Industry briefing - Steam Systems

1. Steam systems are used in many industrial applications such as: healthcare, food processing, dairy industry, breweries, pulp and paper processing, sugar mills, timber drying, concrete curing, sterilisation process, oil and gas industry, etc.
2. A steam system may signify an initial capital investment of one to several million dollars per site. Plant owners employ staff to operate and maintain all the systems but typically the staff do not have the specialist skills to critically audit the steam system.
3. the steam system may be set up properly after installation but over the years modifications and changes in process requirements can alter the steam demand requirements.
4. Steam system surveys allow specialist skilled engineers to investigate the current operational characteristics of the system and determine if the system is working efficiently to match the process requirements.
5. However, clients are reluctant to pay for a survey and traditionally wait 4 system failure before they react.
6. The system failure is investigated and the component replaced, and the system put back to work however the opportunity to investigate the whole system his typically ignored.
7. The energy initiatives and decarbonization policies Off the current government is gaining momentum in the industry however, there is a lack of motivation to assess the current system status and establish an existing benchmark which can be used to assess investment opportunities.
8. Based on experience, Tier 1 consultancies are winning the design phase but do not have the speciailist skills to design steam systems. They produce outline documents similar to early schematic level of documentation and pass on full design responsibility to the contractor. The contractor has installation experieince but typicall does not have steam system design knowledge, so the contractor approaches a specialsit steam equipment supplier to provide the design. The equipment supplier has a single priority to sell equipment, and the solution will be one that is tailored to suit the particular equipment available by the supplier. Additionally, the supplier only looks at the relevant segment of the system being modified and does not provide a whole holistic analysis of the system. After installation, the new equipment is commissioned but the whole system is left to self regulate and the cycle of reactive only maintenance continues.