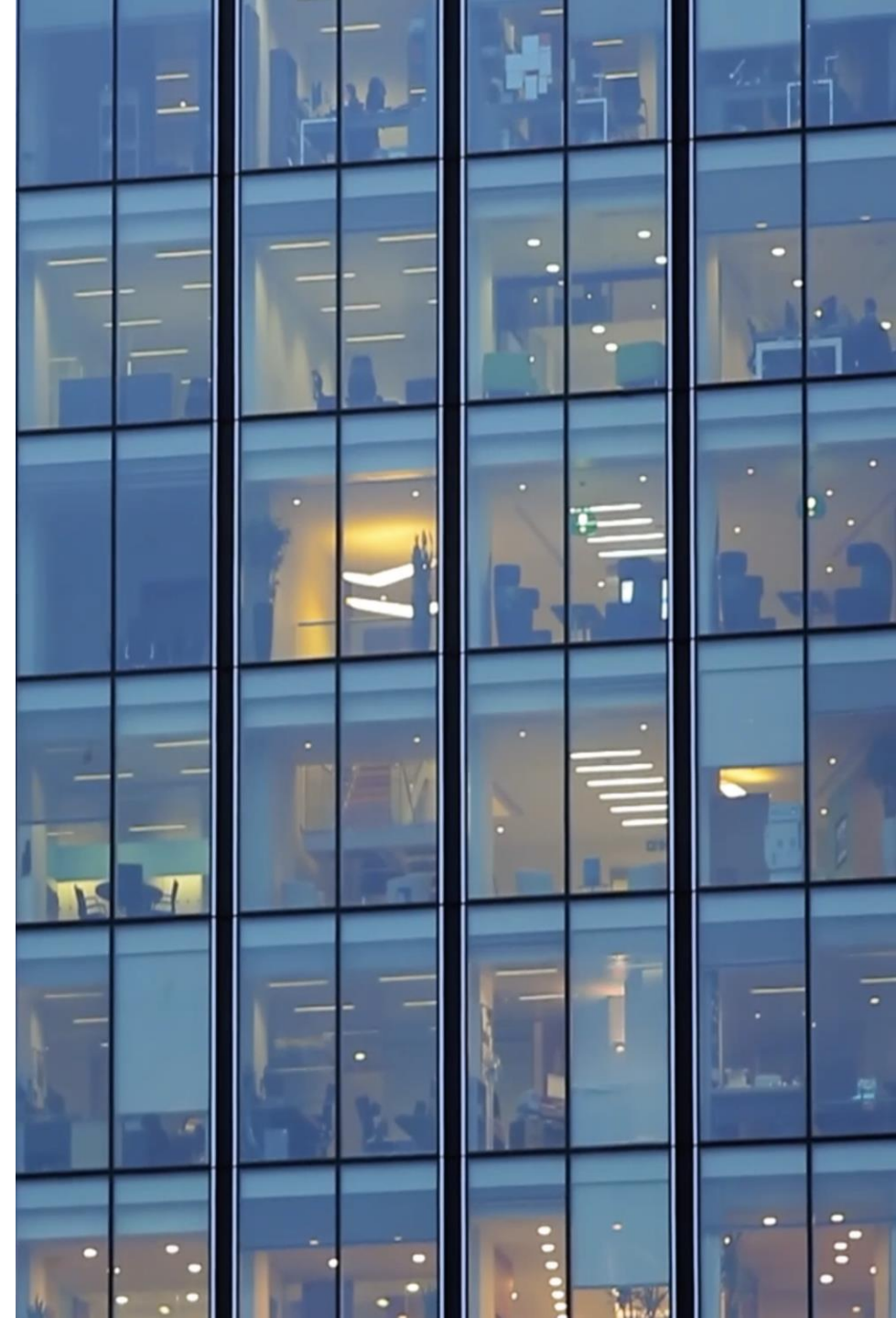




Smart Building Software for Smart Cities.

