DÁIL ÉIREANN

AN COMHCHOISTE UM IOMPAR AGUS CUMARSÁID

JOINT COMMITTEE ON TRANSPORT AND COMMUNICATIONS

Dé Céadaoin, 16 Nollaig 2015 Wednesday, 16 December 2015

The Joint Committee met at 9.30 a.m.

MEMBERS PRESENT:

Deputy Michael Colreavy,	Senator Terry Brennan,
Deputy Michael Fitzmaurice,	Senator Eamonn Coghlan,
Deputy Tom Fleming,	Senator Paschal Mooney.
Deputy Brendan Griffin,	
Deputy Noel Harrington,	
Deputy Seán Kenny,	
Deputy Helen McEntee,	
Deputy Michael Moynihan,	
Deputy Patrick O'Donovan,	

DEPUTY JOHN O'MAHONY IN THE CHAIR.

The joint committee met in private session until 10.10 a.m.

Additional Uses of Natural Gas: Gas Networks Ireland

Chairman: The purpose of this morning's meeting is to engage with representatives of Gas Networks Ireland on the growth plans of the company and the potential benefits of the use of natural gas as a transport fuel. On behalf of the joint committee, I welcome Mr. Liam O'Sullivan, managing director of Gas Networks Ireland, Mr. Padraic O'Connell, head of regulation and corporate services, Mr. Denis O'Sullivan, head of commercial operations, and Ms Edwina Nyhan, head of finance.

I draw the attention of witnesses to the fact that by virtue of section 17(2)(l) of the Defamation Act 2009, they are protected by absolute privilege in respect of their evidence to the joint committee. If they are directed by the committee to cease giving evidence on a particular matter and they continue to do so, they are entitled thereafter only to qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given. They are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable. I advise them that any submissions or opening statements they have made to the committee may be published on the committee's website after this meeting. Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official by name or in such a way as to make him or her identifiable.

I ask Mr. O'Sullivan to make his opening statement.

Mr. Liam O'Sullivan: I thank the Chairman and the members of the joint committee for inviting us to talk about Gas Networks Ireland's plan to maximise the use of the gas network and, in particular, to outline the real benefits to Ireland of developing natural gas in the transport sector. Before I outline our plans in more detail, I would like to give some brief background information about natural gas in Ireland. Natural gas is available in over 160 population centres in 19 counties throughout the country. Approximately 650,000 Irish homes and 23,000 multinational and Irish businesses depend on natural gas for their energy needs. Natural gas is an ideal partner for renewable energy because it provides the flexibility and effective backup needed to compensate for the intermittence of wind or solar power generation. Natural gas burns more cleanly than other hydrocarbons. It produces up to 30% less carbon dioxide than oil and approximately 45% less than coal, which makes it the ideal choice to help Ireland to make the transition to a low-carbon future. Gas Networks Ireland is cognisant of the environmental challenges associated with global warming and the imminent publication of the White Paper on energy. It has devised a strategy to help Ireland to achieve its objectives in this regard. The three core elements of this plan involve developing a market for natural gas as a transport fuel, switching existing oil users near the gas network to natural gas and introducing renewable gas into the network. The combination of these activities will bring a series of benefits to Ireland, including lower emissions, improved security of supply and lower energy costs for Irish consumers.

We could discuss a number of topics today but we believe the focus of this meeting should be on the use of compressed natural gas, or CNG, as a transport fuel. CNG is a cleaner and cheaper alternative to oil and is already a proven technology. CNG represents a great opportunity for Ireland and for fleet operators in the transport sector. It is of note that Ireland is already behind the curve in using CNG as a transport fuel. There is strong growth in CNG across Europe, with over 1.8 million CNG vehicles in the EU and approximately 18 million such vehicles worldwide. In a nutshell, we want to develop a fuelling infrastructure, consisting of approximately 70 filling stations around the country, to support the development of a viable CNG market in the transport sector. Why do we want to do this? Commercial vehicles using diesel currently account for 3% of the vehicles on Irish roads, or some 80,000 vehicles, but they account for a more significant 20% of total energy used and 30% of total transport emissions. If these vehicles were converted to CNG, the benefits would include cheaper fuel for fleet operators, lower air pollution and reduced noise pollution. Lower transportation costs could ultimately translate into lower transportation fares for the Irish public. In addition, the higher use of the gas network would ultimately benefit all gas users through lower tariffs and end user prices. We are here today to outline our plans but it is important to stress at the outset that we need the necessary regulatory, policy and funding support to ensure this happens.

