**Electrical Energy**

**(EE07)**



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| **Fact Sheet EE07: Use intelligent control for the HVAC system (Energy management system or Building management system)** | |
| **Overview** | |
| *Objective* | Decrease the electrical energy consumption in the hotel’ HVAC system |
| *Action* | Use an intelligent control system for the hotel HVAC system (ex: a Building Management System (BMS)) |
| *Key Challenges* | Engineering of a tailored solution to be compatible with the existing HVAC system, minimizing the system down time during installation and commissioning |
| **Process** | |
| *Complexity* | High, The process involves technology selection, engineering, installation and commissioning |
| *Equipment & Material* | The equipment specified by the control system design, Monitoring and control software |
| *Human Resources* | Maintenance and engineering department personnel, control system contractor |
| **Considerations** | |
| *Regulatory Aspects* | None |
| *Economic* | High CAPEX, high OPEX for system maintenance, and high expected annual savings |
| *Advantages* | * Improved system performance * High expected annual savings |
| *Disadvantages* | * High technical complexity * A Detailed study is required for implementation * Disruptive installation and commissioning |
| **Impacts** | |
| *Environmental* | Pollution reduction by avoiding CO2 emissions |
| *Employment Opportunities* | None |