

# Monitoring of CO<sub>2</sub> levels in kindergartens in Brno

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over

# 3

months of air-quality measurement

# 3

kindergartens had learned how to ventilate properly

# 100%

scalable system for additional sensors and other devices



## The Idea

The aim of RehiveTech was to teach the staff how to ventilate properly to maintain a good air quality at kindergartens in Brno.

There was a suspicion of poor air quality due to frequent illnesses of children.

They wanted to inform the staff when the conditions inside were bad enough to start ventilation.



## The Solution

The air-quality monitoring system consists of:

- 1) IQRF CO<sub>2</sub> sensors
- 2) AuroraHub IoT Gateway
- 3) central IoT application for data processing
- 4) wirelessly controlled RGB light

Based on the collected data of CO<sub>2</sub>, the command from the IoT application changed the color of the RGB light.



## The Results

Three months later, an experimental shutdown of the signaling light followed, and the results of the measurements surprisingly showed that local staff had learned to control their indoor air automatically, only by window ventilating.

Unacceptably high levels of CO<sub>2</sub> were not longer measured.



## The IQRF Benefits

It is possible to realize similar projects very quickly using existing components from the IQRF ecosystem (e.g. sensors, gateways, other software,...).

There is no problem for IQRF to cover whole building with many floors and rooms with air-condition sensors and signaling lights or other devices.