



**AGI FROST FANS PTY LTD**  
RELIABLE FROST PROTECTION



## **ELECTRIC FROST FANS / WIND MACHINES: GREENER & MORE EFFICIENT**

Grid or generator powered.

Industry-leading coverage of up to 9ha (22ac) per fan.

Lowest running costs.



## ABOUT AGI FROST FANS

AGI Frost Fans is based in Wellington, a fruit farming and engineering hub, in the Western Cape region of South Africa. Its dedicated team has decades of collective experience in the fruit and wine industry and have used this knowledge and insight to design and manufacture the most efficient frost fan in the market.

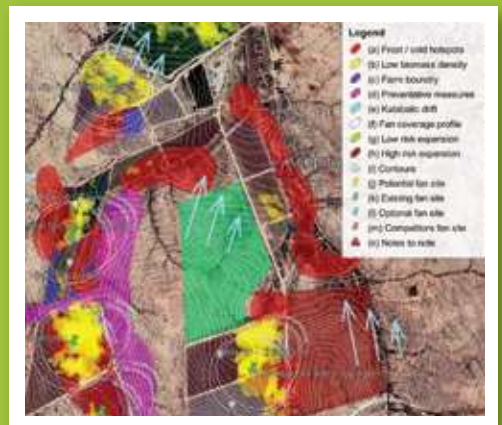
Not only are its frost fans electrically driven, but they also offer industry-leading coverage of up to 9ha (22ac) per fan and boast the lowest running costs.

AGI Frost Fans is committed to continuous research and development and remaining ahead of its competitors.

## GET A FREE FROST RISK ASSESSMENT

Rather than deploy wind machines in a grid, AGI Frost Fans offers a free frost risk assessment to identify high and low risk areas, determining the best location for each fan.

AGI Frost Fans' risk assessments are conducted remotely, drawing on various data streams including historical weather data, biomass data, contours and topography, katabatic drift flow obstruction analysis and, of course, its own expertise and experience.



# THE BENEFITS OF ELECTRIC FROST FANS / WIND MACHINES

AGI Frost Fans' wind machines feature a custom-designed, open impellor to ensure the efficient protection of frost-prone crops, across a variety of micro climates.

## > ELECTRICALLY DRIVEN FROST FANS

Power options include grid or generator powered.

## > INCREASED COVERAGE

A specialised blade design delivers leading-in-class coverage of up to 9ha (22ac) per fan.

## > EASIER INSTALLATION AND MAINTENANCE

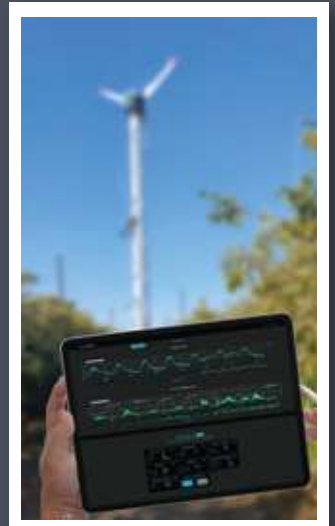
An optional hydraulic pivoting tower allows for easier installation and maintenance.

## > GREATER MECHANICAL EFFICIENCY

The electric motor means fewer moving parts (no drive shaft or gearbox), less noise and reduced running costs.

## > CLOUD-BASED CONTROL SYSTEM

Real-time monitoring and control via the AGI LIVE app for Android & iPhone puts you in control of your equipment.



## FEATURES & PERFORMANCE

AGI Frost Fan's electric frost fans offer a host of benefits including easier deployment and monitoring, greater efficiency and substantially lower running costs.



### FEATURES INCLUDE:

- Lightweight blade design with composite 3-blade fan.
- Coverage up to 9ha (22ac) per fan.
- Blades designed for uniform wind velocity for maximum orchard penetration.
- Adjustable incremental rotation allows for increased coverage area.
- Blade-lock feature to reduce wear when idle.
- Grid or generator powered.
- Lower noise levels.
- Lower running costs.
- Manufactured to ISO 9001 global quality management standards.

## THE POWER OF CUSTOMIZATION

AGI Frost Fans offers a range of models which vary one from another in three key respects:

### > ELECTRIC MOTOR POWER (KW)

Choose between a smaller motor for farms with limited grid supply or low frost risk and a larger motor for optimal protection in larger farms or frost-prone areas.

