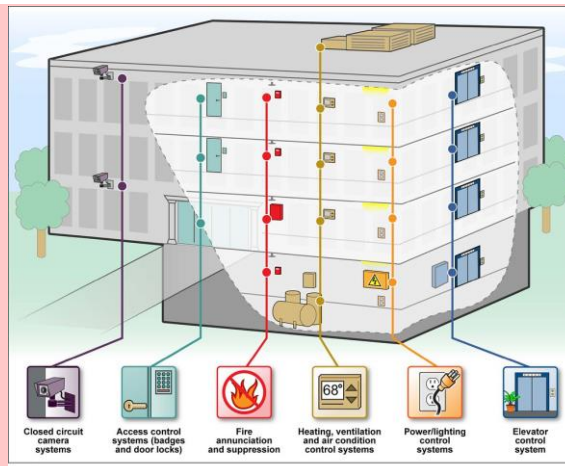


Energy

Building Energy Management System

Energy Monitoring and Management

Monitoring and controlling of energy-related building equipments can be provided by Building Energy Management Systems (BEMS). These systems integrates equipments such as ventilation and air conditioning, lighting, lifts, sensors (smoke detection, movement). Remote monitoring of equipments allows energy savings by optimising operation modes, set points, hours of operation. They can also trigger alarms (e.g. for equipment maintenance), track records of consumptions and provide reports.



Source: GAO, | GAO-15-6

• Potential use in hotel industry

BEMS can be particularly useful in the hotel industry to check and manage energy consumption in the building, plan maintenance and make considerable energy savings on each energy-related equipment. Smart BEMS can also contribute to the district by communicating and providing energy flexibility when needed.

Advantages

Energy savings

Monitoring of equipment for maintenance

Record of historical consumption data

Centralised monitoring and management of equipment via intranet or WiFi

Disadvantages

Cost of installation

Maintenance needed (e.g. replace batteries in sensor)

The systems require knowledgeable people to manage them