

MIDDLESBROUGH COUNCIL	
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Report of:	Corporate Director of Environment, Communities and Culture – Geoff Field
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Relevant Executive Member:	Executive Member for Environment
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Submitted to:	Executive
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Date:	2 September 2026
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Title:	Cremator Refurbishment Programme
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Report for:	Decision
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Status:	Public
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Council Plan priority:	Safe and resilient communities
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Key decision:	Yes
Why:	Decision(s) will incur expenditure or savings above £250,000 and have a significant impact in two or more wards

Subject to call in?	Yes
Why:	Non-Urgent Decision

Proposed decision(s)

That Executive:

- Approves the inclusion of the Teesside Crematorium Cremator Refurbishment Programme totalling £1.047m in the Council's Capital Programme, and the allocation of capital funding from existing Council funded capital resources to deliver the project.
- Approves the implementation of the proposed programme of works, including cremator refurbishment, refractory replacement, installation of operational bypass flues, NOx abatement technology, emissions monitoring upgrades, mechanical and electrical improvements, and associated structural alterations.
- Notes the findings of the independent condition assessment and options appraisal, including the operational, environmental and compliance risks associated with maintaining the existing infrastructure without investment.

- Notes that the proposed investment will extend the operational life of the existing cremator plant by at least ten years, improve service resilience, support compliance with DEFRA Process Guidance Note PG5/2(25), and reduce nitrogen oxide (NOx) emissions by approximately 65%.

Executive summary

Teesside Crematorium provides essential cremation services for residents of Middlesbrough and the wider Tees Valley.

In February 2026, an independent condition assessment and options appraisal identified that while the existing cremators remain structurally sound and capable of meeting current and projected demand, investment is now required to address ageing infrastructure, improve operational resilience, maintain regulatory compliance and enhance environmental performance requirements.

As part of the independent assessment, a number of significant risks requiring attention were identified. These include the loss of contingency capacity following the withdrawal of two mothballed Lupton & Place cremators, the absence of operational bypass flue arrangements, the deteriorating condition of cremator refractory linings, and the need to comply with the requirements of DEFRA Process Guidance Note PG5/2(25). Without investment, the Council faces an increased risk of service disruption, equipment failure, environmental compliance issues and escalating maintenance costs.

Following completion of the independent appraisal, the manufacturer of the existing cremators, provided updated budget quotations for refurbishment and replacement options based upon the preferred service option. The costs were considered alongside the findings of the condition assessment, operational requirements, environmental obligations, project deliverability and affordability.

The preferred option is the refurbishment and upgrade of the existing cremator plant. This includes replacement of refractory linings, installation of operational bypass flues, NOx abatement technology, upgraded burners and control systems, replacement emissions monitoring equipment, mechanical and electrical improvements, and associated structural alterations.

The estimated cost of the preferred option is £1.047m, comprising £0.786m for cremator refurbishment works, £0.061m for mechanical and electrical improvements, and £0.200m for structural and building alterations.

The proposed investment will extend the operational life of the existing cremator plant by ten years, improve business continuity arrangements, reduce nitrogen oxide (NOx) emissions by approximately 65%, and ensure continued compliance with environmental and operational requirements.

Alternative options considered included continued reactive maintenance, replacement of the existing cremators with new units, replacement with Hybrid Ready cremators, and longer-term replacement technologies. Whilst replacement options would provide a longer asset life, they require significantly greater capital investment and longer lead in times and are therefore not considered proportionate at this stage given the condition of

the existing cremators, the continued serviceability of the abatement plant, and the immediate requirement to address resilience and compliance issues.

The recommended option to refurbish the existing machines represents the most balanced and cost-effective solution available to the Council, addressing immediate operational risks whilst maximising the value of the existing machines and thereby allowing sufficient time to develop a longer-term crematorium replacement strategy in line with future technological and further regulatory developments.

The financial, legal, operational, environmental, equality, procurement and governance implications of the recommendations have been considered by the appropriate officers of the Council and are set out within the main body of this report.

This matter requires Executive approval as it is a Key Decision. In accordance with paragraph 10.20.1 of the Constitution, the Executive is responsible for making Key Decisions that have not been delegated elsewhere by the Mayor.