Ireland's transport sector faces a series of challenges including emissions reduction, security of supply and cost competitiveness. We believe introducing CNG into the transport sector here would be a key step in addressing such challenges. CNG is ideal for community fleets such as buses, local authority vehicles and delivery trucks, as well as heavy goods vehicles. CNG vehicles emit 22% less carbon dioxide than similar vehicles running on diesel. CNG delivers fuel cost savings of up to 35% for fleet operators. For example, the conversion to CNG of 50% of the national fleet of buses and HGV trucks, or approximately 5,000 buses and 10,000 trucks, would result in the fuel cost savings for the Irish economy of €524 million per annum over diesel and emission savings of 165,000 tonnes of carbon dioxide per annum. If biogas or renewable gas were used, the annual carbon dioxide saving would be 2 million tonnes. On a practical level, how does CNG work? CNG vehicles can be purchased from many leading vehicle manufacturers and cost approximately 10% more than conventional diesel trucks. A CNG vehicle can be refuelled in five minutes at a service station, which is similar to a diesel or petrol vehicle. Importantly, we see CNG working in partnership with electric vehicles, rather than competing with them. Electric vehicles make sense for the private and family car market, while CNG is the ideal and indeed the only viable alternative for operators of truck and bus fleets. In our view, there is a perfect synergy between the two.

What have we done to date? Gas Networks Ireland has been working on the development of CNG in Ireland in recent years. Ireland's first fast-fill CNG station was completed at our office in Cork last year and we introduced five CNG Volkswagen Caddy vehicles to the company's fleet. Using our CNG Volkswagen Caddy, a round trip between Cork and Dublin costs €35, whereas the same trip using a diesel van would be €50. This is as a result of an approximate natural gas price of 79 cent per litre equivalent, compared to diesel at €1.19 per litre. The range of the Volkswagen Caddy using CNG is 650 km per fill, so there is no need to refuel for a round trip between Cork and Dublin. The 2014 budget applied a welcome favourable excise treatment for CNG, with the application of the minimum level of excise duty on natural gas as a transport fuel, as well as a commitment that this will remain in place for eight years. We have carried out a number of successful trials to date with Bus Éireann and some major fleet operators. We are working with a number of businesses to convert their fleets to CNG. What do we

need to do next? The EU requires Ireland to develop a national policy framework for the development of a CNG refuelling infrastructure by 2020. Gas Networks Ireland is ideally placed to develop this refuelling network and ensure Ireland complies with the EU directive. We want to roll out a national network of fast-fill stations, with 27 stations initially building up to 70 stations across the country over time. Gas Networks Ireland has targeted three station openings in 2016. Government funding and cross-departmental support is critical to the success of the roll-out of this infrastructure. Similar to electric vehicles, we need to incentivise fleet operators to convert from diesel vehicles to CNG for all major fleets of HGV trucks and public transport buses as CNG vehicles typically cost 10% more than an equivalent diesel vehicle. A VRT and motor tax treatment should also be implemented to recognise low emission vehicles, similar to electric vehicles.

In addition to developing CNG, Ireland needs to develop a renewable gas infrastructure that will facilitate the development of an indigenous energy source as part of its overall energy mix well into the future. Renewable gas can be readily harvested from food waste and agricultural residue. This gas can then be injected into the gas network or it can be used independently as a fuel for heating, transport or power generation. If this renewable gas were directed to transport through CNG, we would also benefit from the 20% lower carbon dioxide emissions versus diesel. Renewable gas is a key resource for the future, it is already a proven technology and many other countries in Europe are pursuing the same long-term strategy.

I hope the foregoing has provided some useful information to the committee. I thank the Chairman and members of the committee again for giving us the opportunity to explain Gas Networks Ireland's plans and the significant benefits we see in developing natural gas for the transport sector. With the right policy and investment supports these natural gas initiatives combined offer huge potential benefits for Ireland. In summary, we see the benefits as a significant reduction in CO2 emissions; energy savings for connected households and businesses; increased utilisation of the network thereby reducing tariffs for all gas customers; meeting the requirements of multinational and indigenous companies for renewable energy; and provision of a cost competitive advantage in commercial transport.

Notwithstanding the fact that we have been invited to discuss Gas Networks Ireland's plans for the future, it is important to recognise the contributions that others have made to what we have done to date, in particular our interactions with the Departments of Communications, Energy and Natural Resources, Transport, Tourism and Sport and Environment, Community and Local Government, which have been very positive. The Departments have been very supportive of what we have been trying to do and we want to acknowledge that. In particular, I reference the role of the Commission for Energy Regulation, CER, as it has been supportive of what we are doing. Ultimately, the CER approves all of what we do and it has made available innovation funding to allow us progress many of the initiatives we have spoken about. I want to recognise its contribution.

