Equality Panel. The options presented in this report either seek to maintain service levels as they are or increase provision. There are no significant negative equality impacts on protected characteristics that have been identified with service users retaining access to both local authority and private sector marketplace providers delivering local and national facilities.

Summary of risk assessment

59. Current live potential non-compliance with Crematorium Regulations 2008 by continuing to use the name 'Crematorium' when signposting to the Poole facility when no working equipment is in operation at the site currently.

60. Remain open to legal challenge by market competitor as to the use of the term "Crematorium" at Poole.

61. Any investment decision at this time would result in an increase in unsupported revenue spend and impact of the Council's Medium-Term Financial Plan.

62. The public petition shows that a proportion (3,394 as at 16/01/2023) of BCP residents and the wider population have expressed a keen interest in reinvestment in the facility as a working crematorium, a decision to await a wider BCP conurbation review or not invest may result in reputational impacts and a potential element of future loss of customer base if, as a result potential service users chose to use other marketplace providers that offer onsite cremation.

Background papers

Bereavement Services Business Plan 2020
Decision Impact Assessment Final Report DIA412

Appendices

Appendix 1 – Financial Table
Appendix 2 - CDS Feasibility Report into Cremator Replacement at Poole
Appendix 3 - EIA Conversation Screening Tool