1. Purpose of this report and its contribution to the achievement of the Council Plan ambitions

- 1.1 The purpose of this report is to seek approval for capital investment in the Teesside Crematorium Cremator Refurbishment Programme and the implementation of a programme to refurbish and upgrade the existing cremator plant, associated mechanical and electrical improvements, and structural alterations and environmental enhancement works.
- 1.2 The proposed investment will support the achievement of the Council Plan ambitions by safeguarding the provision of a bereavement service, improving operational resilience, strengthening environmental performance, ensuring compliance with statutory requirements and delivering long-term value from existing Council assets. The programme contributes directly to the Council's ambitions of creating a successful and ambitious town, supporting a healthy place, maintaining safe and resilient communities and delivering best value for residents.

Our ambitions	Summary of how this report will support delivery of these ambitions and the underpinning aims
A successful and ambitious town	The project supports local businesses and partners including funeral directors, contractors and suppliers, whilst ensuring that an essential public service remains sustainable and fit for purpose for at least the next decade. The investment also protects previous capital expenditure by extending the life of existing assets and delivering value for money.
A healthy Place	The installation of NOx abatement technology, upgraded burners and enhanced emissions monitoring are expected to reduce NOx emissions by approximately 65%, supporting improved air quality and contributing to the Council's environmental and climate commitments. The following will continue; continuous monitoring for particulate matter, carbon monoxide and oxygen as well as carrying out annual testing for hydrogen chloride and organic compounds, and that the emission limit for particulate will be stricter than existing (was 20mg per NM3 but will now be 10mg per NM3) however this will be complied with as a result of the new works.
Safe and resilient communities	In addressing ageing infrastructure and reducing the risk of service disruption the project strengthens the resilience of service. The installation of bypass flues, replacement of critical cremator components and upgrades to supporting infrastructure will ensure that services can continue to

	operate reliably during periods of maintenance or equipment failure. This provides reassurance to residents, funeral directors and stakeholders that an essential community service remains available when needed most.
Delivering best value	Refurbishing the existing cremators, as identified as option A within the appraisal document, provides the most cost-effective solution identified through the independent options appraisal. It extends the operational life of the existing cremators by at least ten years, avoids the significantly higher costs of full replacement and ensures compliance with DEFRA Process Guidance Note PG5/2(25) and other regulatory requirements. By maximising existing assets while improving resilience, environmental performance and operational efficiency, the proposal delivers long-term value for money and reduces future financial risk to the Council.

2 Recommendations

2.1 That Executive:

- 2.1.1 Approves the inclusion of the Teesside Crematorium Cremator Refurbishment Programme in the Council's Capital Programme, and the allocation of capital funding from existing Council funded capital resources to deliver the project.
- 2.1.2 Approves the implementation of the proposed programme of works, including cremator refurbishment, refractory replacement, installation of operational bypass flues, NOx abatement technology, emissions monitoring upgrades, mechanical and electrical improvements, and associated structural alterations.
- 2.1.3 Notes the findings of the independent condition assessment and options appraisal, including the operational, environmental and compliance risks associated with maintaining the existing infrastructure without investment.
- 2.1.4 Notes that the proposed investment will extend the operational life of the existing cremator plant by at least ten years, improve service resilience, support compliance with DEFRA Process Guidance Note PG5/2(25), and reduce nitrogen oxide (NOx) emissions by approximately 65%.

3 Rationale for the recommended decision(s)

- 3.1 Teesside Crematorium is a critical public service, and investment is required to maintain the reliability, resilience, and compliance of the existing cremator infrastructure.
- 3.2 An independent technical assessment of the existing cremators identified ageing infrastructure, deteriorating refractory linings, reduced contingency capacity and upcoming environmental compliance requirements as key risks requiring immediate intervention.
- 3.3 The proposed refurbishment and upgrade programme recommended within the technical assessment, will extend the operational life of the cremator plant by up to ten years, improve environmental performance, strengthen business continuity arrangements, and ensure compliance with current and future regulatory requirements.
- 3.4 Failure to proceed would increase the risk of service disruption, contribute to equipment failure, regulatory non-compliance, and higher maintenance costs as well as the potential of irreparable reputational damage to the Council.
- 3.5 The recommended investment represents the most proportionate and cost-effective solution to safeguard the long-term delivery of cremation services for residents of Middlesbrough and the wider Tees Valley.
- 3.6 This proposal directly contributes to the mitigation of Corporate Risk DR-05-035 (Crematorium – Lifespan and Replacement by 2030). The risk identifies the potential failure of crematorium infrastructure and the consequent impact on service continuity, regulatory compliance, reputation, and financial sustainability. The cremator refurbishment provides a medium-term mitigation by extending the life of the existing cremator plant to at least 2036 whilst allowing sufficient time for the Council to evaluate future cremation technologies and develop a long-term replacement strategy.