We are happy to take questions from members.

Chairman: I thank Mr. O'Sullivan for his comprehensive presentation. My initial reaction is that the train has already taken off, in that a great deal of progress has been made, it is a no-brainer and that it should be rolled out as quickly as possible, after the conference in Paris which identified the need to progress such measures quickly.

Mr. O'Sullivan referenced the decisions taken in the budget that were supportive and mentioned the need for funding of these stations. How much funding is required? What other

changes in legislation are required to implement the regulations? I presume the infrastructure will be similar to the charging stations for the electric cars and that it will need to be replicated around the country. What would it cost to set up one of these stations?

Mr. Liam O'Sullivan: In response to the Chairman's first question, the level of funding required, our focus to date has been on getting all the stakeholders to a point where we are all on the same page and that everybody is of a mind that this is, as the Chairman says, a no-brainer and that we need to proceed to implement it as quickly as possible. We have done a number of trials which in our view prove conclusively that this is of benefit to the fleet operators and to the overall economy.

In regard to the legislation, we have referred to the need to give the fleet operators an incentive to meet the additional cost to convert to gas.

Chairman: The vehicles are more expensive.

Mr. Liam O'Sullivan: Correct. Our hope and expectation is that there would only be a short-term need for it because as we grow the volume of vehicles into the country, we would expect that the price differential would disappear. We need to get over the initial bump. In this respect the excise duty that was introduced in the Finance Bill last year was very positive and strongly supportive. Operators who change over to gas should be given credits and recognition for the green nature of their transport.

With regard to the policy supports and incentives that are put in place that could influence where the funding will come from and how much people are prepared to pay for it, our position to date is that if we can get to the point where everybody is of a view we will sort out the funding quickly. Our overall view is that we will be able to put the funding in place. We will have to talk to the CER and get its approval. We will also have to talk to all the relevant stakeholder Departments and get their view. Our view is that this can be done once we are all of a mind to do it. In terms of the actual cost, I will ask my colleague, Mr. Denis O'Sullivan to talk about the cost of an individual station.

Mr. Denis O'Sullivan: Our plan is to roll out 70 station networks, which is a relatively small network of stations but relevant to the market on which we are focusing, the captive fleet market, trucks and busses. We believe there is a larger market than that but that in time it will be delivered through commercial interests and private operators. The overall investment requirement for 70 stations is approximately $\in 1.5$ million, that is approximately $\in 1.5$ million per station for the compression and dispensing equipment for refuelling the vehicles.

Chairman: Is Mr. O'Sullivan suggesting that the Government would fund these stations?

Mr. Denis O'Sullivan: The nature of how the stations network would be funded is yet to be determined depending on the policy measures that are put in place. With regard to one of the items my colleague referred to in terms of incentives, we believe that some measures introduced around the taxation of commercial vehicles, especially heavy goods vehicles, could incentive this to facilitate users of these stations contributing towards the cost of it, but there is a requirement for some public funding to support the initial roll-out of stations.

Chairman: I thank Mr. Denis Sullivan. I call Senator Mooney.

Senator Paschal Mooney: I thank the Chairman. Unfortunately, I must go to the Seanad so I may not be able to remain to hear the answers. I have a number of questions.

May I clarify that we are talking about what I used to hear referred to as LPG, liquid petroleum gas?

Mr. Denis O'Sullivan: No. Liquid petroleum gas is an oil derived product, what we are talking about is natural gas.

Senator Paschal Mooney: Fine. Back in the 1970s, during the oil crisis, I converted my car to LPG, at a time when it was a pioneering move. People used to tell me it was very dangerous because there was a big tank at the back of the car and one could switch from petrol to gas. I used it for many years. There were stations across the country but it fell out of favour. People had an idea it was dangerous, but I proved them wrong in the unfortunate sense because in the early 1980s I was involved in a car crash from which, luckily, I came out alive but the tank and the whole system was not affected at all. I found it very good but the problem was that it had an adverse effect on the car valves because it was a clean fuel. Is the same true of natural gas and will it have an adverse effect on the mechanics of the cars? At that time, this was the biggest single disadvantage, apart from the fact that one would not get enough energy when one would hit the accelerator. Is the same true with natural gas? If this condition is still relevant, it may not be that attractive to fleet operators or to buses.

I am curious about the technical side and the impact the fuel has on the engines. Perhaps technology has moved on considerably to the point where this is no longer an issue but at the time, because fossil fuels put a coating around the valves, that meant the valves lasted longer and were more efficient, whereas with a clean fuel, there was no additional coverage of the valves. The valves were clean and they ran out much more quickly and affected the engine overall. I am curious about the technical side. Is the witness satisfied that the natural gas that will go into vehicles will not have an adverse effect and that it will be an attractive option?