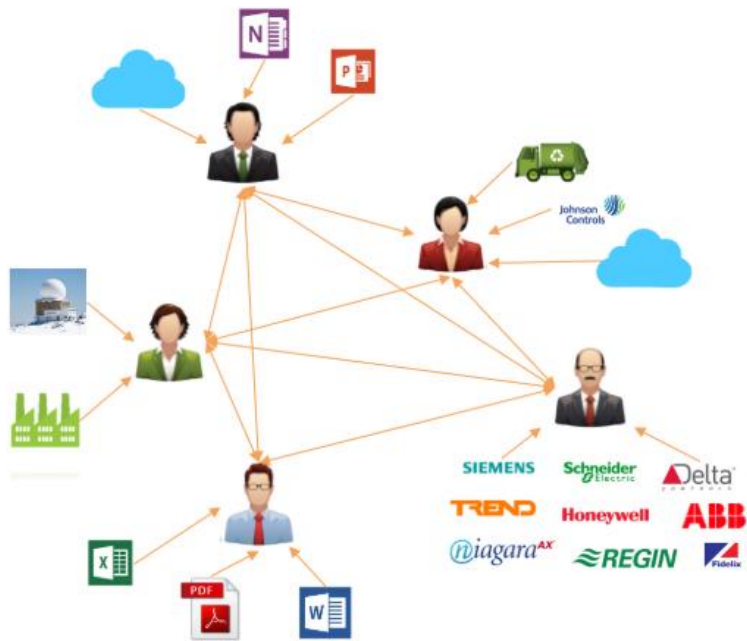
# Company Overview.

- Real-time data platform for efficient and transparent management of smart buildings
- Proven technology with over 2 500 buildings connected to Nuuka platform
- References in smart buildings in Finland, Sweden, Netherlands and the US
- Experienced team with 20 years of ICT and real estate know-how



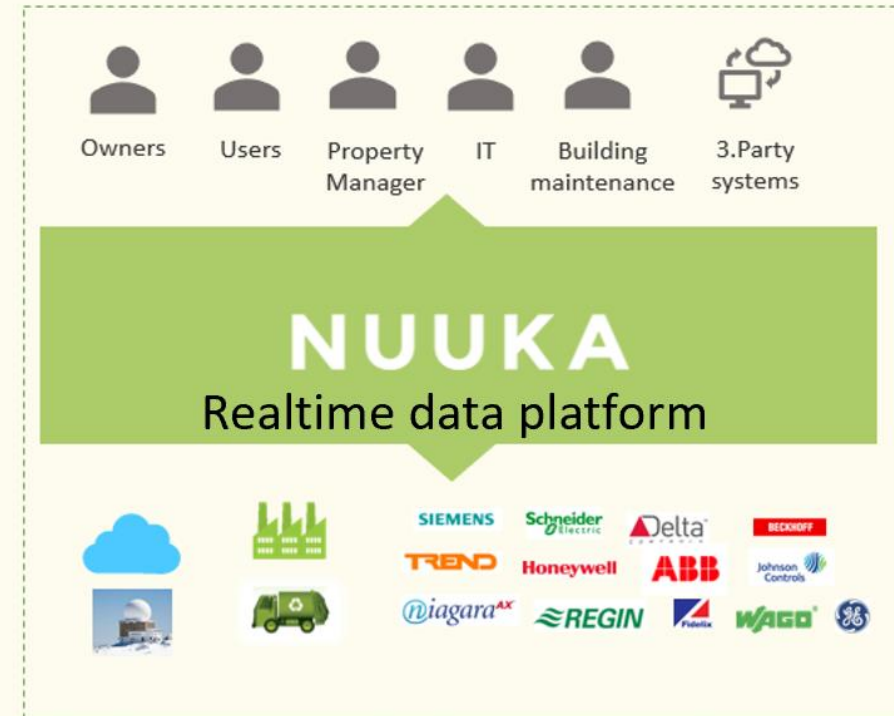
# Our solution takes of the chaos.

## Silo solution problem



Data chaos –  
Does not scale

## Nuuka's solution





 **NUUKA**

Case City of Helsinki.

