

CNG NOW

The urgent need for CNG

Diesel costs continue to increase, whilst the only viable alternative (CNG) is delayed since 2016. FTAI members' costs for delays in CNG refuelling to date:

- Virginia James Cole; *"delays to date cost us €2,000 per month for 18 months, we have now opened our own CNG refuelling, but we are prevented from supplying others' CNG trucks.*
- BWG – Ken Leahy; *"ongoing delay in the opening of CNG stations in Dublin Port and on the N8, is preventing use of 4 dedicated CNG trucks at a cost of € 2,000 per month per truck i.e. € 8,000"*
- Elsatrans – Aaron McAleenan; *"uncertainty around CNG pricing and fuelling prevents us accepting delivery of new dedicated CNG trucks ordered since Jan'18"*
- Scania Joe Crann; *"more customers than ever are inquiring about alternatively fuelled options. Some hauliers have expressed concern that the speed of infrastructure isn't matching their demand and as more CNG trucks arrive into fleets weekly this is becoming an urgent issue for those hauliers who have made significant investments in cleaner trucks.*

This paper calls on government to immediately open built, and accelerate planned, compressed natural gas (CNG) stations for essential road users (ERUs); the investment and infrastructure is in place, the CNG trucks are delivered; the last barriers to roll-out are:

1. **Uncertainty;** Dublin Port CNG station has not opened 12 months after completion; *"within the next 4 weeks"* is no longer credible.
2. **Commercial pricing is unclear;** opening the first station(s) allows operators to see pricing and plan investments in CNG vehicles.
3. **Inability to resell CNG¹, even to sub-contractors,** severely limits potential for accelerated CO₂ savings (regulatory change needed).

A competitive forecourt CNG price, **already supported by government with a reduced excise rate**, frees capital for more CNG trucks; an uncompetitive forecourt price forces operators to invest in expensive on-site refuelling infrastructure.

A 5% reduction in Ireland's annual 1m tonne CO₂e target is worth €23m of the mooted €455m fines Ireland will pay from 1st Jan 2021.

The Causeway Project's €25m investment of EU money to build 14 CNG refuelling stations for trucks is at risk, if early adopters cannot operate the vehicles to show the cost savings to others.

FTAI call on government to open CNG stations now.

We appeal to the Ministers for Housing, Energy and Transport to:

1. Unblock the good work done to date by GNI² **and ask the regulator to make decisions immediately to release pricing and contracts.**
2. **Open the refuelling stations – now.**
3. **Make portable CNG units available** while stations are being built.
4. **Continue grants towards the extra cost (only) of CNG trucks**
5. If the above are not possible, **to pay operators to hold on to dedicated CNG vehicles** rather than return them to dealers.

The situation is urgent, as the CNG vehicles have arrived in dealers and are parked up, more CNG vehicles are on the way.

¹ WRT electricity, landlords are allowed resell or bundle electricity in rent, fleets are not allowed to charge for electricity or gas.

² GNI – Gas Networks Ireland a division of Ervia reporting to the Department of Housing, Planning and Local Government

Calculating the costs of missing Ireland's climate targets

From 1st January 2021 Ireland is one of the few EU Member States which will have to buy carbon credits or 'statistical transfers' to offset the amount in tonnes of CO₂ by which we miss our Renewable Energy and Energy Efficiency targets.

CCAC³ and EPA projections show we will miss our target by millions of tonnes; at DPER's planning price of € 7.29 per tonne, each 1,000,000 tonnes will cost Ireland € 7.29m. At the carbon price on 3rd Of October (the date of FTAI meeting) the costs would be € 21m, it is widely expected that this price will continue to increase to at least € 35m.

Paul Deane at UCC (<https://www.rte.ie/eile/brainstorm/2017/1124/922516-missing-climate-and-energy-targets-will-cost-ireland-millions/>) calculates the total cost of compliance for both targets range between €148m and €455m.

