

# NorthQ

The image shows a modern apartment complex with several multi-story buildings. The buildings have a mix of grey and beige facades and many windows. Some balconies are visible with red railings. In the foreground, there is a green lawn with a small tree and a playground area with yellow and red equipment. A tennis court is also visible on the left side. The sky is blue with some light clouds.

Smart home solutions improve indoor climate,  
reduce energy consumption and increase property value.

By installing smart home solutions, Adrem Link helped real estate developer, Coresi Group, improve indoor climate, reduce energy consumption and increase the property value of more than 100 apartments.

Client: Adrem Link (for Coresi Group)

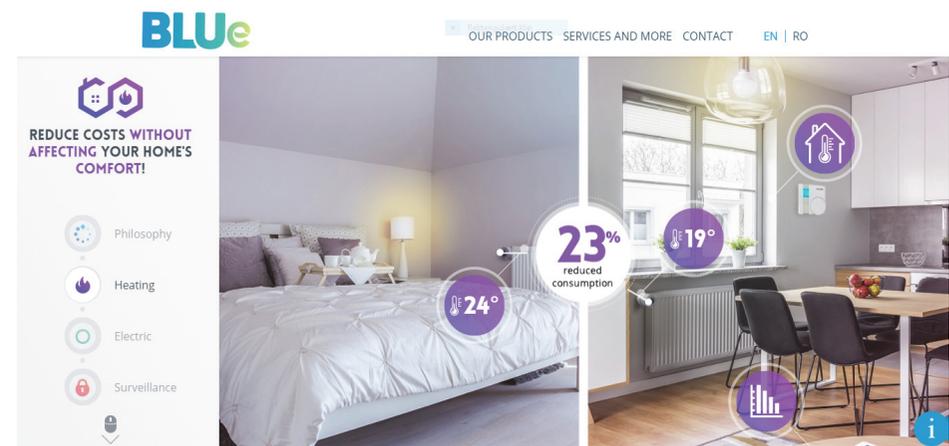
Location: Romania

Status: Ongoing

As system integrator, Romanian company Adrem Link aims at bringing together numerous smart home benefits into one solution to create lasting value for their customers who are investors, developers and residential apartment owners. Adrem Link was contracted by one of the biggest developers in the country, Coresi Group, to assist them in optimising the energy consumption in their newly-built apartment complexes.

A comprehensive smart home solution was needed to create a greener and smarter image, as well as to measure, control and track energy consumption in the buildings. Coresi Group was also looking for a differentiating factor that would position them differently and make them stand out from competition in the market.

To do just that, Adrem Link partnered with Danish founded NorthQ on the project "Improving apartments' energy efficiency and comfort through a smart heating solution". The project was rolled out in Romania from mid 2016 and had several phases. The main goal was to integrate smart home solutions by using NorthQ smart home products and services in Coresi Group's newly built real-estate projects.



Stefan Voicu from Adrem Link explains. "Three years ago we saw that smart homes will be the next big thing. That is why we entered the world of smart home development and tried to scratch the surface of the concept – and that is how the partnership with NorthQ was first established."

So far, the project went through three stages:

- **Phase 1 (June 2016)** served as proof of concept. During this period, Adrem Link implemented a heating control package consisting of two radiator thermostats, one gateway and an app in approximately 100 apartments.
- **Phase 2 (December 2017)**. During this period, Adrem Link expanded the former package by adding a central boiler thermostat to the smart home solution previously installed in the apartments.
- **Phase 3 (2018)**. Adrem Link extends its smart home package by installing PIR-sensors (for motion, temperature and humidity detection) in 250 apartments.

## Highlights Romania

- Revenue in the "Smart Home" market amounts to US\$20m in 2017
- Revenue is expected to show an annual growth rate (CAGR 2017-2021) of 70.6% resulting in a market volume of US\$170m in 2021
- Household penetration is at 1.4% in 2017 and is expected to hit 9.9% in 2021
- The average revenue per installed Smart Home currently amounts to US\$193.27

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*Adrem Link promotes solutions for energy efficiency, visibility and information, operational optimisation, automation and control. The company addresses both energy-intensive users, such as municipalities, industrial and retail consumers, as well as consumers in the residential sector. The company is strategically focused on Internet of Things (IoT), cloud architectures and "as a service"-models, to ensure efficient energy consumption for their customers through optimised operations and process visibility.*

*One of Adrem Link's customers, is the Romanian real-estate developer, Coresi Group, that holds a wide product portfolio, including shopping centres, office- and apartment buildings. With 10 years of experience and more than 3,000 satisfied customers, Coresi has become a landmark in Romania's residential market and has grown to become one of the biggest developers in the country.*

