Air Source Heat Pump Case Study
Apple Tree Day Nursery, Kirton

Outline: **System size:** 16kW **Product**: Daikin Altherma HT Split

Apple Tree Day Nursery were referred to Flixborough Eco Technologies through a local organisation. Managing Director, Giles, visited the site to complete an initial survey and discussed how renewables can assist in futureproofing their business. When Stuart attended the nursery to complete a high-level site survey, the nursery used a range of fan heaters to heat the air. These were running at only 40% efficiency, which was extremely unsustainable for the nursery.

To replace this, Giles designed and quoted for the installation of a 16Kw Daikin Altherma High Temperature Split. The Air Source Heat Pump installation is now working at an impressive efficiency of 304%, which has reduced Apple Tree Nursery's energy bills significantly.

As an MCS accredited renewable heating system, the Daikin Altherma HT Split air-to-water heat pump is eligible for funding from the Renewable Heat Incentive (RHI) Scheme, which Apple Tree Day Nursery will be claiming, if the heating water flow temperature is 65°C or less.

Ideal for refurbishment projects, the Daikin Altherma HT Split system heats water up to 80°C, so it will work with existing radiators – meaning less installation cost and disruption.

Benefits of the Altherma HT split:

- Highly efficient CoPs of over 3 when producing high temperature hot water.
- Water flow temperature of up to 80oc can be produced without an additional electrical heater.
- Key hydraulic components including circulation pump and expansion vessel already included within the indoor unit.
- Fast hot water cylinder recovery times.
- Hot water cylinder can be stacked on top of the indoor unit, thus saving space.
- MCS accredited.
- Outdoor unit can be sited up to 50m away from the outdoor unit.