**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 |