

# CASE STUDY

## Woodlands Nursing Home

Tipperary - Ireland

## Incredible savings on annual heating bill for Care Home

Woodlands Nursing Home in Dundrum, Co. Tipperary.

### Woodlands Nursing Home Co. Tipperary

**Biomass Solution:** 150kW Woodco E-Compact Wood Pellet Boiler

**Installation:** March 2011

Woodlands Nursing Home is a purpose-built, 15,000 sq. ft. care facility with 43 beds in Dundrum, Co. Tipperary.

Established in 1976, the Woodlands care facility is run by Mr. Paddy Fitzgerald and specialises in caring for the elderly and those with acquired brain damage, dementia and learning disabilities.

The home has a very high demand for 24/7 space heating for the comfort of its residents, and hot water for cleaning, laundry, food preparation and bathing.

Having originally had gas heating, Paddy calculated the home's **gas bill in 2010 to be a startling €38,359**. This encouraged him to research a cheaper, more sustainable alternative.

The care home has substantial heating requirements to ensure the comfort of its residents



Fuel is automatically fed to the boiler from this 17-tonne storage silo. The Woodlands Care Home receives pellet deliveries 4 times per year.



Woodco's E-Compact Wood Pellet Boilers will also be eligible for the Government Support Scheme for Renewable Heat (SSRH), a financial incentive that will pay per kWh of heat generated from renewable sources – so you can make significant cost savings, and generate income by switching to biomass heating!

## A Biomass Solution

In November 2010, Paddy got in touch with Woodco and decided to install a **150kW E-Compact wood pellet boiler**.

Woodco's premium range of E-Compact commercial pellet boilers are available in outputs of 85-215kW and are **over 90% efficient**. Each boiler fitted with **i-Gen control** and is WiFi-enabled for easy remote access.

The boiler is **automatically fed via auger** from a 17-tonne silo and equipped with automatic burner-cleaning technology – so the system is completely hands off, except for simple bi-monthly removal of the ash box.

## Heating Cost Analysis

The nursing home's gas bill in 2010 was €38,359. Cooking accounted for about 8% of this, the remainder was for heating purposes.

In 2011, Paddy made a **mammoth saving of 60% on the home's heating bill, spending under €15,000 on wood pellets** – something that he was particularly pleased with, given the exceptionally cold weather during winter that year.

The table below shows a breakdown of cost savings when the Woodlands Care Home switched from LPG to pellet heating in 2010 – 2011.

	Fuel	Usage	Cost/unit	Cost/unit (inc. VAT)	Total Cost
2010	LPG	52401 (litres)	€0.64504	€0.73204	€38,359.63
2011	Wood Pellets	76.5 (tonnes)	€172	€195	€14,917.50
<b>Savings in heating costs</b>					<b>€23,442.13</b>

(Note: the calorific value (CV) of LPG is 7.08kW/litre, the CV of pellet is 4.85 kW/kg)  
 (Note: LPG includes a Carbon tax levy of €0.024/litre)

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For more information on Woodco's Biomass heating solutions or the upcoming Government SSRH, contact us at [info@woodco-energy.com](mailto:info@woodco-energy.com) or visit our website, [www.woodco-energy.com](http://www.woodco-energy.com) – our team would be happy to help.

One of the home's 43 bed spaces.



## About Woodco Energy

We are the Biomass Boiler People. We manufacture, supply and support a wide range of Biomass Boiler systems including both commercial and domestic boiler systems and WID compliant waste to heat boiler systems. With a manufacturing facility based in Co. Tipperary and offices in Ireland and the UK, Woodco Renewable Energy has supplied boiler systems across Ireland, the UK, Europe, the United States and Canada.

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