*By installing meter reading solutions for real time consumption data from NorthQ and their easy to use online platform, Adrem Link and Coresi Group were able to monitor power consumption and use the consumption visualisations to analyse where energy could be saved.*



*"It is about communicating the positive effects of a greener and smarter neighbourhood. We need smart homes, because the approach is convenient, sustainable, cost-effective and holistic"*

Stefan Voicu

As a Coresi Group subcontractor, Adrem Link is the main service provider. This means that Adrem Link is in charge of providing energy monitoring and home automation services to Coresi Group's real estate projects. In a price volatile real estate market, it is a constant challenge to create **long-lasting property value** for most developers. Maintenance prevention has therefore become an important measure in prolonging the value of assets and to keep buildings in the best possible shape for longer periods of time.

As part of their smarter and greener image, Adrem Link wishes to overcome these challenges by creating more value for their customers. This happens for example through the **implementation of NorthQ smart technology** and the **strategic use of energy monitoring services**.

These steps have effectively resulted in:

- Reduced energy consumption from complete real estate projects
- Increased apartment-value due to improved comfort from pre-installed smart home system
- Automatically-induced preventive maintenance as a result of real-time data access to viable data about the indoor climate of the apartments (e.g. humidity)

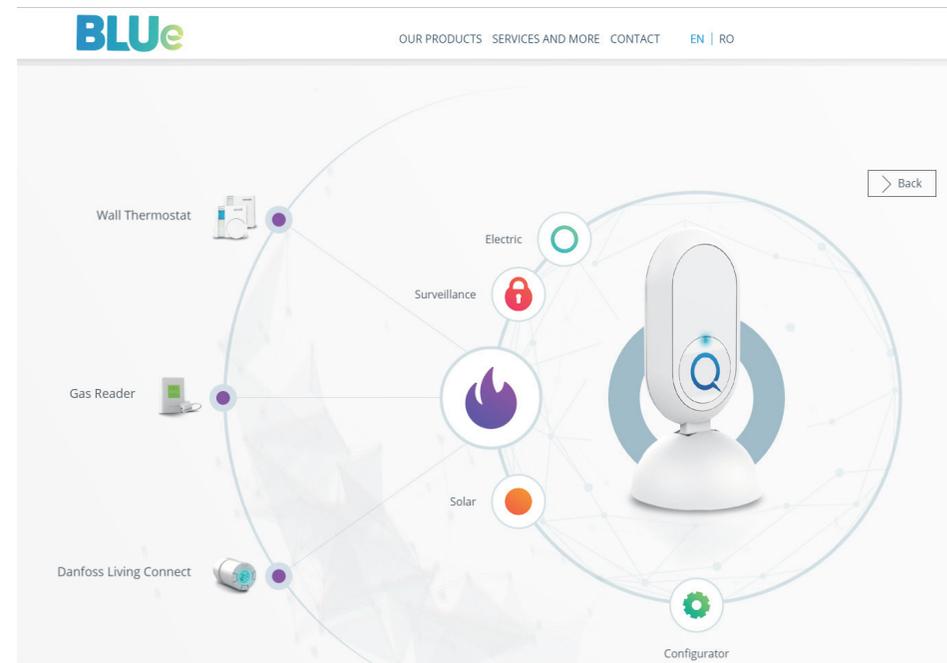
Stefan Voicu from Adrem Link explains: "It is about communicating the positive effects of a greener and smarter neighbourhood. We need smart homes, because the approach is convenient, sustainable, cost-effective and holistic. This is how smart homes fit with the overall strategy".