Second, in the context of costing and pricing, I assume that like LPG in its day, the price per unit or litre of natural gas will be considerably cheaper than petrol and diesel. That should be an added incentive, particularly for fleet operators. I fully support the concept, and I would like to see more happening with it. I would be very tempted, having already had the experience with LPG. I presume cars are increasingly manufactured to take account of natural gas. Perhaps the witness would elaborate on that too, and the availability.

Mr. Denis O'Sullivan: With regard to the technical aspects, we are fully confident that there are no issues with natural gas. There are substantial differences between the chemical make-up of natural gas and LPG, and the technology has moved on a great deal. Some of the advances in petrol engines have brought that about, with the removal of lead from petrol fuel. That was part of the valve issue that the Senator mentioned. The engines being built today are specifically built for CNG. There is also the option, similar to what happened previously with LPG, of retrofitting natural gas onto existing diesel and petrol engines. We have conducted trials on that very successfully and they work without issue.

Senator Paschal Mooney: What about the structure and the tanks in it?

Mr. Denis O'Sullivan: Yes, there is a compression tank. In developing this, we are far more focused on the dedicated CNG vehicles that come out of the factories. They are original equipment manufacturers, OEMs, that produce these. There are kits which can be procured to retrofit vehicles as well and they have proven very successful. The composition of the fuel is key. It is a different fuel so it does not create the same problems as LPG potentially created and certainly the technology has moved on substantially. That can be seen. There are approxi-

mately 19 million CNG vehicles operating in the world. It is a popular fuel source for transport in Asia, in particular, but also in some European countries, particularly in Italy and Germany. There is a map on the screen which shows some of the locations where CNG utilisation is high. The Senator will see the level of uptake in Italy where there are approximately 970 filling stations. I do not have the number of vehicles off the top of my head but it is a substantial number. We have no concern whatsoever with regard to technology.

Senator Paschal Mooney: Are the major manufacturers producing those cars?

Mr. Denis O'Sullivan: Absolutely. There is a reluctance on their part, especially on the motor car or small commercial van side, to bring those vehicles into Ireland until they see movement on the infrastructure. We have been heavily engaged with the manufacturers of trucks and buses. They have rolled out this equipment in several European countries and all over the world. They are happy to facilitate the Irish market once they see the correct policy supports and measures being put in place, to give them comfort that the infrastructure will be put in place to refuel these vehicles.

On the Senator's question about price, in the examples we gave we stated a price of 79 cent per litre of diesel equivalent. That is taken from standard tariffs of gas. We expect that large fleet operators, who have the ability to procure their own gas rather than buying from a retailer, would see significant savings on top of that. The prices we have given are the prices we believe are appropriate based on today's prices for retail at a forecourt.

Mr. Liam O'Sullivan: I wish to add two points. As part of the trials we carried out we bought some of those vehicles and included them in our fleet. To be honest, when one sits into them one would not know what fuel it is.

Senator Paschal Mooney: One did with LPG; one definitely knew the difference.

Mr. Liam O'Sullivan: Absolutely.

Mr. Denis O'Sullivan: There is no difference in performance and no difference in refuelling times. There is also no difference in the range of those vehicles, which is an important point. There is no switching from one fuel to another. In terms of what happened with LPG, there has been a significant shift in technology.

Senator Paschal Mooney: It is an inevitable question, but where will the gas come from?

Mr. Denis O'Sullivan: Our natural gas network. Up to now, the majority of our gas came through the interconnector with the UK via Scotland. Once the Corrib comes on line, there will be gas from that source as well, with potentially up to 60% of it initially.

Chairman: Mayo gas.

Senator Paschal Mooney: I am sure Deputy Colreavy will have a question about that, so I do not wish to steal his thunder. Both of us are probably thinking the same thing but I will leave it to Deputy Colreavy to follow up on that question. I thank the witnesses.

Chairman: I will call Deputy Colreavy in due course. Deputy O'Donovan is next.

Deputy Patrick O'Donovan: I welcome the representatives from Gas Networks Ireland. Will these filling stations be at locations along the existing gas infrastructure?

Mr. Denis O'Sullivan: Yes, predominantly, but not necessarily. We anticipate the initial stations being in locations where the gas network is available, but there is nothing to prevent us having stations located off the network and the gas being transported via CNG technology to those stations. It can be delivered in the same manner as how diesel or petrol is transported.

