

CNG - Driving a cleaner energy future

Compressed Natural Gas (CNG)

CNG is now available as a cleaner, alternative fuel for the Irish HGV transport industry. Gas Networks Ireland supports vehicle roll-out through its development of CNG refuelling infrastructure.

CNG can support Irish businesses reduce their carbon footprint

CNG is a proven alternative fuel

There are an estimated 28 million Natural Gas Vehicles (NGVs) in operation worldwide

Over two million vehicles in Europe

their CNG experience "...the lower running costs of the CNG trucks versus diesel was worth the investment..."

Gas Networks Ireland opened the first publicly-accessible CNG station in December 2018 at Dublin Port, delivering CNG to the Irish market and hauliers for the first time.

Irish hauliers' insight into

Most recently, new stations have opened in Tipperary, Limerick and Dublin. These are the second, third and fourth CNG stations to be rolled-out as part of the Causeway Project, which plans to deliver a network of publicly accessible CNG stations. Phase 2, Green Connect, will see the delivery of additional stations.

Both are co-funded by the European Climate, Infrastructure and Environment Executive Agency (CINEA).

CNG is the ideal fuel for decarbonising

Ireland's heavy goods vehicles (HGVs) and bus fleets. Switching to CNG can lead to a reduction in carbon emissions of up to 23% well to wheel².

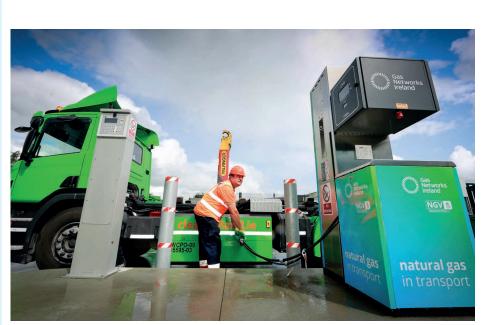
Renewable gas is now flowing onto the gas network at Gas Networks Ireland's purpose built gas injection facility in Cush, County Kildare.

As more renewable gas enters the network, its use by existing CNG customers will result in net-zero carbon transport in the same NGVs.



reduction in well to wheel carbon emissions²





CNG vehicle refuelling at Clean Ireland Recycling, Shannon, Co. Clare



Virginia International Logistics

Virginia International Logistics is a family owned business, with locations in Virginia (Co. Cavan), Kells (Co. Meath), Ballycoolin (Co. Dublin) and Tamworth (UK). With over 35 years' experience in temperature controlled, dry freight and containerised transport, they chose CNG due to its sustainability. As members of Bord Bia's Origin Green programme, they believe they have a responsibility to inspire others to create a sustainable tomorrow.

"It is totally green transport. People are looking to turn their supply chains green, and that is why we are changing our fleet, to save the carbon footprint."

Ray Cole - Co-owner / Transport Director, Virginia International Logistics



Clean Ireland Recycling

Clean Ireland Recycling has become one of the leading providers of waste management services in the Mid-West. Providing a full range of waste management services to domestic and commercial customers, Clean Ireland Recycling has built up a strong reputation for legally compliant and cost-effective waste management services.

"Transitioning our waste collection fleet to CNG will achieve a reduction of up to 22% in CO_2 emissions and a 99% reduction in particulate matter. Not only does this make sense environmentally, CNG can achieve fuel cost savings of up to 35%, so the decision to adopt the technology is the smart choice. Customers are becoming more focused on the sustainability of their supply chain and, if we are asking them to adopt environmentally-

friendly waste management initiatives, we need to practice what we preach. We are delighted to be the first to adopt this offering nationally, and it's a move that I believe should be replicated across the country. Clean Ireland Recycling already provides a 'zero – landfill' waste service to our customers. I believe we are getting close to a situation where environmental policy will play a key role in the public sector tender process. It is already a consideration for some private sector businesses. The decision we have made to invest in a CNG fleet is not just environmentally smart, it makes sense in pounds, shillings and pence."

Brian Lyons - Director, Clean Ireland Recycling



BWG Foods

BWG Foods operates one of the largest delivery fleets in the country with approximately 280 vehicles combining to cover over 25 million kilometres each year. They supply over 1,000 stores nationwide - which together serve more than one million people per day - along with a further 14,000 additional professional customers across the retail, food service and licensed sectors.

"As part of our overall commitment to sustainability, in 2019 BWG Foods became the first Fast Moving Consumer Goods (FMCG) group in the country to launch a fleet of CNG vehicles to replace the old articulated diesel trucks. Today, our fleet stands at 14 CNG trucks with more to follow. Each of BWG Foods' new trucks will complete approximately 120,000 kilometres each year, with each truck saving at least seven and a half tonnes of CO₂ emissions in the process."