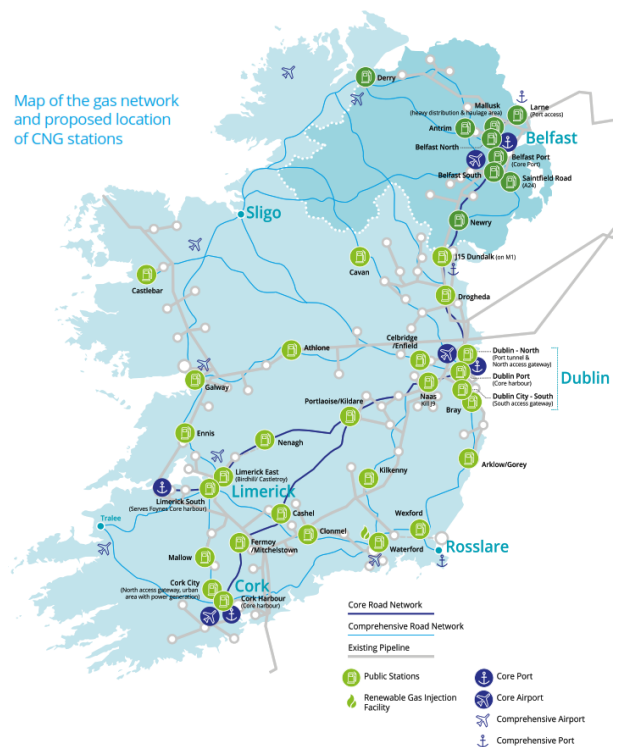
*Instead of achieving the required **reduction of 1 million tonnes per year** in carbon dioxide emissions, consistent with the National Policy Position, Ireland is currently increasing emissions at a rate of 2 million tonnes per year. An increase in greenhouse gas emissions is evident across all sectors, with the largest increases in energy industries, up 0.7 million tonnes of carbon dioxide equivalent, followed by transport and agriculture **both up 0.5 million tonnes of carbon dioxide equivalent.** - CCAC 17th July 2018*

The Causeway Project – GNI

Aim: The formation of a national Compressed Natural Gas (CNG) refuelling network, a renewable gas injection facility and the deployment of a fleet of CNG vehicles. **The Causeway Project is delivered through 6 activities:**

- Project Management
- **Pilot CNG Network – 14 Fast Fill Stations**
- CNG Vehicles and Supports – CNG Vehicle Fund
- Renewable Gas Injection Facility
- System Operation & Data Analysis Study
- Communication & Dissemination

Map of the gas network and proposed location of CNG stations



€25
million
project
budget

Co-financed
by EU

14
CNG
filling
stations

1
Renewable Gas
injection
Facility

1
final
network
study

20%
Renewable
Gas by
2030

Results disseminated in Europe

Timeline runs from February 2016 to December 2020. Co-financed by the European Union's Connecting Europe Facility (CEF). CEF is a transport and infrastructure program focused on sustainable, efficient, multi-modal transport across European key corridors.

³ The Climate Change Advisory Council is an independent advisory body tasked with assessing and advising on how Ireland is making the transition to a low carbon, climate resilient and environmentally sustainable economy by 2050, established under the Climate Action and Low Carbon Development Act 2015.

Transport CNG contribution to reducing Ireland's fines

There are c15,000 articulated vehicles in Ireland, the majority of which are goods vehicles carrying essential supplies e.g. raw materials and finished goods to and from Ireland's places of employment; goods transport accounts for 6% of Ireland's final energy demand and 25% of transport energy demand (car use is 43%).

These vehicles are essential road users under the Diesel Rebate Scheme.

To show the urgency of opening Ireland's planned CNG network we have posited a 10% switch to CNG over time and an example of an FTAI member fleet already committed to CNG – BWG Foods.