Deputy Patrick O'Donovan: However, the likelihood is that the initial tranche of these stations will be on the existing network.

Mr. Denis O'Sullivan: Yes

Deputy Patrick O'Donovan: That excludes huge parts of the country. In my constituency there is a gas pipeline from Limerick to Askeaton and to Aughinish Alumina. Another spur goes from Limerick through Charleville and Kilmallock to Cork. There is no gas infrastructure in all of County Kerry, most of Limerick and all of north Cork. That is just one region, not to mention the fact that the counties of Longford, Leitrim, Sligo, Donegal, Monaghan and Cavan have no access to the network, in addition to a huge part of the south east, such as Wexford and parts of Kilkenny, Carlow and Wicklow. What is the plan to roll out the network?

There are substantial industrial locations in my region, such as Newcastle West, Listowel, Tralee and Killarney, that are huge consumers of energy. I presume the tourism industry in the Kerry region alone is a massive consumer of energy, not to mention the agri-food industry in Listowel, Newcastle West and the like. Is there a plan to extend the network to those locations if there is to be an alternative transport system that will be based on compressed natural gas from a pipeline? These areas are already disadvantaged from the point of view of having access to affordable energy in terms of gas that will come on stream from the Corrib, the Porcupine or wherever in the future. If one talks to the IDA or anybody who wishes to invest in such locations, they are at a distinct disadvantage if there is no access to a main gas pipeline. Will they not be further disadvantaged by the absence of a complete infrastructure if this goes ahead?

Mr. Liam O'Sullivan: The Deputy is correct. That is certainly an issue. Our focus, to be honest, will definitely be that the initial ones will be located off the existing network. Equally, we will seek to locate them where they will get immediate usage, so I expect we will seek to put them into forecourts that are on the network. However, we will be seeking also to put them where there are sizeable fleets that will take up usage almost straight away and start generating a return on the investment.

Regarding the Deputy's point on the other locations, on an ongoing basis we will be examining setting up CNG based on tankering fuel to locations. That might address some of the issues. To be honest, however, that is probably further down the road in terms of-----

Deputy Patrick O'Donovan: That will not happen any time soon.

Mr. Liam O'Sullivan: If we could get to a point where we were rolling out 70 of these over the next number of years, we could certainly see that happening within the next five or six years.

Deputy Patrick O'Donovan: By the time the first 70 are rolled out, realistically it will not have gone off the network I am looking at here.

Mr. Liam O'Sullivan: We will have on the 70. It is our intention within that 70 to go to locations that will be off the main network. Most definitely that 70 includes those. We will be trying to get as broad a dispersion as we possibly can because there is also an EU directive, to which I referred in my opening statement, that requires us to have a filling station arrangement

throughout the country, and that is part of what we have outlined. We intend growing beyond the figure of 70, but the target of 70 will give a critical mass to get it up and running. Stations which would tanker off the network will be included in that figure. The Deputy makes a relevant point about continuing to look at extending the network. It is on our agenda and we are strongly focused on it.

Deputy Patrick O'Donovan: Will the witness clarify what plans are in place for that network expansion?

Mr. Liam O'Sullivan: We are in the process of extending gas to Nenagh and Wexford. These extensions are on foot of assessments, which are ongoing, of all the towns in the State which do not have gas already. We focus exactly on the types of loads and heavy users such as hotels and industries. We run the assessments again when any new industry which comes to a location to see if we can generate a case. Ultimately we are subject to the guidelines from the Commission for Energy Regulation that when a network is extended, it has to have a positive overall return to the economy and to customers. That will continue to be the case. There is no question that it does help to grow the load when a new industry comes into a location with existing industries. That is what happened in Wexford and Nenagh when new loads have come on and we will continue looking to do that in other areas.

Chairman: If an area makes an argument to Gas Networks Ireland about usage, and the chambers of commerce and others make commitments on the area, would Gas Networks Ireland look at extending then?

Mr. Liam O'Sullivan: Absolutely. We would love to work with groups like that. It is one of the ways in which we hope to continue working.

Deputy Patrick O'Donovan: The towns of Newcastle West, Abbeyfeale, Listowel, Killarney and Tralee make up a fairly considerable population base which is practically on top of the pipeline at the moment at Aughinish where it crosses the Shannon into County Clare. Will Mr. O'Sullivan indicate if any work has been done on extending that pipeline into Kerry, to those towns and to the west Limerick towns?