Carbon neutrality 2035 | Pioneering in energy efficiency | Building user involvement | Smart & Clean | 1000 public buildings

# Helsinki

Building automation

Indoor Climate sensors

Utility & waste companies

Energy & water meters

Camera Technology

Subjective user feedback



Azure SQL database

# NOOKA

Data Analytics and Machine Learning

Energy

HVAC Process

Indoor Air

Feedback

Waste

Sustainability

Demand Response

Space Efficiency

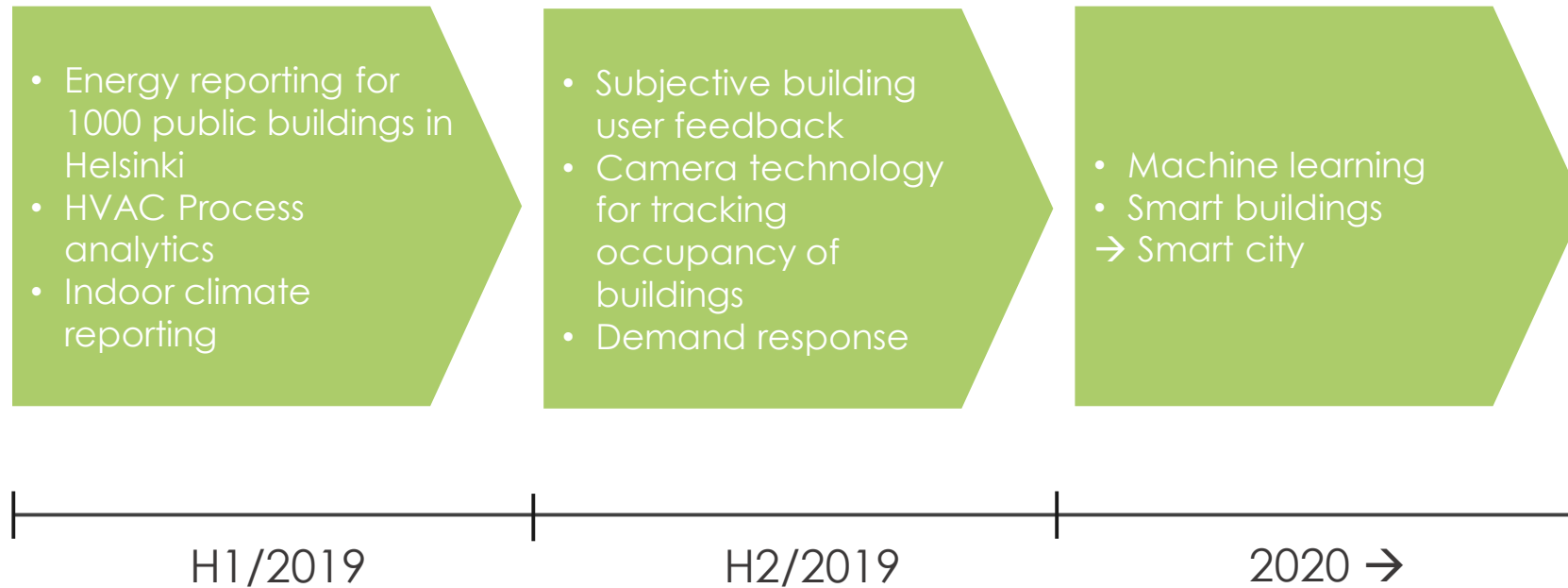
Intelligent UI

KPI Reports  
Power BI  
GRESB

