

Eden Towers: reaching new heights with sustainable urban farming

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With an interest in the food supply chain, Christian Prokscha and his wife Julia were keen to create healthier, more nutritious food at better margins than traditional farms.



Co-founder Christian Prokscha holding radish grown in his vertical farm (Source Christian Prokscha)

When COVID hit, it provided the perfect opportunity for Christian and Julia to embrace the challenge, and so they left their careers in professional services in southeast Asia to start Eden Towers, their own vertical farming food business in Western Australia.

“We can grow a healthier crop, loaded with nutrition and that doesn't have any toxins, chemicals or pesticides applied, and sell it at the same or better price as traditional

farming methods,” Christian Prokscha explains.

“It's accessible to everyone, and we feel there is something good about that.”

Eden Towers is a future food company using controlled environment technology in vertical farms and fruiting chambers to grow a variety of crops, including leafy greens, micro herbs and specialty mushrooms. They have two farms in Perth and one in Adelaide. With plenty of sunshine to generate electricity to

grow uniform crops, they can speed up the growth cycle, producing crops two to three times as fast as traditional farming methods.

“A microgreen requires seven to 10 days, while a leafy green requires anywhere from 19 to 26 days,” says Christian.

Producing a uniform product means they don’t produce a range of grades and can pack, grade and distribute produce to a wholesaler, adding more margin to the business.

There are also environmental benefits of vertical farming. The watering system means any water not used by the crops is returned into the watering tanks via a filtration system and then reused.

“We use about one litre of water per kilogram of produce which is 50 to 100 times more efficient than a spray irrigation farm,” says Christian.

When they started the business in 2021, Eden Towers used a containerised farm to validate the financials and make an entry into the market. Their goal was to build 12- to 14-metre-high towers for commercial scale farming, however Christian discovered challenges in deploying this technology due to capital and operational developments.

“In the last 12 to 18 months we have been working with partners from Europe and Asia to utilise technology that fits in a smaller space and allows the same production at six metres high but is far denser,” explains Christian.

In the beginning, Eden Towers considered using various bespoke automation systems. They are now moving away from this approach to use solutions they can put together themselves which adds both longevity and improved profits as they are

avoiding ongoing software fees which can cost hundreds of thousands of dollars a year.

One of the keys to success was the decision early on to get help with areas of the business they had limited skills in. Christian and Julia offered advisors with experience in environmental, social and governance (ESG), the food industry, communications and PR, technology, automation and venture capital law a small equity position in the company. The benefit of this was not only advice and reducing risk of growing a business, but a network far beyond their own.

Additionally, they found engaging with the Department of Primary Industries and Regional Development (DPIRD), the Peel Development Commission (PDC) and Food Innovation Precinct of WA (FIPWA) early in their business journey extremely valuable.

The support from these government departments has been invaluable to Eden Towers growth and ambitions through grants, networking, business opportunities and research and development. It also provided a path for Eden Towers to participate in the 2022 Harvest Agtech Accelerator Program (Harvest 5), supported by DPIRD.

Christian acknowledges the importance of continuous learning as key to their success.

“We’ve enrolled in several courses to enhance our business and DPIRD ran a particularly helpful course which guided us in how to set up export operations.”

“Our engagement with DPIRD has opened many doors and opportunities.”

In addition to the program content, being involved in the industry has also provided invaluable networking opportunities. Eden Towers has been represented at the

Singapore International Agro-Food week, evoke^{AG} in Adelaide and Perth, and in May 2024 Christian joined the panel of the May 2024 WA AgTech Meetup.

“Our engagement with DPIRD has opened many doors and opportunities,” says Christian.

An example of this was Eden Towers success in securing a \$200 000 grant through FIPWA’s Enterprise Support Program to undertake research and development to investigate how specialty crops can be incorporated into their vertical farm.

A major achievement for Eden Towers was entering the east coast market with the Adelaide farm and securing supply agreements with the major retailer Costco in WA.

“We are now at a point where we are very clear on our strategy around technology, our farms and what we are going to do to scale up our business,” Christian explains.

Christian and Julia are about to embark on another capital raising campaign which will be crucial to scale the business. Through improvements in technology, Christian hopes to reduce the set-up costs for vertical farming, which was about \$5000/m² when they started to \$1000/m².

“We are hoping to raise around \$30 million with our next capital raising campaign,” Christian says.

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“If we are successful, this will help us to start our journey to have a farm in every capital city across Australia, so we can start producing commercial quantities for a growing market.

“Our current capacity is about 10 or 20 tonnes, and we want to produce hundreds of tonnes of produce.”



Eden Towers grow a selection of specialty mushrooms in their fruiting chambers (Source Christian Prokscha)

Christian’s goal of expanding Eden Towers to other states aligns with his vision to increase access to healthy high quality Australian produce.

“Most of the mushrooms sold by others in Perth are imported from China and Korea, spending three to four weeks on a ship,” Christian explains.

“Many shiitakes imported from Korea or China are sprayed with preservatives to retain shelf life and we want to be able to provide a healthier, fresher alternative to these products.

“We are committed to displacing more imported produce, with locally grown options from WA and across Australia.”