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New technology will give better air and healthier children

The County Administrative Board of Dalarna has participated in several projects aiming to improve indoor environment in schools and pre-schools. Measurements were conducted during 2019 in some of the county's schools and pre-schools. The results show that air, acoustics and light are not always optimal for children's well-being and performance.

- Poor indoor air affects not only health, but also the ability to concentrate and perform in the classroom. Particularly in pre-schools, it is necessary to reduce the number of particles in the air, as there is a tendency for viruses and bacilli to spread, says Marit Ragnarsson, project manager at the County Administrative Board.

Stefan Lysén, Luvian AB, expert on particles in indoor environment and the person who carried out the measurements:

- Looking at the air quality, I have found examples of classrooms that on certain days have too high particle levels. The particles can, for example, come from pollen or emissions from clothing and building materials.

Rättviks Fastigheter AB has tackled the problem and is now first in Dalarna with the installation of an air cleaning system for particles and better indoor air at Daljerks pre-school. An investment implemented with funding from Region Dalarna.

- With this pilot we hope to drastically reduce the number of particles in the indoor air, which is especially important for children with asthma or allergy. At the same time, we hope to reduce energy consumption,



improve humidity during dry winters and balance the carbon dioxide content, says Ebbe Evbjer, CEO of Rättviks Fastigheter AB.

The installation will be continuously monitored with measurements so that you can compare the air quality in the rebuilt part with the non-rebuilt part and compared to the outdoor air.

- We hope that staff and children will experience increased well-being at the same time as sick level decrease, says Ebbe Evbjer.

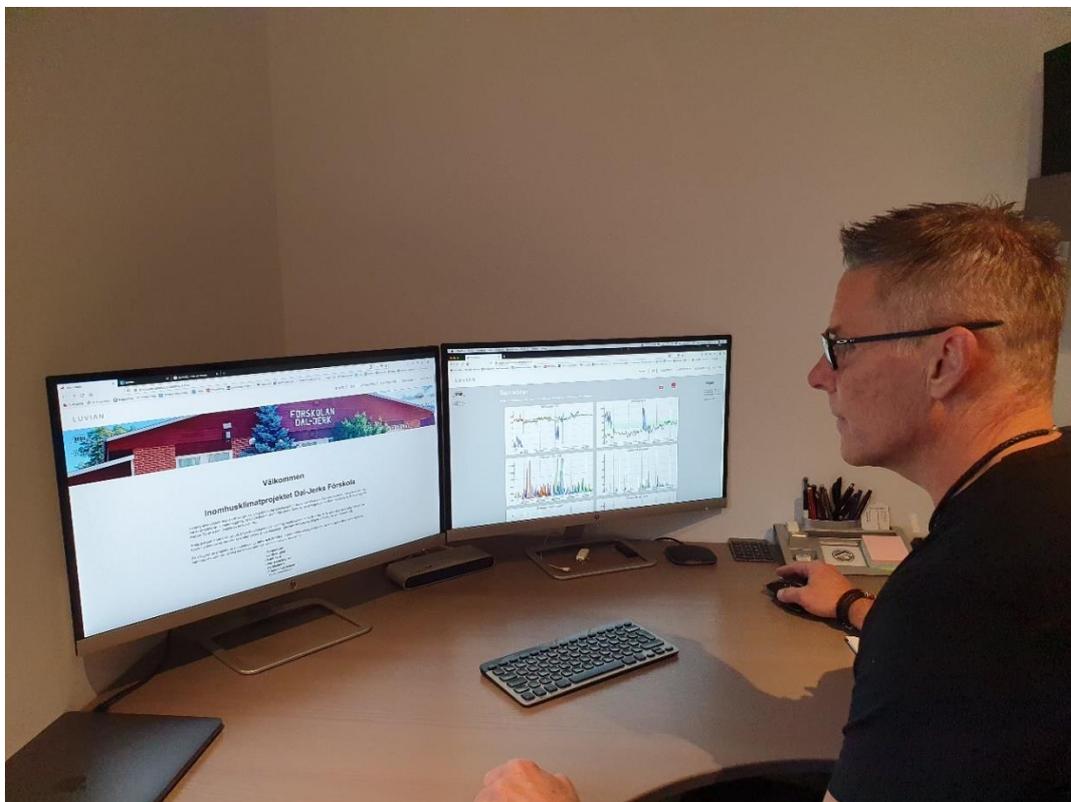
Facts about the system

The Luvian system is continuously cleaning the air from emissions and particles through a re-circling system integrated with the exiting ventilation system. It also reduces the number of viruses and bacilli.

The system is a combined solution for ventilation, air conditioning and air cleaning.

The values displayed are temperature, humidity, CO², particles in different sizes PM1, PM2,5, PM10 µg/m³, total VOC and Formaldehyde.

Installation is done in one pre-school department and the measurements are going to be compared with another department. The measurements will be shown in real time on the new homepage. In the picture below Stefan Lysén is analyzing data from the system.



In August the system will be up and running and information can be seen at www.daladagis.se Mail address to Luvian AB: info@luvian.se

About EFFECT4buildings:

EFFECT4buildings is implemented with the support from the EU funding Program Interreg Baltic Sea Region (European Regional Development Fund) and Norwegian national funding. The aim of the project is to improve the capacity of public building managers in the Baltic Sea Region by providing them a comprehensive decision-making support toolbox with a set of financial instruments to unlock the investments and lower the risks of implementing energy efficiency measures in buildings owned by public stakeholders.

For more information: <http://www.effect4buildings.se>

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