Revolutionize your workplaces

- Make your office more flexible, energy-efficient, and cost-effective in no time

- Improve employee productivity and wellbeing with intelligent workplace solutions

SMART WORKPLACE
(Room Booking, Desk Sharing, Space Utilization)

25% space savings by shared desks

Room Occupancy, People Activity
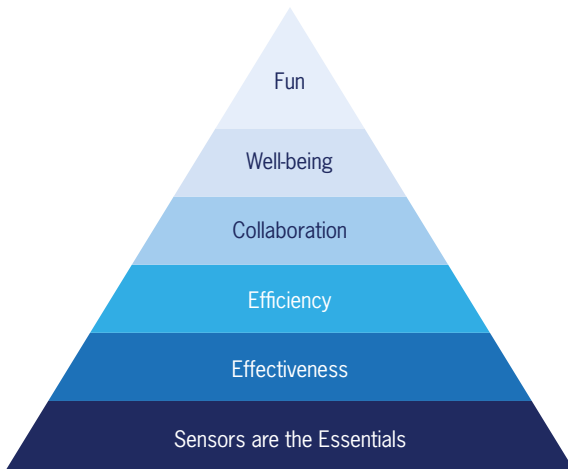
Desk Utilization

People Counting

FREE

Desk/Room Status

The workspace is changing

Flexible working models and new digital solutions have opened completely new ways of working. The classic 9 to 5 office job almost doesn't exist anymore, but our buildings and offices haven't quite caught up with this development yet. Flexible and demand-based use of space is becoming increasingly important, not only to keep an eye on costs and energy consumption but also to create a comfortable, healthy, and safe environment for employees.

Pyramid (top to bottom):
- Fun
- Well-being
- Collaboration
- Efficiency
- Effectiveness
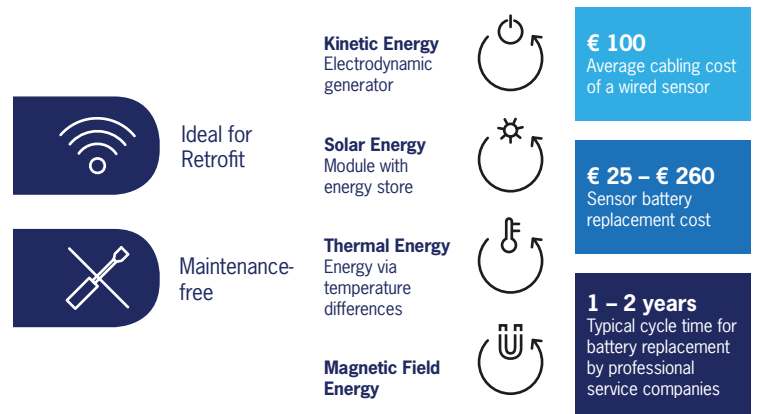- Sensors are the Essentials

Sensor-based workplace solutions are what is needed to ensure all this. They help companies to optimize space usage, to provide excellent air quality, and to reduce energy consumption.

High time to save unnecessary costs
Too many unused desks automatically mean too much unused space that causes unnecessary costs. Not only renting costs, but these rooms also need to be heated, ventilated, lights need to be turned on, etc. If you know which areas and workstations are being used on a regular basis and which ones are unnecessary, you will be able to save up to 30% of all costs. Make your offices smart and save costs with EnOcean's wireless and battery-free IoT sensors.

Energy Harvesting Wireless for more Sustainability

EnOcean's IoT devices don't rely on batteries or wires to gain energy, they "harvest" it out of air. More precisely, they gain their energy from movement, light and temperature differences. This principle called energy harvesting is not only a low-cost alternative to batteries and wires, but is obviously much more sustainable.

Ideal for Retrofit

Maintenance-free

Kinetic Energy
Electrodynamic generator

Solar Energy
Module with energy store

Thermal Energy
Energy via temperature differences

Magnetic Field Energy

€ 100
Average cabling cost of a wired sensor

€ 25 – € 260
Sensor battery replacement cost

1 – 2 years
Typical cycle time for battery replacement by professional service companies

Being wireless and battery-free comes with decisive advantages:

- The IoT sensors are ideally suited for retrofits as no walls must be torn up to lay cables. This also means minimal disruption during installation.
- They are completely maintenance-free as no batteries need to be changed.
- They can be flexibly installed throughout the entire building – exactly where they are needed. Put them onto walls, windows, doors, desks, chairs, or places that are hard to access, everything is possible.
- Compared to a wired sensor, a wireless one typically saves 67% of costs (100€ for cabling of a 50€ sensor).

Smart devices for smart spaces

Smart Workplace Management

Monitor room and desk occupancy and enable your employees to book meeting rooms and workplaces via app.

Desk sharing models offer incredible monetary and ecological benefits as companies can typically save up to 25% of space and desks. With EnOcean sensors, you can establish a desk sharing system that reduces costs and increases efficiency. Especially when there are fewer workstations than employees, expenses are eliminated: The office space can be smaller, rent and heating costs are lower, there are fewer computers to look after – the list goes on. For employees, desking sharing promises increased flexibility in working hours. The workplace can be chosen according to current needs, for example to work with a specific colleague or to work in a silent area.

Energy efficiency

Buildings are the biggest energy consumers of all, accounting for 40% of global energy consumption – that's why it's important to ensure an energy-efficient use of buildings. The potential for energy savings is almost just as high. EnOcean devices help you to reduce energy consumption with intelligent room control by up to 30%.

