



Case Study

Improve your home's Building Energy Rating (BER) with natural gas

The BER of your home indicates how energy efficient it is. Buildings are rated on a scale of A-G, with "A" being the most energy efficient.

The majority of homes in Ireland fall within a "C" category. The better the BER, the lower your energy bills, the less carbon (CO₂) emissions and the greater the value of your home.

Switching Results:

No need to schedule deliveries

Reduced fuel usage (higher efficiency)

Lower carbon emissions



Why switch your home heating from oil to natural gas?

Natural gas is a cleaner, affordable and reliable alternative to oil, trusted by more than 680,000 homes across Ireland.

While many Irish homes have already made the switch from oil to natural gas, there are over 200,000 homes in Ireland within 15 metres of the national gas network that are not connected to natural gas. Switching from oil to natural gas will allow you to save on your energy bills, enjoy more convenient and flexible heating, and make your home more environmentally friendly at the same time.

Including one or two other minor changes can bring your home from a BER of C3 to B2. Installing a new, 90% efficient gas boiler and time and temperature controls are great ways to use less energy, support the environment and further save on running costs. Improving the BER of your home will also add value to your home should you come to sell.

Visit [gasnetworks.ie](https://www.gasnetworks.ie) or call **1800 50 40 60** to see if you can connect to the gas network.

Benefits of natural gas

Affordable - Save on your energy bills.

Cleaner - Produces 21% less CO₂ emissions than oil.*

Versatile - Cooks your food, heats your home and water, powers your gas appliances.

Convenient - No need for orders, deliveries, storage or bulky fuel tanks.

Renewable ready - Renewable gas began flowing on the network in 2019. As renewable gas replaces natural gas, homes connected to the network will be powered by an even cleaner energy.

Other energy efficiency tips

LED Lightbulbs - Using 100% LED, low energy lightbulbs is a quick, simple and affordable way to reduce your electricity use and energy bills.

Attic insulation - Adding extra insulation to your attic is one of the most cost-effective ways to reduce heat loss in your home and improve your property's BER.

Renewable electricity - Installing solar photovoltaic (PV) panels on your roof is a sustainable way to generate your own electricity.

*SEAI (2022)

Improve your home's Building Energy Rating (BER)

in 3 simple steps

Step 1 Change to a new natural gas boiler and modern controls

Step 2 Fit 300mm loft insulation and 100% LED lights

Step 3 Install four solar PV Panels (300Wp)

Emissions and energy savings

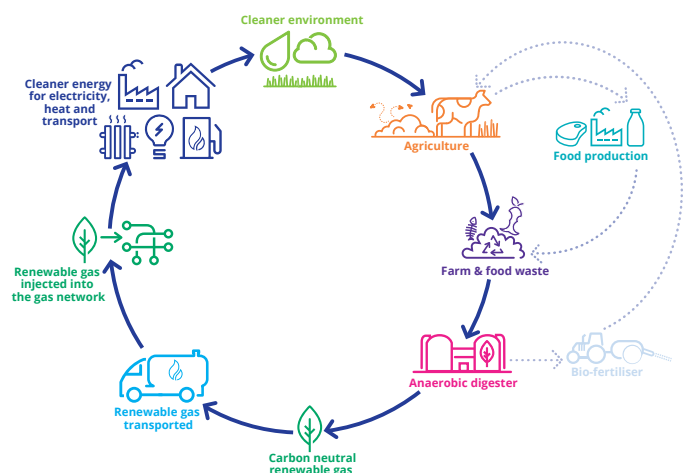
	Current BER status C3 BER	Switch from oil to gas C1 BER	Fit loft insulation and 100% LED lights B3 BER	Install four solar PV panels B2 BER
BER Rating	C3	C1	B3	B2
Ventilation	Natural	Natural	Natural	Natural
Water Tank (litres)	110	110	110	110
Heating system	79% – oil boiler	91.2% – gas boiler	91.2% – gas boiler	91.2% – gas boiler
CO₂ emissions (Overall house)	47.74 kgCO ₂ /m ² /yr	29.61 kgCO ₂ /m ² /yr	26.64 kgCO ₂ /m ² /yr	22.82 kgCO ₂ /m ² /yr
Energy use per m²	202.16 kWh/m ² /yr	158.47 kWh/m ² /yr	142.98 kWh/m ² /yr	123.56 kWh/m ² /yr

Building element calculations - Built: 1983-19293, Size: 105m², Aspect: (South East/North West), Roof (W/m²K): 0.40, Walls (W/m²K): 0.60, Floors (W/m²K): 0.57, Windows (W/m²K): 2.80, Thermal bridging (W/m²K): 0.15, Ventilation: natural with one open chimney. CO₂ intensity - Oil: 272g CO₂ /kWh, Gas: 203g CO₂ /kWh, Source: DEAP 4.2.2

A cleaner energy future with renewable gas

Ireland's gas network is a vital national asset that generates 30% of primary energy, 40% of our heating and almost 50% of our electricity. Today, more than 680,000 Irish homes rely on the gas network to provide safe, reliable, flexible and affordable energy to meet their heating, cooking and power needs. By gradually replacing natural gas with renewable, carbon neutral and ultimately zero carbon gases, such as biomethane and hydrogen, these same homes and more will be powered by increasingly cleaner energy.

Biomethane, which began flowing on the network in 2019, is the first step to a cleaner energy future. Produced from agricultural and food waste, this renewable gas is structurally identical to natural gas and can be used in exactly the same way through the existing infrastructure, boilers and appliances, meaning homeowners will transition to this sustainable energy source and play their part in progressing Ireland towards a cleaner energy future, without changing a thing.



To get connected visit www.gasnetworks.ie or call **1800 50 40 60**

This information is only a guideline to the different products available for use with natural gas in development construction. Users should ensure that products are suitable for the specific circumstances in which they seek to apply them. Contact the supplier or manufacturer directly for specific information on building requirements and materials needed for installation. Professional advice specific to the project should always be sought. The current Irish Gas Standards and Technical Guidance Documents (Building Regulations) override all contents. Users should ensure they always have the most up to date information.