

## Auckland Winter Gardens heated by wood fuel

Michael Buckley, Chief Executive of Tubman Heating, proudly announces the conversion of heating of the Auckland Domain Winter Gardens to wood fuel heating.

We are encouraging and helping businesses, both in the public and private sectors to move towards [biomass boilers](#). Installing biomass boilers that use a renewable energy source instead of a fossil fuel such as oil or gas helps reduce carbon emissions. The reduction in emissions is attributed to the sustainable harvesting of biomass and the original growth of biomass trees and plants removes greenhouse gases like CO<sub>2</sub>.



**The Auckland Domain Wintergardens** is a protected Heritage Site that has been around for over 100 years, with rare and magnificent plants seen in the two glasshouses. The Tropical House is kept at a constant 27°C through hydronic heating while the pond is warmed in winter. The boiler house is separate to the greenhouse to ensure there is no extra water vapour in the air. Water not immediately used is stored in a storage tank for use in the following 24-48 hours. Our proposal for the Wintergardens was to remove the existing natural gas hot water boiler that had come to the end of its economic life and replace it with the ÖkoFEN pellet boiler system, with sustainable and cost-efficient wood pellet fuel made in New Zealand.



**Auckland Domain Wintergardens Glasshouse**



**ÖkoFEN PES 128 and PES 64 Pellet Boiler Cascade System**

Our team installed two ÖkoFEN pellet boilers to provide up to 192 kW of heating, a 500-litre buffer storage tank and two pellet hoppers with approximately 12 tonnes capacity. Dividing the energy demand across two boilers allows the flexibility needed to maintain the temperatures throughout the change of seasons, while remaining efficient and reducing the amount of maintenance required. The compact design of the ÖkoFEN pellet boilers allowed our team to install both boilers in the original boiler plantroom.

The Pellematic Touch heating controller allows remote access to the boiler controls and data, with alarm monitoring and auto dialler function in the event of a fault and automatic alerts when the pellet volume is low. The pellet hoppers' integral auger and elastic sloping floor ensure pellets are emptied almost completely.



**12 tonne capacity pellet hoppers with sloping floors**

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*"It was great working with Tubman Heating to replace our old gas boiler with a new wood pellet boiler at Wintergardens. From the very beginning, the team at Tubman Heating was knowledgeable, professional, and easy to work with.*

*We appreciate the commitment to quality and customer service that Tubman Heating has shown throughout the entire process."*

*Nina Quintana, Project Manager Auckland Council*

As New Zealand's weather is variable throughout the year this can impact the production of fresh flowers, fruit and vegetables. Consistent and reliable heating allows growers to maintain fresh, locally grown food and flowers 365 days a year. If your business is looking to reduce its carbon footprint while saving financially in the long run, then call us today to discuss how we can create an optimal biomass heating solution for your greenhouse or covered cropping enterprise.