



CASE STUDY

WIRELESS MONITORING IN
GETLIŇI GREENHOUSE

The day your greenhouse became smarter

You can use the gas from a waste landfill to produce electricity, then use the excess heat to warm greenhouses. This is the genius thinking that empowers SIA Getliņi Eko. And this is also why they run one of the most advanced greenhouses in the Baltic region. Genius thinking and genius people behind it.

Getliņi manages the largest municipal solid waste landfill in the Baltic States. Recycling waste produces biogas. They burn biogas to produce electricity. Then they sell this electricity to the grid. This process produces a lot of heat. This heat is used to keep the greenhouses warm. Together more than a hectare of tomatoes, cucumbers and potted flowers. Now this is a smart optimization of resources.

They were the first greenhouse in the world that implemented LED lighting for cucumber growing. And they continue to lead the way in technological development.

You can't optimize if you don't measure. This is where **Aranet** comes in.

"We are fighting for every half of a degree," says the chief agronomist Guntars Strauts, "energy efficiency is our utmost concern". It is not enough to measure the temperature only in the center of the greenhouse with a climate box. This does not give you all the information you need to optimize costs.



Aranet T/RH sensor with Convection Radiation Shield



Aranet Weight sensor

It's like taking the average patient temperature in a hospital. Twelve people with a fever and one dead. Average temperature 36,6 °C (98 °F) - perfect! Or is it?

The same goes for a greenhouse. You need to know what is going on everywhere, even in remote corners. Is one side colder? Did someone forget to close the window? You would never know, if you were measuring only in the center.

The **Aranet** system offers flexibility by using wireless sensors for all measurements. Put the sensors anywhere you want. Change the location as often as you need. No wires, no hassle. Cost efficient. Simple.



Aranet PAR sensor



Aranet T/RH IP68 sensor

Getlini took it a step further. They now use the Aranet system to measure on 3 levels of the plant – top, middle and bottom. Maybe the lower level is fine, but the tops of the tomato plants are overheating. Time to close the shades.



Plant weight is an important matter. It's very satisfying that it can be measured in the same Aranet system. All in one dashboard. You know how much water is coming in. You weigh the plants. You weigh the drainage. You get your biomass increase. You can be even more precise if you want. Aranet temperature sensors also measure relative humidity. You can use this to get the use vapor pressure deficit. Then calculate the evaporation and subtract it.

The flexibility offered by wireless sensors is immense. It takes time to comprehend all the applications. It takes time to escape the "wired" thinking. Time to break loose from the limitations of wires.

Time to choose **Aranet!**

If you want to find out if Aranet wireless monitoring solutions can help your business visit www.aranet.com or contact us info@aranet.com!