Case Study

Technopolis achieves 30% energy saving on heating and 50% energy saving on ventilation with smart IoT building solution

The Challenge

As a leading provider of shared workspace environments, Technopolis wanted a solution to reduce energy consumption and CO2 emissions to improve customer value, advance sustainability reporting, and better meet its ESG goals in commercial buildings.

The Solution

In partnership with Lassila & Tikanoja and Connected Inventions, Technopolis deployed an IoT solution that remotely monitors and optimises ventilation, energy usage, and indoor air quality connected to the 0G Network.

The Results

The benefits of smart building solution of Technopolis include:
- 30% of energy savings on heating
- 50% of energy savings on ventilation
- Reduced CO2 emissions
- On-demand maintenance
- Optimal occupancy conditions
- Accurate ESG reporting
- Compelling ROI

Solution Partner

L&T

Lassila & Tikanoja is a service company that makes the circular economy a reality by keeping materials, buildings, and factories in productive use for as long as possible and optimising the use of raw materials and energy to create customer, commercial, and societal value. www.lt.fi/en/company

Customer

TECHNOPOLIS

Technopolis is a shared workspace expert, delivering efficient, flexible, inclusive offices and business services including workspace design, reception management, meeting rooms, restaurant alignment, and cleaning solutions. technopolisglobal.com/

Technopolis enjoys 30% energy saving on heating and 50% energy saving on ventilation with Lassila & Tikanoja and Connected Inventions' smart building solution on the 0G Network

Founded in Finland in 1982, Technopolis simplifies its customer' lives by providing high-quality, flexible office spaces supported by meeting rooms and business services such as reception management and cleaning. The company owns 16 campuses hosting 1,500 companies and 48,000 employees across Europe.

Motivated by the dual drivers to offer greater customer value and accelerate its sustainability goals and ESG reporting, Technopolis planned to introduce an intelligent IoT enabled solution to reduce energy consumption and CO2 emissions in commercial buildings.

Technopolis partnered with Connected Inventions and solution provider Lassila & Tikanoja (L&T) , to create a new Internet of Things (IoT) smart building solution.

Lassila & Tikanoja (L&T) and Connected Inventions partner to design and deploy a scalable smart building solution for Technopolis.

The Technopolis building management system (BMS) is the core of its smart building solution. The BMS is connected to L&T's Smartti Automation software, an intelligent building automation system that optimises a property's energy consumption through a central digital service. Smartti uses data from multiple sources, including IoT devices, a building's thermal mass readings, and weather conditions to adjust ventilation automatically and optimise energy consumption.

Integrating Smartti Automation with Connected Inventions' AirWits Indoor Air Quality (IAQ) monitoring, added even greater value to the Technopolis solution. The IoT devices are compact, easy to deploy and powered by long-life batteries to remotely monitor a building's carbon dioxide (CO2), temperature, and humidity levels.

At preset intervals the devices send air quality data via the Connected Inventions FoxerIoT device & data management platform to the Smartti AI software.
The 0G IoT Network provides low-cost, energy-efficient device connectivity.

The simple AirWits Insights dashboard lets users remotely track and manage sensor data and IoT device status to improve decision-making. The solution enhances the BMS data with more frequent data collection.

> *The IoT sensor solutions enable L&T's Smartti Automation AI to optimise conditions and energy consumption even more effectively than before with regular and precise indoor air conditions within buildings. The multiplier effect brings further energy savings and consistent indoor air quality that is optimal for building occupants.*
> **Vantte Kenttä, Customer Relations Manager at Lassila & Tikanoja**

> *The results of L&T Smartti Automation and Connected Inventions' IoT sensors' deployment have been so good that we've decided to implement it in other commercial buildings around Finland. In addition to energy efficiency, we were able to also confirm improved indoor air quality in the building property.*
> **Ismo Myllymaki, Head of property management at Technopolis**

Case Study

Technopolis enjoys 30% energy saving on heating and 50% energy saving on ventilation with Lassila & Tikanoja and Connected Inventions' smart building solution on the 0G Network

The smart building solution connects more than 1.000 IoT devices and delivers significant savings and energy consumption for Technopolis.

Technopolis deployed IoT devices sending essential environmental data to the integrated Smartti Automation and AirWits solution at the Ruoholahti 3 property in Finland.

Data-driven insights enabled by the solution helped the building management team achieve significant operational outcomes within months.

Overall energy consumption savings of over

30%   50%

in heating energy   in ventilation energy

Occupants of the Ruoholahti 3 property enjoyed a steady indoor temperature of 21C and reported an increase of perceived comfort of 8.7 percent.

Other data-driven outcomes of the Technopolis smart building solution include:

* Reduced consumption during peak periods (high energy cost)

* Consistently comfortable and healthy indoor environs for occupants

* Proactive maintenance

* Simplified business and ESG reporting

> *We are excited about the results our collaboration with Lassila & Tikanoja achieved for Technopolis. Our tech-agnostic IoT solution provides the devices and the platform to collect and manage the environmental data that enables these outcomes for modern facilities management. These results are repeatable and scalable. Reducing energy consumption for more sustainable and healthy buildings is what we are passionate about*
> **Markku Patronen, Founder, Connected Inventions**

About Connected Inventions:
We provide cost and energy efficient IoT solutions that enable data-driven operations, allowing building owners and managers to reduce energy consumption, lower carbon-emission and transform their buildings into sustainable, healthier and more resilient assets. Our secure IoT solutions encompass our devices, data management platforms and connectivity services that help facility managers simplify the deployment of maintenance free solutions. ConnectedInventions.com