Road Freight	Ireland 2016	BWG Foods	Conversion Factors
Ktoe (kilo tonne oil equivalent)	713	1.6	
MWh	8,292,190	18,508	11.63 MWh x ktoe
kWh	8,292,190,000	18,507,580	
Litres [1]	815,438,096	1,820,000	10.169 kWh / Litre
tCO ₂ e [1]	2,188,309	4,884	0.2639kgCO ₂ e/kWh
10% Irish Freight in tCO ₂ e	218,831	488	tCO ₂ e
If 10% of 15,000 HDV switched to CNG			
22% emission saving [2]	48,143	107	22%
Proportion of target 1m tCO ₂ /year	5%	0.01%	
[1] https://www.seai.ie/resources/seai-statistics/conversion-factors/			
[2] https://www.gasnetworks.ie/business/natural-gas-in-transport/transport-and-natural-gas/			

- 1m t CO₂e per annum target is from the CCAC report issued 17th July 2018,
- 713 ktoe attributed to road freight is from SEAI and is also visible in CSO reports
- 22% CO₂e saving vs diesel, assumes new dedicated CNG vehicles (not conversions) source GNI

Irish greenhouse gas emissions are rising rather than falling. Ireland is completely off course in terms of achieving its 2020 and 2030 emissions reduction targets. Without urgent action that leads to tangible and substantial reductions in greenhouse gas emissions, Ireland is unlikely to deliver on national, EU and international obligations . . . – Climate Change Advisory Council 17th July 2018

FTAI Member story BWG

BWG owns and operates a number of leading retail brands with over 1,400 SPAR, EUROSPAR, MACE, Londis and XL stores **servicing local communities in partnership with independent retailers.**



BWG also owns and operates leading Irish wholesale brands, BWG Foodservice and Value Centre Cash & Carry.

BWG Group has an estimated 12% share of the overall grocery retailing market in Ireland and a **40% share of the convenience retailing market.**

The Group is a long-established wholesale and retail company in the Irish grocery trade and was formed by the amalgamation of four independent wholesale companies in the 1970's.

Each day BWG collect from 650 suppliers, employing 3PL or sub-contracted hauliers, whilst operating 10 artic's, 40 rigid's and 3 vans themselves.

These vehicles supply 14,000 community shops and stores around the entire country. These stores are owner managed and rely exclusively on BWG supply chain for their fresh foods, drinks and dry goods.



The problem

In the face of rising diesel costs, BWG have ordered 12 artic's to run on CNG, 2 of these have been delivered to Dublin, **but cannot be used as there are no refuelling stations open on the M7/8– the backbone of their supply chain**

The Dublin Port CNG station will reportedly be open in mid-October 2 years late, the GNI station in Cork can only refuel one truck every 3 hours i.e. approx.. 6 trucks per day.

Furthermore, BWG cannot even order a portable unit to refuel with CNG as there is no price.

Finally, after ordering the trucks over 9 months ago, BWG still do not have a firm price or contract for supply of CNG for their trucks from any supplier.

It is no exaggeration to say that BWG are now faced with having 12 new artic's for which there is no fuel.

This is a significant commercial risk to BWG, jobs and the 14,000 members of their buying group brands.

Cost of delay

- Fuel costs comprise approx. 30% of transport operating costs, with labour and the truck itself the balance.
- Each artic uses 50,000L per annum: Diesel is now up to € 1.08 per litre after VAT and rebates.
- CNG promises to reduce this cost by 22%, but there is no certainty in this as there is no price.
- 12 artic's running on diesel consume 600,000L per annum, emitting 1.6m tonnes of CO2 equivalent.
- Each day that passes without the first two vehicles on the road add's 235kg of CO2 to Irelands emissions.
- Each day that passes adds to the costs and risk to the investments BWG have made.
- Further delay shall cost money in lost journeys on the two CNG vehicles and put jobs at risk.

Only two of the 12 artic's have been grant aided by GNI the balance represents an additional investment of over €300,000 i.e. over and above the usual price of an artic.