Good air quality in offices is a must

We know that the amount of CO_2 in the air is an indicator for the possible COVID virus load, that's why monitoring environmental parameters like temperature, humidity, and CO_2 is a necessity. On top of that, great air quality reduces absenteeism by 15% and at the same time increases motivation and productivity by 8%.

HEALTH & CLEANING
(Environmental Monitoring)

8% higher employee productivity by healthy environment

Air Quality: CO_2, VOC, PM, Noise

Utilization of Room/Table/ Device

Cleaning required

Service Call

ENERGY SAVING
(CO_2 Reduction)

30% energy savings by single room control

Heating Valve (thermal powered)

Presence, Window Status

Room Thermostat

Switching, Dimming, Power Measurement

Smart Cleaning

It is key that companies don't stick to strict cleaning patterns and instead focus on smart cleaning. EnOcean sensors tell facility managers how often desks and meeting rooms are being used, if soap dispensers have gone empty or how many people have been to the restrooms. Send your cleaning team when it is actually necessary in order to ensure a hygienic and clean area so that employees feel entirely comfortable and save million litres of water, and tons of plastics and detergents.
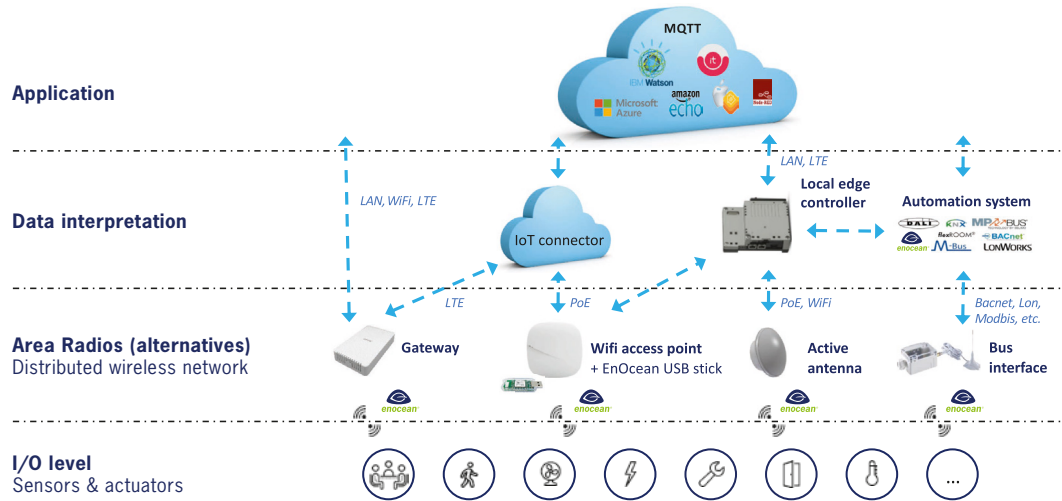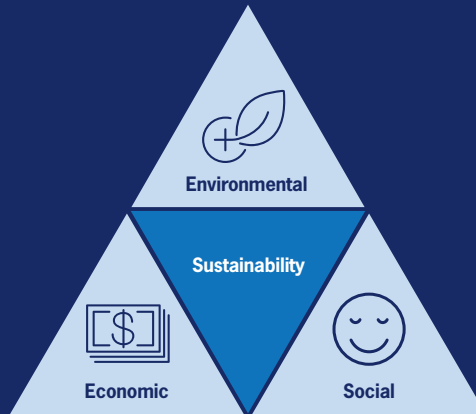
Total system flexibility guaranteed

It is important to have a system that is entirely flexible and that can be adapted to individual needs – no problem with EnOcean.

How it works

The EnOcean IoT sensors collect the data and send them to a gateway or Wi-Fi access point from one of our partners with the help of our USB stick. The gateway or access point then pushes the data to a cloud where the information is used to build customer-specific dashboards and apps. We work together with different access point and app providers who know exactly what's important here.

And even though the data sets coming from the sensors are all different, they end up in the cloud in a uniform way thanks to the EnOcean IoT Connector software. But most importantly, the customer is in total control of the data, nobody else has access to them as data security is key.

Application

MQTT — IBM Watson, Microsoft Azure, amazon echo, Node-RED

Data interpretation

LAN, WiFi, LTE — IoT connector

LAN, LTE — Local edge controller — Automation system (DALI, KNX, MP-Bus, BestROOM, enocean, M-Bus, BACnet, LONWORKS)

Area Radios (alternatives)
Distributed wireless network

LTE — Gateway

PoE — Wifi access point + EnOcean USB stick

PoE, WiFi — Active antenna

Bacnet, Lon, Modbis, etc. — Bus interface

I/O level
Sensors & actuators

The self-powered IoT and sustainability

Thanks to energy harvesting, EnOcean's wireless and battery-free IoT sensors are the sustainable solution compared to wired and battery-powered solutions as they cover all three aspects of the sustainability triangle: They are environmental-friendly because the technology does not require batteries or cables and therefore does not pollute the environment. On top of that, they make buildings themselves greener and help reduce their CO_2 emissions. These IoT solutions are economical because battery-free wireless sensors are significantly cheaper in the long term and don't require frequent maintenance as wireless battery-powered sensors do. Last but not least, they benefit society because people can live and work better and healthier in intelligent buildings.