



Driving Sustainability at Westerlay Orchids

Reducing the operation's carbon footprint is top priority for second-generation owner Toine Overgaag.

BY ABBY MCGARRY

Westerlay Orchids has made quite the mark in Carpinteria, California. What started as a rose operation when Joop Overgaag immigrated from the Netherlands in the late 1970s has now become an orchid powerhouse, growing more than 4 million orchids annually.

Owner and President Toine Overgaag took over the family business in 2009 and continues to drive the operation forward as the second generation. He's currently developing a new facility and looking at other crops for long-term expansion, all while having his eyes set on a carbon-neutral operation.

GPN caught up with Toine to discuss the company's forward-thinking sustainability efforts.

GPN: I want to start with maybe the broadest question possible. Why are you focused on a sustainable growing operation at Westerlay Orchids?

Toine Overgaag: Put everything on the table that's out there that we should be concerned about as people, and I think that climate change is the existential threat. We can just kind of pretend it's not there, or we can in our own little way try to change, improve and maybe even inspire others as well.

Sustainability to address climate change and environmental impact is extraordinarily important, and I think talking about it and being deliberate and bold about where you want to go is important to set something out on the horizon to continue to make improvements and changes.

That's the big picture for me personally and I think for our company and what our core values are as a business. I'm a big believer in incremental change and incremental improvement, to set a big goal on the horizon and work toward it steadily over a long period of time.

GPN: One of your big goals is to become a carbon neutral operation, and I know you've already made some changes to reduce your carbon footprint. What projects have been successful so far?

Overgaag: We're looking really at A) efficiency and B) greater reliance on electrical, which of course can be generated through renewables. A project we executed last year was to install solar. At one of our facilities, we have a solar array of over 560 pounds, which went live September of last year, and we are somewhere around 95% of our electrical needs at this facility that we're covering with this system. That's a real direct carbon footprint reduction.

The idea with our expansion is that we are going to develop a facility that is going to have a much smaller carbon footprint. Ultimately, carbon offsets are not the long-term answer, but offsets in the short term are an element of what we're doing. We're doing some now where we're helping to fund wind farms in India as an offset for some of the carbon we use, the idea being that you are supporting the generation of carbon-

THIRD-PARTY CERTIFICATIONS

For the past eight years, Westerlay Orchids has been working with the international organization MPS to further its sustainability goals. The MPS-ABC program includes both certification and monitoring tools that help companies reduce their impact on the environment. This includes auditing and recording usage of crop protection agents, fertilizers, energy, water and waste. Westerlay Orchids has earned an A rating every year.

The company has also received the MPS-GAP certificate, which centers around areas such as traceability, environment, crop protection products and recall procedures.



To monitor its carbon footprint and reduce its environmental impact, Westerlay Orchids has been working with the firm Carbon Footprint Ltd. out of the United Kingdom. In August, Westerlay ramped up its efforts by becoming the first North American user of the HortiFootprint Calculator, a software tool developed by MPS and LetsGrow.com that measures the carbon footprint of horticultural production and helps growers to make more sustainable choices.

“MPS gets our industry, and they can help us identify perhaps suppliers or consumers of our goods, so it becomes the entire chain that you can look at more effectively for carbon generation,” says Toine Overgaag, owner and president of Westerlay Orchids. “We want to work with partners, third parties, who are tough on us and make us better, and there is a rigor to MPS.”

Overgaag also sees value in the benchmarking system that MPS uses to compare like businesses within the industry and in similar geographic areas. For the Westerlay team, it's not all about the certifications though.

“I want to emphasize that a lot of our efforts are internally driven,” Overgaag says. “The primary reason is we want to get better.”



Photos: Westerlay Orchids

free energy in an environment where it's cheaper to do so than in a high-cost country, and it's more likely to replace a really dirty source of energy: coal. But long term, we want to just directly reduce our own carbon footprint.

GPN: Can you talk a bit about your irrigation water and recapturing system and the impact it has had?

Overgaag: Orchids are empathetic plants and are not grown with sprinklers, emitters or anything like that; watering is done with overhead irrigation. You can't get around that, but that makes capturing runoff very difficult.

What we did, through a company in the Netherlands that designed the system, is install a floor that we covered with an impermeable membrane, then a drainage system, and then a permeable cover that you could walk over. All irrigation water coming through the system gets trapped, funneled into these drains, then processed through a series of sand filters and then UV filters, so you're capturing all your drain water and all the fertilizer that spills out. At the same time, you're eliminating your pathogens or other matter you don't want, and you're reusing that water. We've found that we recapture and reuse 75% or so of our irrigation water.

We also heat the greenhouse not just for temperature but also for drying the environment. The drain floors eliminated standing water, reducing the humidity in the atmosphere, and so we ended up reducing our gas use consumption by about 15%.

GPN: What role does automation play in your operation now and what do you see in the future?

Overgaag: Some folks will define sustainability beyond just environmental definitions into economic factors. I want to pay the people who work for me a really fair wage and even a bit more than normal wage, but in order to stay viable, we can't have more people than we absolutely need. Automation tends to be one answer for that.

Right now everything works on the floating table system, but the next generation is those tables are moved everywhere by robots; individual plants can be removed from tables by robots, moved through processing and sorted by robots. We're not there yet.

You don't want to paint yourself into a corner because of automation. You still must be able to respond to the market and if your customers are demanding or asking for a specific way of processing your plants or sorting your plants. There's a limit to the benefits of automation. [gpn](#)