

CASE STUDY

POWERSCOURT GARDEN PAVILLION, IRELAND

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BACKGROUND

Powerscourt Garden Pavilion, located in the beautiful 1000 acre Powerscourt Estate. Powerscourt Gardens on the grounds of Powerscourt Estate, was voted top 3 Garden in the world by National Geographic The Pavillion supplies an extensive plant selection, indoor/outdoor plants, bulbs and seeds. A horticulturalist's dream.

PROJECT CHALLENGES

Space limitation in The Pavilion where their plant selection is stored. Existing oil boiler system was old and faulty with increased risk of failure. Lost opportunity for additional indoor plant storage. Air quality in plant storage area reduced by location of boiler. Dust and smells.

IMPLEMENTATION

GS Renewable was consulted by Powerscourt Garden Pavilion on the approach to take for switching from oil usage to renewables for powering the heating of The Pavilion. With the challenges of space limitation, our team recommended our standard modular heat pump plant room to our client. This enabled our client to reclaim internal space for the business where the oil boiler had been located as the GS Renewable plant room is located external to the garden centre.

RESULT

The implementation of the heat pump system resulted in a significant reduction in operating costs for Powerscourt Garden Pavilion. Annual energy expenses were cut by an impressive 76%, saving the estate a substantial amount of money. Additionally, the new system improved air quality within the plant storage area, benefiting the health and appearance of the plants.

Powerscourt Garden Pavilion's successful transition to a heat pump system demonstrates the potential for sustainable energy solutions to address the challenges faced by estate owners across Europe. By embracing innovative technologies and expert guidance, estates can reduce their environmental impact, improve operational efficiency, and enhance the visitor experience.

AT A GLANCE

Challenges

- Boiler's location contributed poor air quality.
- Restricted indoor space.

Benefits

- New heat pump system allowed to maximise indoor space for business trading.
- Annual Operating Cost Savings: 76%

PLANT ROOM DESIGN:
GS RENEWABLE

ASSEMBLE:
GS RENEWABLE

PROJECT MANAGEMENT:
GS RENEWABLE X PYROGENIC

PLANT ROOM DELIVERY (TO SITE):
ALLEN HAULAGE

PLANT ROOM COMMISSIONING:
GS RENEWABLE

EQUIPMENT SUPPLIED BY:
VISSMANN, REFRA, WILO