

**Electrical Energy**

**Solution Card 1: Upgrade Mini bars to higher efficiency models**

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| **Solution Card 1: Upgrade Mini bars to higher efficiency models** |
| **Overview** |
| *Hotel* |  |
| *Action* | Upgrade minibars in guest rooms with higher efficiency models |
| **Assumptions** |
| *Exchange rate* | 15.65 EGP/USD |
| *Maximum energy consumption of minibar* | 300 kWh/year |
| *Best case IEE for Class C minibar* | 70% |
| *Worst case IEE for Class A mini bar* | 60% |
| *Annual energy savings* | 30 kWh |
| **Constraints** |
| *Cost of energy* | 7.348 cents/kWh |
| **Economic Features**  |
| *CAPEX* | EGP 500 |
| *OPEX* | Low |
| *Net annual Savings* | EGP 30 |
| *Payback period* | - |
| *Lifetime* | 10 years |
| *Annual CO2 reduction* | 0.014 tCO2/year |

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| Reduction in energy consumption | Simple payback period (years) |
| 10% | Infeasible |
| 15% | Infeasible |
| 20% | 7.8 |
| 25% | 6.2 |
| 30% | 5 |