

**Project Title**

Integration of smart office functionality for sustainable office facilities

**Project Description**

This project provides planning and subsequently steps for implementation of IoT based energy management functions for the customer office facilities located in Germany. The project details steps how to meet the objectives and achieve all product properties while highlighting constraints.

**Objectives**

Create an energy management solution for an office building to ensure lowering of power consumption through monitoring and controlling of relevant electronic devices and office features. Utilization of commercially available smart technology helps to yield a healthy atmosphere while allowing the company to meet cost saving goals, ultimately improving the companies efficiency and productivity.

**Product Description**

- Devices and lights in areas of the facility with no staff present are automatically switched off
- In order to not interfere with the staff's needs, the system should know whether staff is present by using data from the card based access system and employee presence data
- Past power consumption data must be used for shutdown decisions through IoT based analysis of utilization, but employees must be able to make use of exceptions (e.g. for regular or sporadic updates, testruns over night)
- The system must come with retrofit expansion capabilities
- Monitoring and exception management will be accessible through a webinterface in the companies intranet

**Constraints**

1. Acceptance of the system by the staff is uncertain, training for proper usage may be necessary
2. Part of the facilities need to be closed during installation and setup
3. Disturbances in trade and delivery may impact project timeline

**Assumptions**

1. Country of deployment is Germany
2. Sufficient network infrastructure to support the IoT-based system is in place already
3. The facility is equipped with an ID-card based access system
4. Access to the employee presence data can be achieved for the project in accordance with data privacy regulations

**Signatures**

<b>Name</b>		<b>Name</b>	
<b>Position</b>		<b>Position</b>	
<b>Signature</b>		<b>Signature</b>	
<b>Place, Date</b>		<b>Place, Date</b>	

<b>Name</b>		<b>Name</b>	
<b>Position</b>		<b>Position</b>	
<b>Signature</b>		<b>Signature</b>	
<b>Place, Date</b>		<b>Place, Date</b>	