



The Scottish Parliament
Pàrlamaid na h-Alba

Strategic Investment Planning

16 June 2022

Reference: SPCB (2022) Paper 43

Executive summary

1. This paper has been prepared to inform the SPCB of some significant investments which will be required over Sessions 6 and 7. Whilst these investments will be funded from the existing Parliament budget, they will form a significant expense and the SPCB will want to satisfy itself that the investments are required and represent good value to the taxpayer.
2. There are several building systems that need to be replaced or enhanced, either due to ageing systems reaching end of life, or to help the Parliament reduce its energy and carbon consumption.
3. This paper introduces the SPCB to:
 - a. Why the investment is required
 - b. Work required and assumed costs
 - c. Governance gateways for SPCB to support decision making
4. The SPCB is invited to:
 - a. Note the strategic investments required to the building over sessions 6 and 7
 - b. Note governance arrangements

Issues and options

Why investments are required

Technology reaching end of life

5. There are two drivers that are causing the requirement for significant investment in the systems which control the building. Firstly, the building is getting older, and some of the technology that was installed in the early 2000's is reaching end of life. This is a natural part of building maintenance and the Facilities Management team (FM) have an ongoing programme of work replacing and updating systems.

6. FM holds a 25-year maintenance plan for all assets at Holyrood. An asset can be anything from carpets to the central heating system. An integral part of the role for FM is to maximise life expectancy of all assets through good maintenance, repair and seeking innovative ways to keep assets working.

7. We also take new legislative requirements, such as climate change laws and overlay these onto the 25-year maintenance plan, so that as we review assets, we build in, how they need to adapt to remain compliant.

8. In 2013 officials first raised that a key system (the Building and Energy Management System (BEMS)) was approaching end of life. Since then, the facilities management team has worked to replace parts and extend its life. However, the risk of maintaining the system now outweighs the benefits of retaining it.

9. The Building and Energy Management System (BEMS) is a business-critical tool which controls the heating, ventilation, air conditioning and water within the Parliament. As it reaches end of life, it can no longer effectively communicate with newer technologies which are being added in (such as modern heating systems). The parts that make up the system are now obsolete and difficult to obtain. The system regularly fails – and this can cause issues such as business critical comms rooms overheating. We have so far been able to resolve these issues, but there is a risk that if a comms room significantly overheated, we would not be able to broadcast and Parliamentary Business would have to be paused. This risk will only increase in the coming years if it is not replaced.

10. The current BEMS system cannot accurately control energy usage throughout the building, and this will be required to help us reduce our consumption.

11. A business case for a BEMS replacement has been produced. The Strategic Resource Board (SRB) has not yet approved the replacement but has asked that we go to market to get accurate costs for a new system. Once we understand the full cost, the SRB will consider the cost / benefit of the replacement. If approved, the costs will be met from existing budgets. Given the scale of the investment, the SPCB will want to be assured that due process was followed.

