

LVG Plants invests R25m in solar water heating facility

LVG Plants, a Woolworths horticulture supplier, has invested R25m in a solar water heating facility. LVG Plants has 100,000m² of climate-controlled greenhouses where they grow delicate potted flowers such as orchids.



In the harsh, variable African climate, the production of many of these indoor plants would not be possible without maintaining a constant greenhouse temperature of 28°C.

Use of coal boilers

Until recently, LVG Plants has powered the water heating system that maintains the warm greenhouse temperatures through the use of coal boilers. Now the business has installed a solar collector field, over a hectare in size, that harvests solar energy which heats a 2.1-million litre heat storage tank from which hot water is transported via a network of pipes into eight greenhouses, where the temperature is automatically controlled for optimal plant growth and flower bloom.



It is anticipated that 80% of LVG Plants' greenhouse heating will now be powered through their solar collector field with only 20% being generated from coal. Apart from greatly reducing their carbon footprint due to far less coal emissions, LVG will also reap significant energy cost-savings and they expect their investment in the solar infrastructure to break even within five years.

LVG Plants joined the Woolworths' Farming for the Future initiative six years ago when the programme was extended to horticultural suppliers, and they have made huge strides in adopting green practices throughout their operations. The water in the closed heating system, as well as the water that they use to irrigate their crops and increase the humidity in, is harvested off the greenhouse roofs and stored in their on-site dams.

Sustainable business for the future

LVG Plants is a family business founded by Lourens van Geest, who, on his retirement, handed the business over to his sons, Ivo, Geert and Bart. The environmentally-conscious brothers acknowledge that it is their generation's responsibility to take on the challenge of reducing their carbon footprint so that they can pass a sustainable, thriving business onto their children.



"Woolies commends LVG Plants on this major investment in clean solar energy," says Justin Smith, Woolworths head of sustainability. "Through Farming for the Future we work closely with suppliers like LVG Plants who echo our own concerns about doing business responsibly, and then also take progressive, meaningful actions to improve sustainability."

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