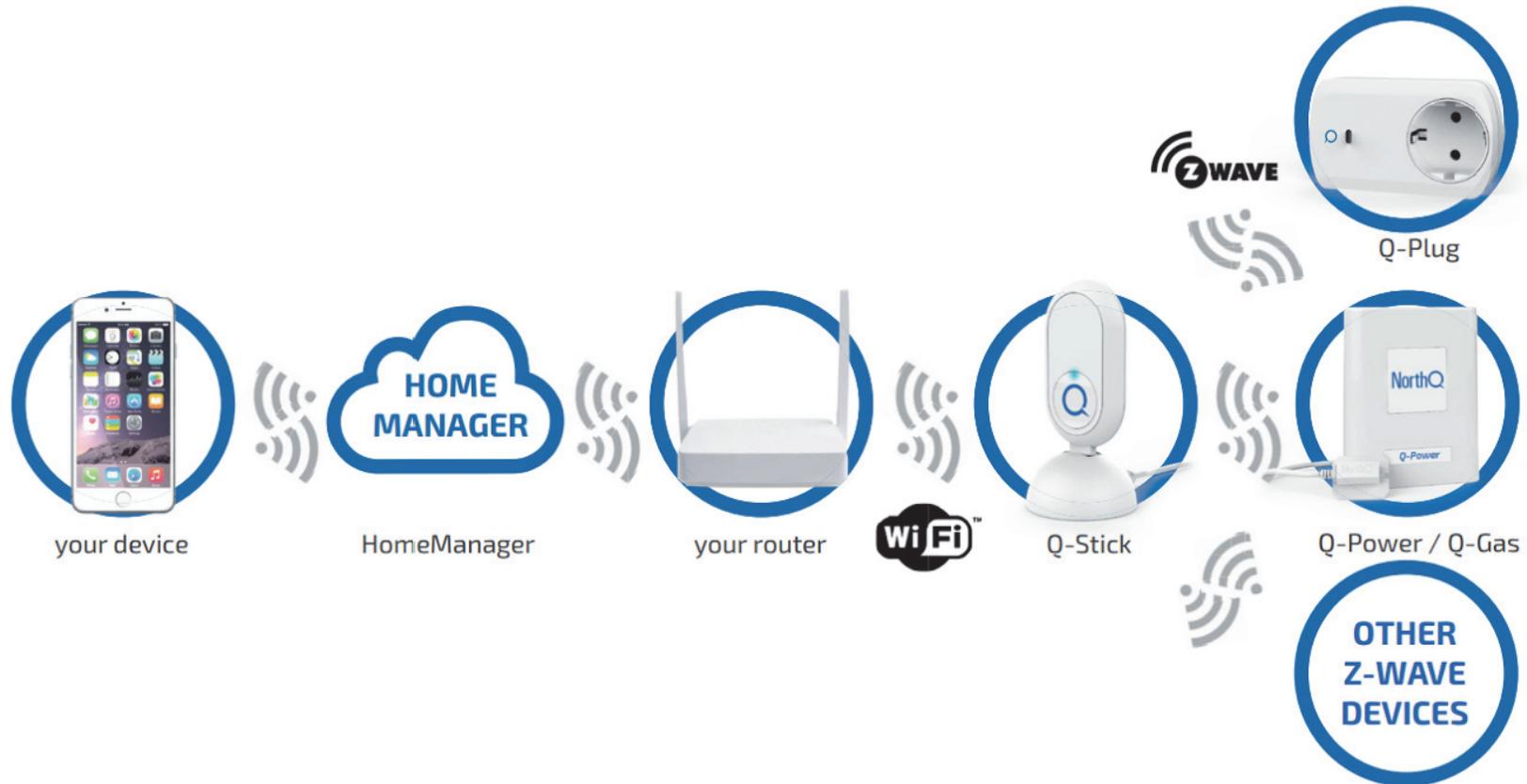
Built on a **value-based and customer-centric approach**, the project aimed at creating a solution that would benefit apartment owners in multiple ways. To overcome comfort, financial and contractual needs, NorthQ devised a special heating control package together with Adrem Link. The package consisted of thermostats and a gateway, that makes the energy consumption visible, trackable and controllable to ensure a substantial increase in comfort.

The package:

- **NorthQ gateway**
- **radiator thermostats**
- **smartphone control app**

The package was offered to new apartment owners as a complimentary moving-in gift for one year. After the phase one period, residents could decide whether to return it or to keep the package for a small fee. By utilising NorthQ's energy efficiency and smart home products, apartment owners for the first time are able to **experience a smarter home**. Through reduced energy consumption, the solution has increased not only the property sales value, but also the comfort of the individual apartment owners. Stefan Voicu explains: "The main value drivers for Romanian smart home consumers are **comfort and convenience**. The apartment owners want you to be there, to explain, and even to plug in the gateway. They feel more secure and comfortable, when we install their smart home solution. So that is exactly what we do."





Several objectives have been fulfilled through the different stages of the project:

- **Stage 1 (June 2016):**

Installation of smart heating packages (gateway, thermostats and app) – in 100 of 120 apartments

Residential solution:

**Users: 100**

**Apartments: 100**

- **Stage 2 (October 2017):**

Installation of central boiler thermostats with home control – in **130 apartments**

- **Stage 3 (2018):**

Installation of PIR-sensors (Pyroelectric InfraRed sensor - measures temperature and humidity) – in **250 apartments**

*\*Implementation of solution in further 1,700 potential apartments (in construction by developer Coresi Group at time of writing)*



*"It's about creating comfort for the end-consumer"*

Stefan Voicu

By combining energy monitoring services with NorthQ's smart home solutions, Adrem Link was able to offer its client Coresi Group a point of differentiation and opportunity to stand out from other investors and competitors. Further, through the implementation of smart solutions from NorthQ, maintenance of vacant apartments as well as the tracking, controlling and measuring of energy, will be increasingly simplified.

