



Heat Pump Presentation

by James O' Donoghue

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Company Overview

Airflow Services Ltd was established in 1996 by Denis and Marina Moynihan to provide high quality products and services to the Heating, Ventilation and Air-Conditioning (HVAC) industry.

Initially the companies main focus was in the Pharmaceutical sector as contracts were secured in this sector, however over the years we have expanded our product and service range to cover all sectors from domestic to commercial to industrial.

The company has grown from strength to strength since its incorporation and now employs 15 people at its premises in Little Island, Co. Cork.

Products

- **Air to Water Heat Pumps**
- Heat Recovery Ventilation
- Solar Thermal Systems
- Air Conditioning Units
- Supply and Extract Ventilation Systems
- Water Chillers
- Belts and Filters
- Variable Speed Drives
- Customised Controls

Services

- System Design
- Supply and Installation
- Commissioning
- Maintenance
- Energy Surveys
- Call-Out and Repairs

We are agents for:

- **Daikin Air Conditioning**
- **Daikin Renewables**
- **Daikin Chillers**
- **Pro-Air HRV**
- **Puma Air Handling Units**
- **Camfil Filtration**
- **ABB Variable Speed Drives**

Presentation Focus

The remainder of this presentation will focus in on our Air to Water heat pump systems.

Presentation Overview

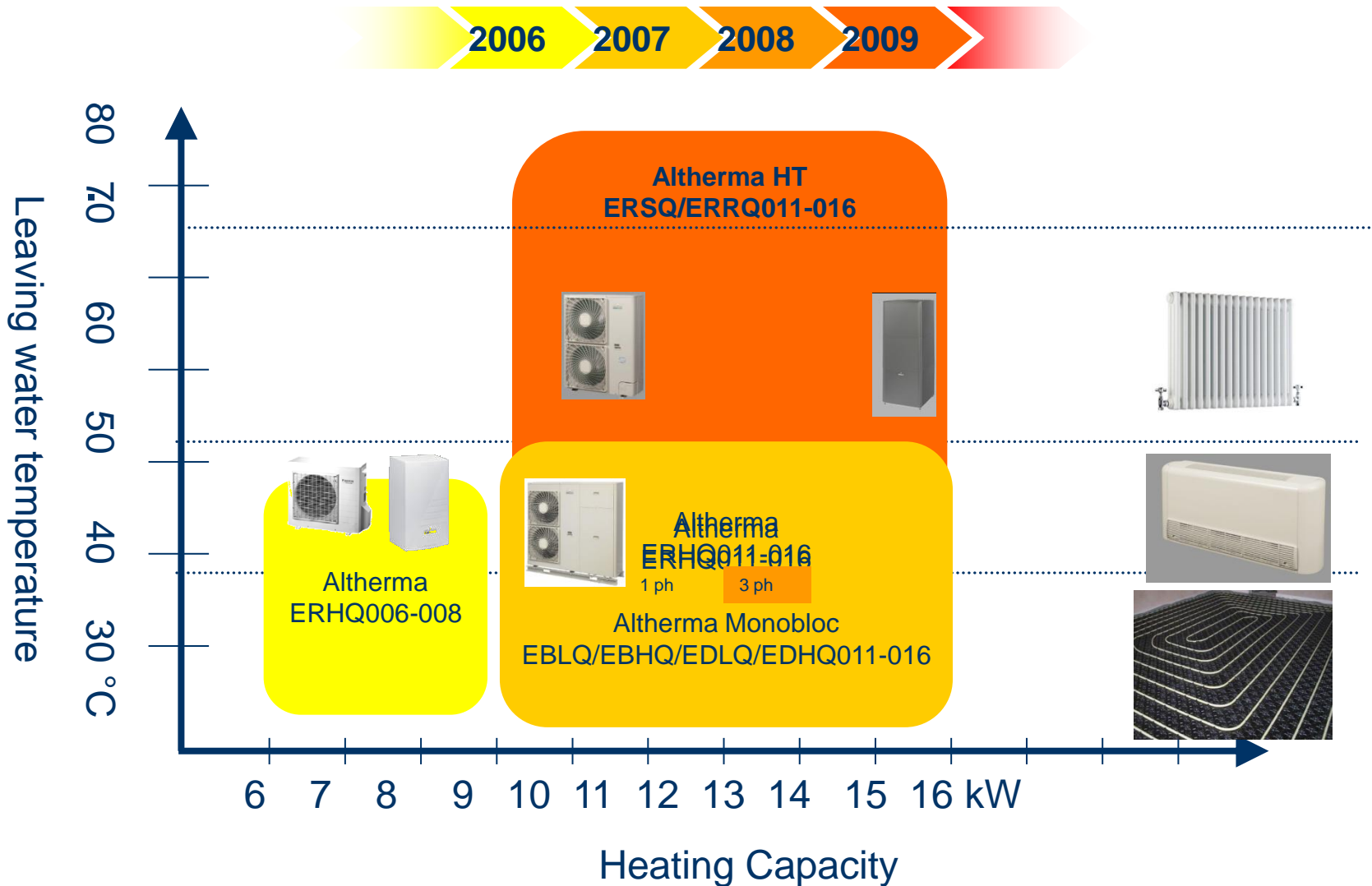
- Heatpump Product Range
- Benefits of Heat Pumps over Oil / Gas
- How to maximise heat pump efficiency
- Running Cost Comparisons
- Airflow Services Ltd - Key Company Attributes in relation to Heat Pump Technologies