Mr. Denis O'Sullivan: Yes, there has. Listowel is going through the process for assessments. There are defined parameters for carrying out assessments in terms of gathering the information, the low profiles of these areas, their distance from the network and the overall costs of rolling out the infrastructure. One of the key principles in rolling out that type of infrastructure is not to burden existing gas consumers unduly. That is probably where the hindrance applies for areas that are a distance from the network. Some of the areas mentioned by the Deputy are under consideration while some have been considered already and are not viable. Those areas will come up again and will be reviewed, but Listowel is at an advanced stage of consideration at the moment.

Deputy Patrick O'Donovan: Does that mean that other towns *en route* to Listowel could be connected?

Mr. Denis O'Sullivan: At present that is not the case but there is potential for that down the line. The volume of gas in these areas is the critical factor and many of them do not have the critical volume of gas. With regard to compressed natural gas, CNG, as my colleague, Mr. Liam O'Sullivan, has said, Gas Networks Ireland will roll out off-grid stations as part of the plan. However, rolling out off-grid stations is a key factor in potentially getting to a critical

volume which would allow for network extensions. We would not see these remote stations as being necessarily a permanent solution. They are more a short-term solution until the network is extended into those areas. In creating the volume through CNG stations, it could expedite getting the network extended into those areas.

Deputy Michael Colreavy: I welcome the witnesses. Deputy Dessie Ellis is our spokesperson on transport but he is currently in the Dáil Chamber as there was a timetable clash and he sends his apologies. I represent the north-west Sligo and north Leitrim area, but whoever is to represent it next time around will cover Sligo, Leitrim, south Donegal and west Cavan. The chambers of commerce in those areas will smile ruefully when they hear me talking about natural gas since we are not on the pipeline. It is the subject of a lot of dissatisfaction in the region. We feel that not being on the pipeline puts us in the north west at a competitive disadvantage while the countryside around us is being fracked to see if natural gas can be had from us. We are not too happy about this situation. I believe Senator Mooney also referred to this.

The economic point is made that compressed natural gas is 79 cent a litre and diesel is €1.19, which is very logical and stands up. One of the problems appears to be the number of CNG vehicles to be converted or bought as CNG vehicles. The second problem appears to be that unless people know they have enough range to get from one outlet to another, it will not work. Will the witnesses clarify if the stations need to be stand-alone or can they cohabit with dirty energy forecourts?

Mr. Denis O'Sullivan: The most effective way of rolling out the stations is as part of existing infrastructure with an existing forecourt. They can sit side by side with diesel and petrol refuelling.

Deputy Michael Colreavy: That would seem to make sense. Do the figures quoted by the witnesses include sharing forecourts?

Mr. Denis O'Sullivan: Does the Deputy mean the infrastructure costs?

Deputy Michael Colreavy: Yes, the figure of €105 million.

Mr. Denis O'Sullivan: The €105 million is the equipment cost. Once we bring gas to an area and we want to connect CNG to that, we need to install a compressor unit to compress the gas and a dispenser which is similar to the petrol or diesel lance one uses to fill a vehicle. Those are the costs. The civil works and infrastructure to deal with that CNG can either be stand-alone or part of an existing forecourt. It does not impact on the capital investment requirement.

Deputy Michael Colreavy: Given that there do not seem to be any steps in train to get the gas pipeline up through Sligo, Leitrim, Cavan and Donegal, and that we will not allow fracking into the region, what are Gas Networks Ireland's plans for the north west?

Mr. Denis O'Sullivan: With regard to the north west, and particularly to Sligo, we have engaged quite recently with the chambers of commerce and business interests in the area. The economic assessment of bringing gas to Sligo and on up to Donegal does not stack up at the moment, but that may change in the future. We have engaged with a number of large multinational companies based in the region to look at bringing natural gas to them via CNG. We are investigating this with a third-party company to see if that is viable.

Deputy Michael Colreavy: Could the witness repeat that please?

Mr. Denis O'Sullivan: Using compressed natural gas or tankering gas to those locations.

Deputy Michael Colreavy: Okay.

Mr. Denis O'Sullivan: If we can build volumes and build demand for natural gas there, we would look again at the viability of bringing a pipeline. If it were viable, we would do that.

Mr. Liam O'Sullivan: There are two other issues raised by Deputy Colreavy. Regarding the range for vehicles, we would be conscious, as would be the Deputies, that the refuelling points would need to be within range. The advantage of natural gas over electric is that the range is pretty much identical to petrol or diesel. Our own CNG Caddy vans have a range of 650 km, which is easily manageable. There was a point made on fracking. I will ask my colleague Mr. Padraic O'Connell to comment on that.

