## Telia Heating Optimization

# Reduce your building's energy costs & emissions by optimizing and automating your heating

Telia Heating Optimization is an end-to-end solution that enables building managers to monitor and optimize the heating of their buildings. It can reduce the energy consumption by up to 10% – along with the costs and emissions that go with it. It also helps you to maximise the tenants' comfort and satisfaction.

### Keep costs down and tenant satisfaction up

With energy costs at record highs, energy wastage is bad news for profit margins.
At the same time, pressure on building occupancy rates mean that tenant comfort and satisfaction have never been more important.

To balance both, you need to be able to monitor the temperature in your building in real time – and have the tools to automate and optimize your heating and cooling systems remotely.

Telia Heating Optimization gives you these tools. It is an end-to-end solution that puts building managers in control. It's the key to reducing energy consumption, costs and emissions while increasing tenant comfort and satisfaction.

### Plug-n-play simplicity with industrial-grade security

Telia's Building Monitoring wireless sensors with Narrowband IoT (NB-IoT) connectivity can connect from deeper inside buildings than traditional IoT connectivity. They also use very little power, so sensors can operate for years on a single battery. On top of that they also inherit proven LTE and GSM security standards for enhanced security.

Data is then sent to the building's heating control system via a Telia IoT Edge gateway. This connects via a Virtual Private Network (VPN ) to keep the data completely separate from the public Internet.
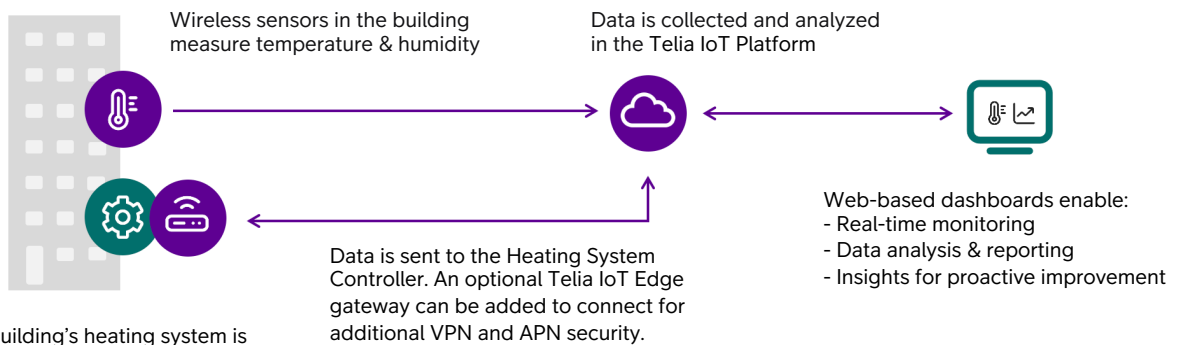
# End-to-end retrofittable plug-n-play simplicity



## Create a self-optimizing feedback loop for your building

Telia Heating Optimization combines best-of-breed hardware, connectivity and platform to deliver an end-to-end solution that puts building managers in control.

## Solution overview



Wireless sensors in the building measure temperature & humidity

Data is collected and analyzed in the Telia IoT Platform

Web-based dashboards enable:
- Real-time monitoring
- Data analysis & reporting
- Insights for proactive improvement

Data is sent to the Heating System Controller. An optional Telia IoT Edge gateway can be added to connect for additional VPN and APN security.

The building's heating system is adjusted by the Heating System Controller and data is reported back to the Telia IoT Platform

## Part of Telia Smart Building

Heating Optimization is part of Telia Smart Building, a suite of digitalization tools and services for new and existing buildings. It is an end-to-end solution with sensors that send relevant data to the Telia IoT Platform. It is can then visualized in dashboards and fed into building management systems via API. This allows building owners and managers to monitor and optimize building operations while reducing costs and environmental impact. It also creates a healthier and more comfortable environment for tenants.



Indoor Climate

Air Quality

Occupancy

Open Close

Heating Optimization

Remote Temp

Telia