Willie O'Byrne - Managing Director, BWG Foods



Food Surplus Management (FSM)

Using their own fleet of vehicles, FSM collect products from manufacturers, wholesalers and retailers across the length and breadth of Ireland. Their state of the art plants enable them to recover 95% of all food collected for the renewable gas industry. They recently received a delivery of two Scania CNG-fuelled vehicles that will reduce emissions by 15% versus diesel. All food collected by FSM is processed in anaerobic digestion plants, producing renewable gas which ultimately fuels their vehicles.

"We have been operating two CNG vehicles for almost two years now thanks to Gas Networks Ireland's CNG Vehicle Fund, as part of the Causeway Project. We know that we can reduce emissions and fuel costs and at the same time reduce our carbon footprint. Our experience to date with Scania CNG vehicles has been a very positive one."

Niall J Lord - Managing Director, Food Surplus Management Ltd



Dixon Transport

Dixon Transport is getting greener with the addition of four CNG Scania R410 trucks to their fleet. They boast the benefit of lowering carbon emissions by 27% over diesel-powered trucks. They are doing their very best to safeguard the environment in a sustainable way.

"In October 2018, Dixon Transport invested in four Scania R410 CNG tractor units. It was a leap of faith for the company moving away from the tried and tested Euro VI Diesel versions. After comparing the lower running costs of the CNG trucks versus the diesel equivalent, the additional capital outlay was worth the risk. Our company's motto for 2019 was "Green for 19", so, along with other incentives including solar energy, bringing trucks with a lower environmental impact into the fleet made sense.

We gave the trucks their own unique livery, changing stripes and writing to a bright green colour. To date, the investment in the trucks has proven successful and figures so far have been encouraging. After one year of running the four CNG units, we made a decision to order an additional six CNG units for delivery in March 2020. With the expansion of the CNG network at home and in the UK, there is the possibility of further additions for next year's fleet renewal."

Colum Aungier - Logistics Manager, Dixon Transport



Elsatrans

Elsatrans Ltd. offers a 24/7 road transport service to the retail, manufacturing and logistics industries throughout Ireland. Road transport contributes about one-fifth of the EU's total emissions of CO_2 , the main greenhouse gas. Elsatrans aims to reduce their carbon footprint with the introduction of new CNG trucks.

"Great to hear about the opening of two new CNG stations. This gives us the confidence to order more CNG vehicles later this year as the location of these stations is ideal. Ireland is among the last nations in Europe to develop a network of CNG filling stations. The alternative fuel – with a much lower emissions profile – is commonly used by European hauliers, with particularly extensive filling networks in Germany, Austria, Italy, Sweden and the Benelux nations."

Aaron McAleenan - Managing Director, Elsatrans

Benefits to business

Range was no longer an issue for CNG vehicles in Ireland with the opening of our second CNG station, located just off the M8 near Cashel in 2020.

Two additional stations at Ballysimon Road, County Limerick and Clonshaugh, County Dublin are nowalso operational. These will form part of our network rollout of fast-fill stations in Ireland

Increased use of the gas network infrastructure will reduce the overall cost of gas to all consumers.

For more information, please see the station location map on the back page.

Benefits for Ireland

Developing a CNG transport network and renewable gas paves the way for decarbonising Irish fleets with indigenous renewable transport fuel.

Transport accounts for **33% of Ireland's primary energy demand**.

Currently, the transport and agriculture sectors account for **55% of all greenhouse gas emissions** in Ireland, with this predicted to **rise to 75%** by 2030.

Commercial HGVs currently account for **only 3%** of all the vehicles in Ireland but **use 20% all emissions in the road transport sector**.

Under the EU Renewable Energy Directive (2009/28/EC) Ireland is committed to produce **10% renewable transport by 2020**.

CNG delivers the following emissions savings:

- Up to 23% reduction in well to wheel carbon emissions for a NGV fueled with CNG when compared to a diesel equivalent².
- Studies show the higher emission savings are achieved under specific conditions, loads and vehicles.
- Well to wheel includes emissions generated in production, distribution and fuel combustion.
- ¹ Cadent (2016) Future of Gas, Transport
- ² Cenex (2019) Dedicated to Gas: Assessing the Viability of Gas Vehicles



CNG station locations



Gas Networks Ireland can be contacted at:

24hr Emergency Service

1800 20 50 50

Businesslink

1800 411 511

cng@gasnetworks.ie



gasnetworks.ie