Mr. Padraic O'Connell: We are aware of the ongoing consultations with the Environmental Protection Agency, EPA, on fracking. We are aware of the environmental, community and planning concerns. We are a network operator and are not involved in production. We are prohibited under Irish and EU law from being involved in the exploration, production or supply of gas but we are very conscious of it. We are trying to bring up our own expertise as we watch it.

Mr. Liam O'Sullivan: I guess we would see the same issues. All of the environmental issues referred to must be looked at in terms of anything we do. As Mr. O'Connell said, we are precluded from being involved in that.

Deputy Michael Colreavy: Gas Networks Ireland will not be making that decision?

Mr. Liam O'Sullivan: No.

Deputy Michael Colreavy: I understand that.

Deputy Noel Harrington: I welcome the representatives of Gas Networks Ireland and thank them for their presentation. The presentation painted an optimistic environment, particularly for the delivery of CNG in the transport sector. They touched on the climate change conference in Paris. The agreement that was reached essentially means we are talking about zero emissions between 2030 and 2050. The implications for this country are enormous, particularly for agriculture in one respect. However, transport is the next biggest sector where the challenges will be huge. With that in mind and given the economic picture the witnesses have painted, they were complimentary to Departments and the Commission for Energy Regulation. I often wonder what is not being said. In the same breath, they mentioned that they were behind the curve in terms of rolling out CNG in the fleets and buses. I do not know whether it is in public or private companies but we are behind the curve. I would be interested to know what road blocks or issues Gas Networks Ireland is facing in its area which may be holding it back from developing a greater use for CNG. The witnesses touched on regulatory issues but there might be issues such as the industry not embracing it. Perhaps they could flesh that out better.

Mr. Liam O'Sullivan: First, I do not think there is anything that is not being said. We have come with a positive picture because that is how we see it - it is a positive picture. As regards why we are not further along the road, because we are a bit behind the curve, a fair bit of that is down to getting a general consensus that this is the right thing to do. Fuel prices have been falling, so there has not been that much focus on it. There was perhaps a view that electric vehicles would solve all our problems but they will not. They have a part to play and we are not seeking to compromise that in any way. We see absolute synergies between the two but they

will not solve all the problems.

We have taken some time to get a consensus in saying that this is the right thing to do. We have run the trials. As regards some of the previous questions, it is not just us saying this is right. We have run trials with Bus Éireann and a range of private fleet operators. They all tell us that this works for them, and it is right in terms of technical performance, but they will not invest until they see a sufficient network that will allow them to go forward. That was the point raised in earlier questions, which was that people need to be sure when their vehicle is going from Cork to Dublin and gets diverted to Galway, that they can refuel. That is the practical stuff. Once we get to a critical mass, it will happen very quickly.

The incentives concerning the fuel differential are right, so small steps need to be taken. I see it as a positive picture. To be fair, all the Departments we have engaged with have been supportive of it. Based on the outcome of the trials we have run, we are largely there in terms of a consensus that this is the right thing to do. The next stage is to move on.

What happened at the climate change conference in Paris over the weekend is all positive. We are hitting it at the right time in many respects but we are hitting it at the wrong time in other respects because the oil price happens to be low at present. However, one needs to take a balanced view of that, asking what the price of oil will be relative to gas over a period rather than at a point in time. Looking back over the past ten years, it was a no-brainer across all the growth areas we have. There is a smaller gap now in terms of changing from oil to diesel or from oil to natural gas in people's homes but that will change as well.

I genuinely see it as a positive picture and I do not think there is anything hidden there.

Deputy Noel Harrington: What does Mr. O'Sullivan see as the next step? Is this a situation where if one builds it, they will come?

Mr. Liam O'Sullivan: Correct.

Deputy Noel Harrington: Is Mr. O'Sullivan saying that he needs to get the industry behind him before he builds the network?

Mr. Liam O'Sullivan: Our approach to that is that we are putting in three of these next year, thanks to the innovation funding that the CER has put in place. During 2016, we hope to arrive at a position where we have all the funding arrangements sorted out and an agreement between all the different stakeholders, including Departments, the regulator and ourselves. From 2017 onwards, we will be rolling out the full stream and a full picture of what we see here. That is the kind of timeline and we see it happening fairly quickly. We took a bit of time initially to get people up to speed and to achieve a consensus. Once that is there, and I believe it is, then it becomes much easier to move forward

Deputy Noel Harrington: I have a final question, Chairman. For the record, can Mr. O'Sullivan give us a picture concerning the stability of supply, including the long-term supply, of CNG?

Mr. Liam O'Sullivan: From our perspective, we are already connected to the UK which is one of the most liquid markets anywhere in the world. Its availability and security of supply is very strong as it is. As Mr. O'Sullivan mentioned earlier, we will have the Corrib gasfield coming on stream, which has the potential to give us additional resources in terms of an indigenous source of natural gas. Our position has never been stronger in that regard.