Warnings and alarms

API to 3<sup>rd</sup> party

# City of Helsinki Project Timeline.





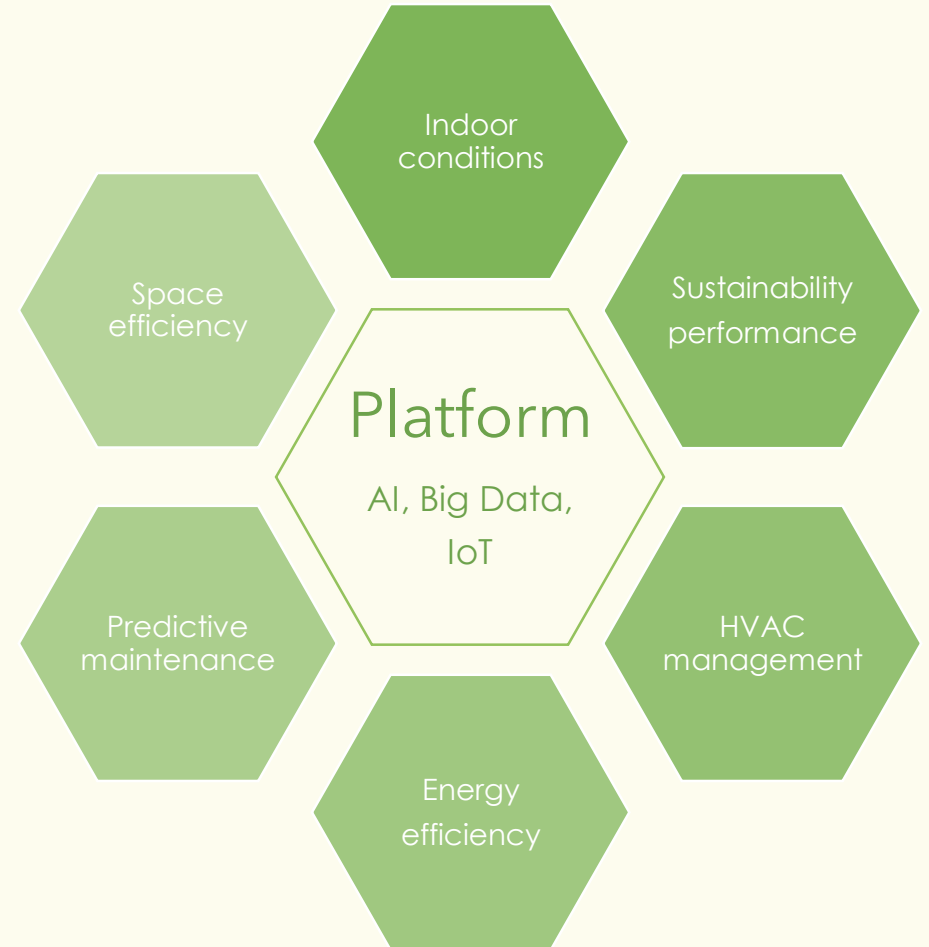
Product.



**NUUKA**

# Platform Overview.

At the core of Nuuka's software is a management platform for Real Estate business. Our platform offers a diverse set of user application to manage sustainability, indoor climate, space efficiency, people flow, energy efficiency and building performance. Resulting in reliable data that gives a single version of the truth for any operator in property environment.



