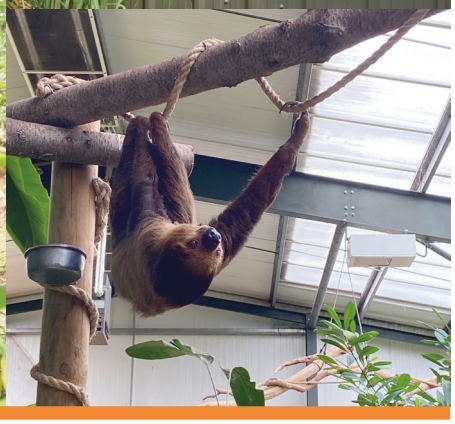

HEAT PUMP DELIVERS A DECADE OF TROPICAL WARMTH AND ENERGY SAVINGS

Banham Zoological Gardens in Norfolk is celebrating 10 years of keeping inhabitants warm in its Tropical House facility thanks to a renewable heating system installed by Finn Geotherm.

Set in 50 acres, Banham Zoological Gardens is run by the Zoological Society of East Anglia (ZSEA), a conservation and education charity. Tropical House is its South American inspired paradise, which is home to sloths, butterflies, birds and reptiles in a lush green enclosure with pathways and a waterfall. With the inhabitants used to living in temperatures of 25°C+, it is essential the building remains consistently warm.

For the past 10 years, Tropical House has been heated by a Dimplex commercial air source heat pump which was specified and installed by Finn Geotherm. The heat pump's fan unit is located just outside the building and works by taking energy from the air to heat water which is used for Tropical House's underfloor heating and air distribution units mounted in the ceiling. The system is ideal for this kind of application as the heat pump runs in long cycles to maintain a steady temperature.

By installing this renewable energy heating system, ZSEA has been able to efficiently heat Tropical House all year round with a system which uses more than 70% less energy than an oil boiler. At the same time as providing reduced heating bills, the system is also making a significant impact on reducing carbon emissions, having saved an estimated 170 tonnes of C02 since its installation when compared to an oil boiler – something that is a key part of ZSEA's environmental strategy.

The heat pump installation was awarded a National Energy Efficiency Award in 2013 as an early example of a ground-breaking renewable heating system.

Jandré Smuts, Head of Estates at ZSEA, said: "The Zoological Society of East Anglia is committed to reducing our environmental impact and continually strive to improve our energy efficiency. The heat pump fits in perfectly with our aims to minimise the consumption of electricity for producing heat and is a step towards reducing our carbon footprint. Finn Geotherm have provided us with an excellent system and great technical support over the last 10 years."

Key benefits

- Heat pump has saved an estimated 170 tonnes of C02
- System uses 70% less energy than an oil boiler
- Maintains 25°C+ tropical temperature all year round