4 Background and relevant information

- 4.1 Teesside Crematorium is a key bereavement facility serving Middlesbrough and the wider Tees Valley. Due to operational concerns around contingency planning resilience, the Council commissioned an independent condition assessment and options appraisal to review the condition, capacity and future requirements of the cremator and abatement infrastructure.
- 4.2 The assessment confirmed that the existing cremators remain structurally sound and capable of meeting current and forecast cremation demand. However, the plant has now reached a stage in its lifecycle where targeted investment is required to maintain operational resilience, environmental performance and regulatory compliance and therefore the appraisal identified several priority areas requiring investment.

- 4.3 The crematorium currently operates three cremators and a shared abatement plant, all installed in 2011. Two older Lupton & Place (L&P) cremators, dating from around 1990, are no longer operational. These cremators are unsupported by the original manufacturer and no longer suitable for modern cremation requirements.
- 4.4 The independent options appraisal concluded that the three operational cremators remain mechanically and electrically sound, operating efficiently and continue to meet current environmental performance standards. However, the plant is now approximately 15 years old and key components, including refractory linings, burners, control systems and emissions monitoring equipment, have approached the stage where investment is required to maintain reliability, efficiency and regulatory compliance.
- 4.5 The crematorium now relies entirely on a single abatement system with no bypass flue arrangements in place. Consequently, a significant abatement plant failure could severely restrict the Council's ability to undertake cremations on site, creating operational, reputational and service delivery risks.
- 4.6 The report also identified several environmental and regulatory drivers for investment. Updated DEFRA Process Guidance Note PG5/2(25) introduces new requirements relating to emissions monitoring, energy metering and operating arrangements. Whilst the existing cremators are capable of meeting current requirements, further upgrades are required to ensure continued compliance and to improve environmental performance. In particular, the installation of NO_x abatement technology would achieve an estimated 65% reduction in nitrogen oxide emissions and future-proof the crematorium against anticipated tightening of environmental standards.
- 4.7 The appraisal concluded that the existing cremator plant has sufficient capacity to meet both current and forecast demand, with no evidence that additional cremation capacity is required.
- 4.8 The objectives of the project are to:
- Extend the operational life of the existing cremator plant to at least 2036.
 - Reduce NO_x emissions.
 - Remove redundant cremation equipment.
 - Improve service resilience through installation of bypass flues.
 - Ensure ongoing compliance with environmental legislation and DEFRA guidance.
 - Improve the working environment and operational efficiency of the crematory.
 - Avoid the need for premature investment in full cremator replacement.
- 4.9 As a result, the report recommends investment in the existing cremator infrastructure rather than full replacement, enabling the Council to maximise the value of its existing assets while maintaining service continuity and deferring a significantly larger capital replacement programme for at least a further ten years.

