ENcontrol system

COMFORT | SAFETY | SAVINGS

Real effects introduction – experiences

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1. Customer introduction

- Consultancy company
- Several offices in more buildings (Czech Republic)
- One customer's office was measured
- Payments for electricity = 4,400 EUR per year, one tariff
- Main goal: **To find possible savings**

2. Appliances characteristics

- 30 PCs + monitors
- 8 printers and multifunctional devices
- Lighting in rooms and in common areas
- Air condition (turned off in the time of measurement)
- Hot drink machine, tank with hot and cold drinking water
- 2 hot water kettles, coffee machine
- Other small appliances

3. Measurement

- There were appliance circuits in the switching box and individual important appliances in sockets measured
- Time of measurement = 3 weeks
- Price of installation and deinstallation = 250 EUR

4. Main recognitions

- 1/3 of PCs + monitors run at night (even if they use suspend mode, they consume some energy and short their lifetime)
- Hot drink machine and drinking water tank are not turned off any time – not even in non working days
- Local printers and multifunctional devices are turned off only rarely
- Sometimes lighting is turned on at night and during non working days, when nobody uses it
- As for air condition, the situation is the same

5. Recommendations

1. To put into effect internal setting for the employees – to switch their PCs and printers off before they leave the office (lower consumption, higher safety and longer device lifetime)
2. Turn off the hot drink machine and drinking water tank from 8 pm to 6 am and during non working days regularly (using automation plan of ENcontrol system)
3. Turn printers and shared multifunctional devices off, except for one central printer from 8 pm to 6 am and during non working days regularly (using automation plan of ENcontrol system)
4. Turn off lighting in common areas from 8 pm to 6 am hours and during non working days regularly (using automation plan of ENcontrol system). While detecting movement, the lighting should be turned on for 5 minutes
5. Turn off air condition regularly from 6 pm to 7 am

6. Savings and realization costs

1. Electricity Savings
   - Internal setting = 600 EUR / year
   - Lighting = 400 EUR / year
   - Others = 400 EUR / year
   - SUM = **1400 EUR / year (32%)**
2. Other savings
   - Prolong the life of PCs, monitors and printers = **1200 EUR / year (27%)**
3. Realization costs
   - Internal setting = internal marginal costs
   - ENcontrol system components = **2000 EUR including installation**
   - **Return of investment in electricity area only = 2 years**
   - **In the case of renting return of investment 1 year only**