

- **Headquarters is in Birr, Co Offaly**
- **Over 400 people are employed by the Group**
- **Subsidiaries both in UK and France**
- **Exports to UK, France, Denmark, Greece, Cyprus, Finland and New Zealand**
- **Manufacturing and Supplying Heating Appliances for over 40 years.**
- **The late 1970's energy crisis led to development of our first product the Grant Back boiler.**
- **Our History of Innovation and company expansion over 40 years**
- **Video: <https://youtu.be/NeCFotXK2co>**

## How We Transitioned to be a Renewable Appliance Manufacturer

1978 Back Boiler that burned solid fuel

1984 Launched Oil Boiler range

2006 Our first range of renewable appliances: the launch of Solar Thermal Panels

2010 The launch of our first Heat Pump

2011 The launch of our first Wood Pellet Boiler

2016 The Launch of our first Hybrid - Heat Pump with integrated Oil boiler

2021 The final transition to all our appliances being renewable - All our oil boilers are now HVO (Hydrotreated Vegetable Oil) Biofuel compatible.

## What is HVO?

HVO (Hydrotreated Vegetable Oil) is made from ISCC (International Sustainability Carbon Certificate) Waste fats and Used Cooking Oils (UCO)

## How is it made?

Hydrogen is added to either a plant- or animal-based feedstock. It combines with oxygen removing water from the mix and resulting in a renewable, paraffinic fuel product

## What Does it mean for Carbon Emissions?

By switching to 100% HVO will result in an 88% reduction in carbon compared to Kerosene

## What does it mean for housing stock currently heated by kerosene?

There are 680,000 homes currently heated by Kerosene. HVO will decarbonise these homes by 88%.

The cost of upgrading an existing oil boiler to HVO is approximately €500.

By upgrading existing boilers rather than having to replace the whole heating system and appliance with a Heatpump the cost of some of which can be used in further upgrading the building fabric to reduce the heat load even more.

This will allow the grid more time to increase capacity

It will free up building trades to focus on New Build rather than deep and costly retrofits

It will allow Councils and Housing Associations to do more work to more houses with their existing budgets

## HEATPUMPS

Heat Pumps are ideal for Newbuild and can be deployed for retrofit

The most critical aspect is that an accurate room by room heat loss calculation is completed and then a full heating system design is completed. Nothing can then deviate from this design..

This is why they are so suited to a newbuild.

## CHALLENGES

Retrofit can be more complicated and depending on the age and energy rating of the house it can be very costly and unaffordable to many.

The running costs of a Heat Pump is underpinned by the cost of electricity. Ireland currently has the second highest cost of electricity in the EU.

We have seen the successful deployment of Heat Pumps at scale in France. But this was supported by very generous capital grants, tax incentives and the fact they have the cheapest electricity in the EU

## Other Opportunities

### HYBRIDS

We are currently working on a research project with the Northern Ireland Housing Executive trialling an existing oil boiler upgraded to HVO combined with a Heat Pump working with an electricity supplier providing demand management software.

The initial budget to spend £10K on Fabric upgrade and £10K on Heating system.

### Annual Cost (3 Bed), 2006 Dwelling, Republic of Ireland September 2021 v. 4 Year Average