### > ELECTRICAL COMPONENTS

Choose between two ranges of electrical components: one prioritises reliability and performance, the other balances affordability and durability.

### > TOWER OPTIONS

Choose between a hydraulically powered pivoting tower for ease of maintenance and a more cost-effective fixed tower, which may also be fitted to existing fan bases.



## **CLOUD-BASED CONTROL & MONITORING SYSTEM**

The AGI LIVE app allows for real-time cloud-based monitoring & control from any internet enabled device. All key functions are shown on a dashboard and operational parameters may be instantly adjusted.

- The AGI LIVE application is conveniently available for both Android and iPhone.
- Custom designed software offers live information and historic data.
- Continuous live data available when connected to the internet.
- Data may be exported in Excel format.
- Alerts may be sent via email / Whatsapp / AGI Live Application / SMS or phone call to designated contacts.
- Remote adjustment of startup and shutdown temperatures.
- Wind cutout feature with adjustable average wind and gust parameters.
- Other customisable alerts include battery voltage, temperature, tampering, mains failure and variable frequency drive error alerts.
- Integrated wireless IoT sensors monitor temperature, soil moisture and liquid levels, amongst others.

Monitor every aspect of your electric frost fan and change parameters at the click of a button!



## A GREENER OPTION IN FROST PROTECTION

As agriculture in all its forms comes under increasing pressure to decarbonise and minimise its environmental footprint, AGI Frost Fans is committed to leading the way with electric frost protection technology.

Using its extensive experience in the fruit and wine industry, AGI Frost Fans has designed and manufactured the most efficient electric frost-fighting fans on the market. While the initial cost of its fans is market competitive, longer-term benefits include the reduction of running costs by up to 90%, when compared to fossil fuel powered alternatives.

AGI Frost Fans offer the agricultural industry a greener alternative for frost protection.

In addition, they may also be fitted to existing fan bases, enabling a smooth transition from using fossil-fuel powered fans to more efficient electric fans when replacing old equipment.

### **OTHER BENEFITS INCLUDE:**

- Greater efficiency with increased coverage per fan.
- Easier installation and maintenance.
- Less noise and pollution.

Electric frost fan technology means greater efficiency in horticulture and agriculture.





## **A COMMITMENT TO SUSTAINABLE FARMING**

Forest Lodge is a six hectare cherry orchard near the Central Otago town of Cromwell, New Zealand. Its goal is to grow fruit with 100 percent renewable energy and have as little as possible carbon footprint. By doing this, it will cut carbon emissions from the orchard by over 80 tonnes per year, when compared to an equivalent orchard using fossil fuels.

With solar panels installed and producing enough energy to operate the orchard's electric irrigation pumps, Forest Lodge turned their attention to finding low-carbon alternatives to other diesel and petrol-powered farm machinery. AGI Frost Fans is proud to be involved and have our electric frost-fighting fans as part of this innovative horticulture.

AGI Frost Fans strives to help the agricultural industry achieve greater long term financial and environmental sustainability.

## **WHAT DOES THE FUTURE HOLD FOR FOREST LODGE ORCHARD?**

"I don't want us to be the only zero fossil fuel farm in New Zealand. I want to use what we've done to really shift the needle when it comes to climate change. Our little farm down in Central Otago, with what we have done, is saving 80 tonnes of carbon a year. If you can scale that up to 20%, 30%, 40% of horticultural operations in New Zealand, that's a huge amount of emissions that we're saving.

That's what my real long-term goal is – it's not to be special. It's slowly making ourselves un-special by getting other people to follow and do the same thing that we're doing. If I can do that then no matter what happens with the climate, I can rest knowing I've done what I can."

- Mike Casey



**AGI FROST FANS PTY LTD**  
RELIABLE FROST PROTECTION

Contact AGI Frost Fans to find out more about electric frost fan / wind machine technology, or to enquire about a free frost risk assessment.

**+27 21 873 0590 | [info@agifrostfans.com](mailto:info@agifrostfans.com) | [www.agifrostfans.com](http://www.agifrostfans.com)**  
**77 Stokery Road, Wellington, Western Cape, South Africa.**