- **Energy-reductions for complete real estate projects**
- **Attractive point of differentiation from other developers in the market**
- **Preventive maintenance through real-time monitoring, tracking and control of the indoor climate of vacant apartments**

The point of differentiation is closely related to consumer branding, Stefan Voicu points out: "It's about creating comfort for the end-consumer and to help them build their own green image. They might think, "because I have a smart home, I am able to control the temperature even remotely from far away, and you are not, so therefore I'm smarter than you". The importance for the consumer lies in **controlling** their **devices**, the **home comfort** and in **optimising** their **energy consumption**."



*Energy monitoring can also be used for better contract performance. Through the system, the developer and building owner, Coresi Group, is now able to monitor the ventilation activities in the building. In practice this means that they can ensure the stipulations made in the apartment owner's contract are met after handing over the keys,. A measure that can prevent disputes and potential lawsuits between Coresi and individual apartment owners e.g. on cases of bad ventilation of an apartment. By using the NorthQ platform, it is possible to collect data that can document the exact temperature and humidity of an apartment on hourly basis. In this way, Coresi is able to use the specific data as documentation for the way the apartment owner has either followed or neglected the terms of the contract.*

*Apart from allowing the customer to control and track their devices and energy consumption, NorthQ's app also represents a direct line of contact between customers and Adrem Link. This communication channel works indirectly as a sales channel, which customers can buy additional NorthQ products if they wish to extend their current smart home range.*



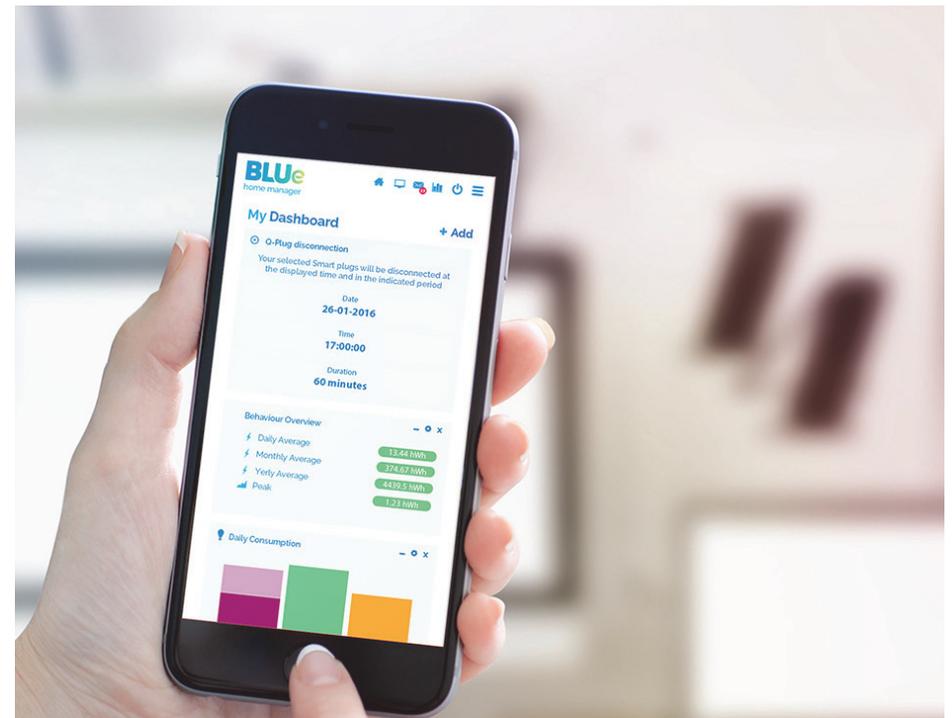
*"We can figure out and design exactly what type of services people need to better understand, buy and use smart home solutions."*

Stefan Voicu

After the project's one year test period apartment owners are introduced to other smart home devices that can help them extend their smart home presence and energy monitoring services further.

In the future, **complementary NorthQ extensions**, e.g. for security, can also be added to the system previously installed to create a full eco-system of smart solutions.

"From the partnership with NorthQ and through the use of their solutions we are learning step by step what kind of solutions smart home customers need. With the customer response we get, we can figure out and design exactly what type of services people need to better understand, buy and use smart home solutions. We are the system integrators and **NorthQ has proven to be a great partner and provider of smart home technology** and related services – and I hope we will continue to work and grow together", Stefan Voicu concludes.



# NorthQ

*A New Way of Living*

*Learn more about us and our solutions or  
order a test sample of our products!*

## NorthQ ApS

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