- 4.10 Further to approval, a structured implementation programme will be required to deliver the necessary upgrades and ensure the continued provision of a safe, resilient and environmentally compliant cremation service.
- 4.11 Delivery of the project will be planned to minimise disruption whilst ensuring resilience and compliance measures are implemented as a priority. Given the urgency of the issues identified and the requirement to strengthen operational resilience ahead of the winter period, the project will be delivered through a phased approach with clear governance, project oversight and performance monitoring arrangements in place throughout the implementation period.
- 4.12 Following completion of the independent options appraisal, the equipment manufacturer for the existing cremators was invited to review the recommendations and provide budget cost estimates for both refurbishment and replacement options.
- 4.13 The providers confirmed that the existing cremators remain suitable candidates for refurbishment and provided indicative budget costs for a range of options. The providers advised that, where considered, a replacement option would require detailed design work before formal prices can be confirmed. Consequently, further assessment of overall project costs would be required should the Council wish to pursue a full replacement strategy.
- 4.14 The updated cost information outlined in appendix A, has been considered alongside operational requirements, service resilience, environmental compliance, project deliverability and affordability. On balance, refurbishment of the existing cremator plant remains the preferred option as it addresses the immediate risks identified within the condition assessment whilst providing the most proportionate and cost-effective investment at this stage of the asset lifecycle.
- 4.15 This investment will ensure Teesside Crematorium remains compliant with the requirements of DEFRA Process Guidance Note PG5/2(25), the Environmental Permitting Regulations, the Cremation Regulations 2008 and other relevant industry standards and guidance.
- 4.16 The updated DEFRA guidance introduces new requirements relating to emissions monitoring, gas and electricity metering, standby cremator arrangements and environmental performance.
- 4.17 The option to refurbish rather than replace will incorporate the infrastructure upgrades necessary to meet these requirements, including the installation of NOx abatement technology, upgraded emissions monitoring systems, gas and electricity metering, and associated software and control system improvements.
- 4.18 The project will also address a number of significant operational and safety risks identified within the independent condition report. The removal of the condemned L&P cremators, installation of bypass flues, replacement of ageing refractory linings, upgrades to critical cremator components and improvements to ventilation systems will strengthen operational resilience and reduce the risk of equipment failure or service interruption. These improvements will ensure the crematorium

continues to operate safely, reliably and in accordance with statutory requirements, whilst providing a dignified service for bereaved families and a safer working environment for staff.

- 4.19 An Equality Impact Assessment (EIA) will be undertaken as part of the project development process to ensure the needs of all users of the service are fully considered.
- 4.20 The value of the works required means that any contract for works will be a below threshold contract for the purposes of the Procurement Act 2023. The proprietary knowledge, software, components and technical specifications required to undertake the work would support the Council to secure a direct award via the Council's Exemption route which is included in the Council's Constitution, this will be formally reviewed and signed off providing a clear audit trail.
- 4.21 The withdrawal of the two Lupton & Place cremators has removed the crematorium's historic contingency capacity. The service is now heavily dependent upon three cremators operating through a single abatement plant. In the event of a major plant failure, cremation services could be severely restricted or temporarily suspended, potentially resulting in funeral delays and significant distress for bereaved families.
- 4.22 The condition assessment identified an immediate requirement for refractory replacement within one cremator and a further requirement within the next twelve months, although this is believed to be a lot more urgent. Failure to undertake these works increases the likelihood of equipment breakdown, emergency repairs and unplanned service disruption. Reactive maintenance is likely to be significantly more expensive than undertaking planned replacement works.
- 4.23 DEFRA Process Guidance Note PG5/2(25) introduces enhanced requirements relating to emissions monitoring, environmental performance and utility metering arrangements. Failure to invest in the necessary infrastructure upgrades could place the Council at risk of non-compliance with environmental permit conditions and future regulatory requirements.
- 4.24 Delaying investment is likely to increase future costs. The independent appraisal demonstrates that refurbishment can extend the life of the existing cremator plant by ten years. Failure to undertake this work could accelerate the need for full replacement of the cremator infrastructure, requiring higher level of capital investment.
- 4.25 Bereavement services are among the most sensitive services delivered by the Council. Any significant disruption to cremation services, delays to funerals or environmental compliance failures would directly affect bereaved families and could result in substantial reputational damage to the Council.
- 4.26 Failure to progress the refurbishment programme would limit the Council's ability to mitigate Corporate Risk DR-05-035 (Crematorium Lifespan and Replacement by 2030). The Council would continue operating ageing infrastructure without addressing known resilience and compliance weaknesses, increasing long-term

operational and strategic risk exposure.

5 Ward Member Engagement

- 5.1 The Executive Member for Community and Culture Services has been consulted on the proposals and supports the recommendations contained within this report.

6 Other potential alternative(s) and why these have not been recommended.

- 6.1 Alternative options were considered, including continuing with reactive maintenance only, partial refurbishment works, and full replacement of the existing cremators with new cremation technologies.
- 6.2 Reactive maintenance and limited refurbishment options were not recommended as they would fail to address the identified resilience, compliance and infrastructure risks and would increase the likelihood of service disruption.
- 6.3 Full replacement options would provide a longer operational lifespan but require significantly greater capital investment and are not considered proportionate at this time given the condition and remaining service life of the existing cremators and associated infrastructure.
- 6.4 The recommended refurbishment and upgrade programme provides the most balanced and cost-effective solution, addressing immediate operational and regulatory requirements whilst extending the life of the existing cremator plant by at least ten years.