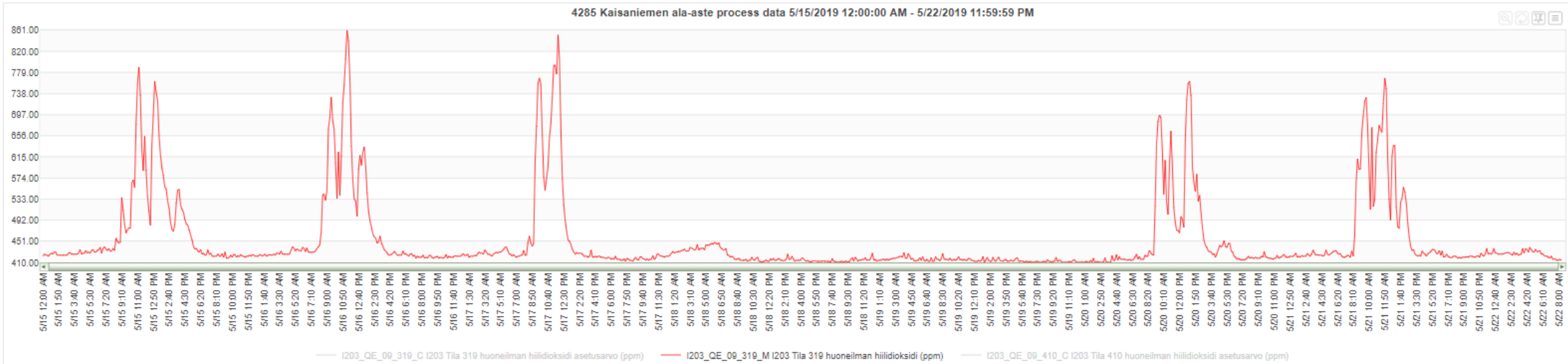
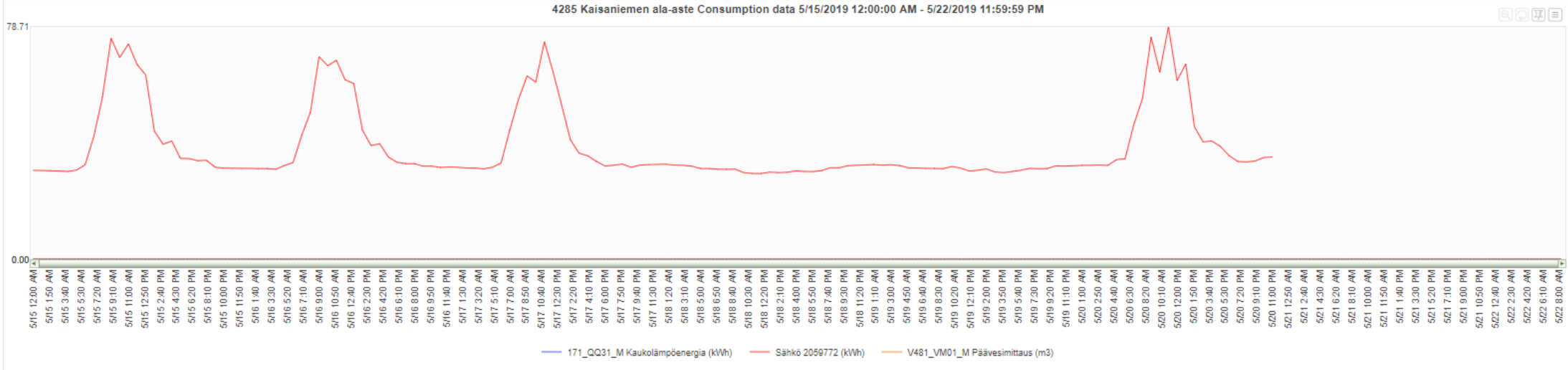


Location: 4285 Kaisaniemen ala-aste

Energy reports Analysis Trends Source data Energy management

-7 days Today Free timespan Select data points...

Zoom mode Pin mode Reset Units



Data point	Sum	Min	Max	Avg
171_QQ31_M Kaukolämpöenergia (kWh)	0	0	0	0
Sähkö 2050772 (kWh)	8463.84	29	78.71	37.87
V481_VM01_M Päävesimittaus (m3)	0	0	0	0

Data point	Min	Max	Avg
I203_QE_09_319_C I203 Tila 319 huoneilman hiilidioksidin asetussarvo (ppm)	700	700	700
I203_QE_09_319_M I203 Tila 319 huoneilman hiilidioksidin asetussarvo (ppm)	410	861	462.79
I203_QE_09_410_C I203 Tila 410 huoneilman hiilidioksidin asetussarvo (ppm)	700	700	700

# Case Kalasatama



*"Helsinki aims to be the world's leading city in digitalization. The choice of Nuuka as our partner is part of Helsinki's determined advancement towards the smart city era."*

Jan Vapaavuori,  
The Mayor of Helsinki

# Using City Buildings as Virtual Power Plants.

- Increasing share of renewable energy are setting challenges for grid load management
- In the grid system the load and the generation of electricity need to be constantly equal
- Buildings can be used as energy storages and as a source for demand response



Demand response enables cities to become more **sustainable and greener.**



# NUUKA

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