Product Range

We are agents for Daikin Air Conditioning and Heat Pumps and the Daikin Altherma domestic range includes the following:

- Low Temperature Air to Water Heat Pump
 - Suitable for new build with low temperature distribution system such as underfloor heating or low temperature radiators
 - Existing Builds where insulation levels have been upgraded and underfloor heating is fitted
- High Temperature Air to Water Heat Pump
 - Designed to replace Oil /Gas boilers and can be used with standard radiators. Targeted primarily at retrofit market.

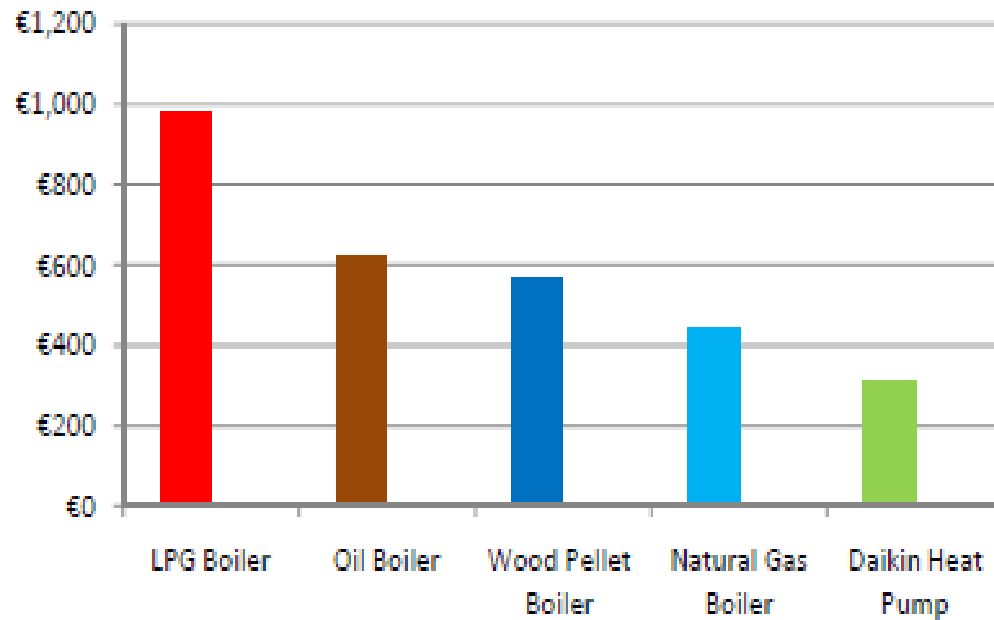
Daikin Altherma Range



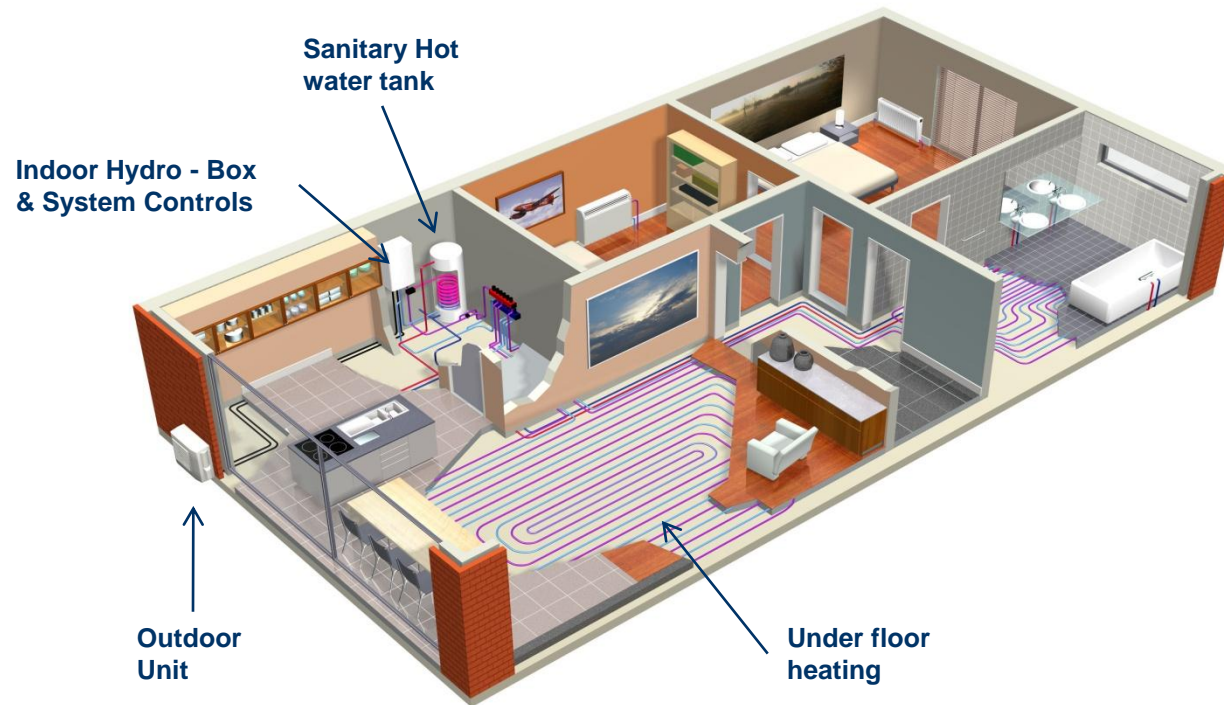
Heat Pump Benefits over Oil / Gas

- Up to 50% savings in heating bills are being achieved compared to conventional fossil fuel systems.
- No Exhaust flue so flexibility in positioning indoor unit
- No Carbon Monoxide threats.
- Greatly reduced carbon emissions
- Achieve renewable energy requirement as per Building Regulations Part L, with heat pump alone, where a solar system would need to be incorporated with an Oil Boiler to achieve the same results.
- Risk of fuel theft eliminated.

Running Cost Comparisons



Typical System Installation



How to maximise heat pump efficiencies:

- Use Low temperature distribution systems where possible such as underfloor heating or low temperature radiators
- Follow recommended guidelines in terms of minimising building heatloss
- Provide adequate time and temperature control on heating distribution.
- You only get what you pay for, do not be fooled by cheap generic Heat Pump models.

Key Company Attributes

- Fully certified and compliant with F-gas regulations to permit handling of refrigerant gases.
- Products are registered with SEAI therefore achieve higher efficiencies in relation to BER Certificate
- Highly educated work force who can take a project from design through to hand-over
- After sales service and support available as a registered agent.
- Over 15 years experience in the HVAC Industry.

Finally....

I would like to thank you for your attention.

Any comments or questions are welcomed.