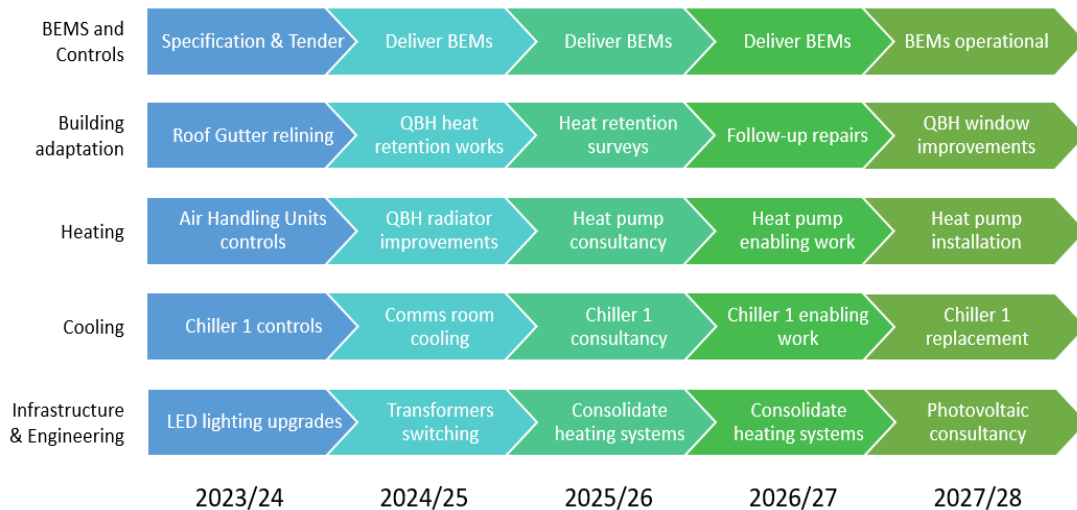
Achieving Net Zero

12. The Scottish Parliament passed regulations that Scotland would become Net Zero by 2045. Net Zero means reducing carbon emissions as close as possible to zero. Any remaining emissions need to be offset. Emissions predominately come from electricity and gas. For the Scottish Parliament as an entity – we have emissions to run the building, and indirect emissions such as emissions through purchasing items or travelling.

13. This paper focuses on the investments needed to get the building emissions to Net Zero. Our indirect emissions (travelling etc) are relatively small in comparison to the emissions to run the building. Any decision to reduce indirect emissions will need to be balanced with any impact of reducing them. This will be a separate discussion with the SPCB.
14. The Cabinet Secretary for Net Zero, Energy and Transport, has written to all Chief Executives of Public Services and has requested all publicly owned buildings are Net Zero by 2038 as part of the phased approach to achieving Net Zero overall by 2045.
15. Our main carbon emissions are from our electricity consumption, however as the grid energy mix decarbonizes, this becomes less and less. The 2nd highest proportion of our carbon emissions are from gas used for heating and cooking. A low carbon alternative to gas is required to move towards Net Zero.
16. In practical terms, this means we need to:
- a. Retain heat within the building, by getting rid of drafts, in order to use less energy by replacing heat lost
 - b. Stop using gas, which means our heating systems need to be replaced
 - c. Make improvements to our electrical network so that if we require to use more electricity instead of gas, our network can cope with this safely
17. Specifically – the work required is:
- a. Improve QBH windows/roof/wall linings so that heat does not escape
 - b. Combine our current two existing heating systems in preparation for switching over to a newer more efficient heating system
 - c. Improve air handling units (to improve efficiency of ventilation)
 - d. Replace water boilers (to improve efficiency)
 - e. Install heat pumps (to heat building instead of gas)
 - f. Implement heat recovery systems (to reuse waste heat)
 - g. Improve electrical infrastructure (to take more electricity safely)

Summary

18. The table below shows a summary of all the enhancements and replacements that need to be implemented. The timings are indicative at this stage and will alter in order to make the overall costs tolerable within the Parliament's existing budget.



Governance

19. These programmes of works will follow agreed corporate governance arrangements. Lynsey Hamill, Group Head Resilience and Sustainability is Senior Responsible Officer, supported by John Paterson as Programme Manager.

20. All proposed works making up this programme will be subject to the following checks and gateways:

- a. Project of work proposed by FM project board – costed and business case produced
- b. The Sustainable Development Programme board will assess effectiveness of project in reducing carbon emissions and make a recommendation to the SRO on whether spend is justified
- c. The SRO will present costs and business case to the Strategic Resources Board, who will confirm if costs can be met from existing parliamentary budgets and approve / reject
- d. The SPCB approves the overall parliamentary budget which will include the expenditure for approved projects
- e. We will also update the SPCB at key gateway stages, suggested as:

Stage 1 Concept /Feasibility Options Stage

Stage 2 Tender period evaluation and contract recommendation

Stage 3 Construction phase

Stage 4 Project completion and handover (including making goods defects period (12 months following practical completion).

Resource implications

21. The SPCB should note that if a decision is taken to proceed with these investment projects, costs will be met from existing budgets. This necessitates that the projects are spread over two sessions to spread the costs. Due to the scale of the BEMs replacement, it is expected that it will be the primary focus of spend for Session 6.

Publication Scheme

22. This paper can be published in line with the SPCB's Publication Scheme.

Next steps

23. At the September SPCB planning day, the SPCB will be taken through the budget for session 6, which includes the costs for replacing the BEMS. The programme team will then produce a further paper for the SPCB in October which will set out more detail on all the other work detailed in this paper, and the next stages for the investments.

Decision

24. The SPCB is invited to:
- a. Note the strategic investments required to the building over sessions 6 and 7
 - b. Note governance arrangements

Resilience and Sustainability Group

June 2022