7 Impact(s) of the recommended decision(s)

Topic	Impact
Financial (including Social Value)	The proposed capital investment totalling £1.047m as detailed in Appendix A, will fund refurbishment and upgrade works to the cremator infrastructure at Teesside Crematorium. The project will be included in the Council's Capital Programme and the capital investment will be funded from existing Council funded capital resources by a virement included in the separate Quarter One 2026/27 Integrated Performance and Finance Forecast Outturn report to this agenda. The investment is expected to extend asset life by ten years, reduce the risk of unplanned maintenance expenditure and avoid the need for premature full replacement of the cremator plant. Social value will be delivered through the continued provision of a high-quality bereavement service for local communities.
Procurement	Procurement activity will be conducted in accordance with the Council's Contract Procedure Rules and Procurement Strategy.

	The value of the works required means that any contract for works will be a below threshold contract for the purposes of the Procurement Act 2023. The proprietary knowledge, software, components and technical specifications required to undertake the work would support the Council to secure a direct award via the Council's Exemption route which is included in the Council's Constitution, this will be formally reviewed and signed off providing a clear audit trail.
Legal	The proposed works support the Council's obligations under the Environmental Permitting Regulations, Cremation Regulations 2008, Health and Safety legislation and DEFRA Process Guidance Note PG5/2(25). Legal Services will be consulted as required in relation to procurement and contract arrangements.
Risk	Failure to proceed would increase the risk of cremator failure, service disruption, environmental non-compliance, increased maintenance costs and reputational damage. The proposed investment mitigates these risks by improving resilience, reliability and regulatory compliance.
Human Rights, Public Sector Equality Duty and Community Cohesion	The proposals are not expected to have any adverse impact on protected groups. An Equality Impact Assessment will be undertaken as part of project development to ensure that all service users continue to have equitable access to bereavement services.
Reducing Poverty	There are no direct impacts on poverty. However, maintaining a local, reliable and accessible cremation service supports residents by reducing the potential for disruption, delays and additional costs associated with funeral arrangements.
Climate Change / Environmental	The project will improve environmental performance through the installation of NOx abatement technology, upgraded burners and enhanced monitoring systems. NOx emissions are expected to reduce by approximately 65%, supporting the Council's environmental objectives and regulatory compliance. The following will also continue; continuous monitoring for particulate matter, carbon monoxide and oxygen as well as carrying out annual testing for hydrogen chloride and organic compounds, and that the emission limit for particulate will be stricter than existing (was 20mg per NM3 but will now be 10mg per NM3) however this will be complied with as a result of the new works.

Children and Young People Cared for by the Authority and Care Leavers	The proposals do not have a direct impact on children and young people cared for by the Authority or care leavers.
Data Protection	No significant data protection implications have been identified. Any personal data processed as part of project delivery will be handled in accordance with UK GDPR, the Data Protection Act 2018 and Council policies.

Actions to be taken to implement the recommended decision(s)

Action	Responsible Officer	Deadline
Secure Executive approval and allocate capital funding for the Teesside Crematorium Refurbishment Programme.	Executive / Corporate Director of Environment, Communities and Culture	September 2026
Finalise project scope, design requirements and governance arrangements with Facultative Technologies and internal stakeholders.	Bereavement Services Manager	September 2026
Appoint contractors and place orders for refurbishment works bypass flues, NOx abatement technology and associated infrastructure upgrades.	Bereavement Services Manager / Procurement / Property Services	October 2026
Commence refurbishment works to reduce the risk of service disruption during the winter period.	Bereavement Services Manager / Facultative Technologies	November 2026
Complete installation of bypass flues, emissions monitoring equipment, mechanical and electrical upgrades and associated structural works.	Property Services / Facultative Technologies	March 2027
Complete commissioning, compliance testing and project sign-off.	Bereavement Services Manager / Environmental Health	April 2027

Background papers

Body	Report title	Date
Appraisal to determine the crematory options for the existing Teesside Crematorium	Teesside Crematorium Options Appraisal	26 June 2026

Appendices

1	Appendix A Cremator Options Assessment Summary
2	Appendix 2 Impact Assessment Level 1: Initial Screening Assessment

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