

## SBRI -Energy Efficient Whitehall Buildings

**Project Title** Continuous commissioning of water distribution systems

**Lead Organisation** Marflow Hydraulics Limited

**Ref:** 854-219

### Section – 1

**Average score for this section (out of 40): 22.00**

The vision is aligned with the challenge to reduce energy use. It would have been helpful to identify which of the ten themes are addressed by the proposal. The proposal is innovative and has been described well, albeit with some jargon. The technology is ready and has sufficient track record. There are some elements of the question that have not been answered here. For example, it states that disruption would be minimised but the level of anticipated disruption is not clear, how would the installation impact building use? Also, there is no discussion here regarding approvals, assistance or consents. Anticipated energy and carbon savings have not been outlined here. Some form of calculation is required. Measurement is mentioned, it would be helpful to discuss this in more detail. Tasks are set out but not set against a timeframe. There is no discussion regarding project management or risk mitigation. Also, a brief description of phase 2 is required - although it appears that the tasks cover phase 1 and phase 2 requirements. There is a brief list of the team, and their roles are well described. This section should address skills, expertise and track record of the proposed team. No energy or carbon savings have been estimated. Costs are set out as hourly and day rates without an estimate of work required for pilot study areas, so value for money is not possible to assess. A clear vision has been let down by not providing clear answers to the remaining questions.

Attractive project because although only moderately innovative, will continue to be useful well after this project is over - every time the office layout is reconfigured. Mid range idea - not all that innovative but also not too risky, that could be boosted if you explained more about your experience of energy savings through the use of PICVs. Note there will be very little opportunity in FCO because of limited use of chilled water systems. The answer given here seems very theoretical and it would be good to know what your experience of implementation on your previous projects has been. This section needs much more detail - perhaps making more of the analogy of the other buildings and extrapolating the energy savings, with necessary caveats. Words like "significant" and "dramatic effect" need to be replaced by numbers. It is not clear which parts of this are in Phase 1 and which in phase 2. This section would be boosted by information about individuals on the team and their experience. It would have been helpful to put in a very approximate estimate for a typical installation - e.g. one floor in BIS.

This project aims to deliver Pressure Independent Control Valve (PICV) to the buildings using chilled beams and fan coil, thereby improving energy performance. (theme 7?) the innovation, in terms of technology, is the modification of existing technology. The PICV has been used previously in a fan coil unit but an assessment of the energy savings were not clear. implementation by terminal isolation or pipe freezing to minimise disruption. Assistance is required from FM mechanical contractor (section 9) but this is not detailed in this section Calculations of the energy (kWh) and carbon savings (kgCO<sub>2</sub>) are not given. This

section mentioned metering for assessing occupancy control but here is no technical detail given anywhere else in the application no appendix and Phase 1 /Phase 2 work not clear. The project plan mentions monitoring of results but there is no detail in how this will be achieved Strong technical team but no mention of who will monitor, interpret and assess any energy data. Depends upon the FM contractor for installation total costs not given

**Recommended**

Did the majority of the assessors believe this application to be suitable for funding? **N/A**