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Dimplex Renewables

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Dimplex renewables
An endless supply of energy

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Dimplex Heat Pumps

- More than 25 years experience in the manufacture of heat pumps
- Manufacturing plant based in Kulmbach, Germany
  - Historically servicing German, Swiss, Austrian and French markets
  - Production capacity of 60,000 heat pumps a year
- Product ranges include:
  - Ground source
  - Air to water
  - Water to water
- Dedicated UK heat pump business since 2005
  - Case studies, product range, etc on our website

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Our Experience

- Framework Supplier to LCBP2
- Design and Specification is a Critical Stage -Speak to Installers and Heat Pump Manufacturers
- Budget Costing even after Grant Funding
- High capital cost but remember:
  - Minimal maintenance
  - No annual safety inspection
  - 20 year + life expectancy
  - Grant funding available

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Geowarmth

Carmelite Monastery

- Two 30kW heat pumps
- 60kW heating load
- 10 boreholes
- Domestic hot water integrated with solar
- 50% LCBP2 grant

Northumberland Schools

- Installed in various schools
- Dimplex SI50TE heat pump and 500 litre buffer
- Horizontal ground loops
- 50% LCBP2 grant

Geowarmth

Village Hall, Lincolnshire

- 14kW heat pump
- 4 slinky trenches
- LCBP2 grant

Geowarmth

School, York

- 2 x 30kW heat pumps
- 500 litre domestic hot water
- 10 boreholes


econic
renewable energy solutions

The Project - Hellesdon Hospital Norwich

- Client - Norfolk & Waveney Mental Health Foundation Trust
- New build Psychiatric Intensive Care and Low Security Units - £9.4m project
- Vanguard project, aiming for the NHS carbon neutrality target of 2018 now
- Officially Opened 12th May 2009

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Project Aims and Challenges

- Highly sustainable building featuring:
  - Low carbon heating system via GSHP
  - Under floor heating
  - Solar PV to offset heat pump electricity
  - Very well insulated, high performance glazing
  - Natural ventilation
  - Rainwater harvesting
- Maximise use of grant funding.
- Building on existing hospital site.
- Noise and upheaval kept to a minimum

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The Econic Solution

- Ground Source Heat Pumps
  - 2 x 50kW Dimplex systems
- “Pushed” ground collector
  - Pipes pushed into ground using hydraulic rams
  - 120 pushes in total – largest in UK
  - Almost silent and no mess
  - Pioneered by Econic and Lankelma
- Under floor heating
- 44kW PV array

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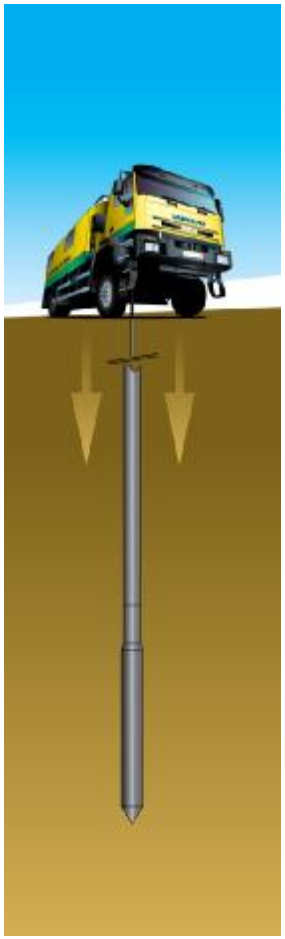
Installation in progress at Hellesdon

The Result

- Client has a low carbon, low maintenance heating system with low running costs
  - Gets better as grid de-carbonised
- Payback accelerated thanks to LCBP2 grants
  - Could not have happened without the grants
- As the client says: “Not only is this a state-of-the art purpose built facility, it also demonstrates the Trust’s commitment to sustainability and renewable energy sources.”



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The Highland Council

- Project Dornoch and Embo East Highlands
- Earth Energy Installer
- Replacement of Existing Heating System
- Air Source Not Considered Due to Location and Noise Emissions
- Single Bore Hole
- Heat Pumps sited in outside housing
- Panel Radiators and hot water cylinder.

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The Highland Council

Recent Heat Pump Projects

- Flagship Housing Association
- 20 new build homes (5 fitted with Dimplex ground source heat pumps)
- Underfloor heating and domestic hot water

- Stafford and Rural Housing Association
- 9 ground source heat pumps fitted to replace solid fuel heating
- Heating radiators and providing domestic hot water

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Thank You For Listening

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