There is a range of additional opportunities out there, including liquified natural gas, LNG, with storage that has to be built up. We will be looking at those opportunities also. From a security of supply viewpoint, we feel we are in a strong position, probably in a stronger position than most other fuels.

Chairman: Last but by no means least, Deputy Fitzmaurice.

Deputy Michael Fitzmaurice: I thank Mr. O'Sullivan for his presentation. He said he was rolling out 70 new stations. From what he has said, I believe it is a four, five or six year project.

Mr. Liam O'Sullivan: That is right.

Deputy Michael Fitzmaurice: Therefore, we are looking at 12 per year. Would that be correct?

Mr. Denis O'Sullivan: The timing of rolling them out can be----

Deputy Michael Fitzmaurice: Does Mr. O'Sullivan have a plan or schedule?

Mr. Denis O'Sullivan: The plan would be to have 70 stations fully operational.

Deputy Michael Fitzmaurice: Yes, but does Mr. O'Sullivan have them lined out for 2016, 2017 and 2018? Where will they be?

Mr. Denis O'Sullivan: Yes, in regard to the number of stations. It is to 2025 in terms of the full 70 station network but that is what we see ourselves putting in place. On top of that, once we have the initial stations rolled out, we some commercial interests will also seek to install their own CNG refuelling infrastructure. I certainly would not say, therefore, that it will be limited to 70 stations.

Mr. Liam O'Sullivan: We have our own plan in terms of what we would like to see. We would like to see it front-loaded, to put as many of them into the first couple of years as possible because then one gets a critical mass. Other stakeholders, however, including the Department and the CER, will also have an input. They might tell us we need to phase this, see as we go along and see if we get the initial 20, for example.

Deputy Michael Fitzmaurice: May I just establish something? Mr. O'Sullivan mentioned 2025.

Mr. Liam O'Sullivan: Yes.

Deputy Michael Fitzmaurice: Are the 70 stations to be done by 2025? Is that what Mr. O'Sullivan is saying?

Mr. Denis O'Sullivan: Our current plan is to have 70 stations completed by 2025.

Deputy Michael Fitzmaurice: Hold on now and let us be clear on this. That is not a five-year or six-year plan. Unless I am very wrong, we are in 2015 at the moment.

Mr. Denis O'Sullivan: Yes, it is a ten-year plan.

Deputy Michael Fitzmaurice: Yes, so it is not five years or six years, as was said earlier.

Mr. Liam O'Sullivan: In terms of the five or six years, we are getting into the same point that I was making. We would like to front-end it but all of the stakeholders have to have an

involvement in that. In terms of the actual time period we are looking at-----

Chairman: It could be in six years, if this took on momentum.

Mr. Liam O'Sullivan: Correct. We would be looking to keep it within five to six years if we possibly can. The sooner we can get it in place and get volumes of gas drawn off, the sooner all customers will start benefiting from that. It comes back to the earlier issue around funding. They are issues to be resolved over the next 12 months but that is our input into it. We would like to see it happening sooner rather than later.

Deputy Michael Fitzmaurice: Am I correct in saying most of the emphasis should be put on the bus and lorry fleet market? In some cities a certain number of cars can be handled, but with the best will in the world, if there were 70 cars in total, there would be at most two or three in a county and we would not have that number for another five to seven years. Is that correct?

Mr. Liam O'Sullivan: That is probably true.

Deputy Michael Fitzmaurice: For example, if I have my Volkswagen Caddy in Galway which is 100 miles across from one end to the other, I am not going to drive 50 miles for a refill when I can buy diesel in the shop one mile down the road. Is it correct to say Gas Networks Ireland is going to target the fleets of lorries and buses that are travelling the country?

Mr. Denis O'Sullivan: Correct.

Mr. Liam O'Sullivan: It is correct because it would get the volumes flowing. Having said that, we still have to cater for a fleet operator that, for example, typically runs from Cork to Dublin but is occasionally diverted to Galway or Limerick. In that case, there would need to be at least one filling station in the place to which it would be diverted. We would put a structure in place to provide for such a situation in order that an operator would knows that if its truck had to go somewhere else, it would be able to refill.

Deputy Michael Fitzmaurice: What is the conversion cost? For example, if I have a 2012 truck and want to change it to a 560 Arctic Scania, what will the cost be?

Mr. Liam O'Sullivan: I will ask Mr. Denis O'Sullivan to answer the second part of that question.

Chairman: We are now getting into the nitty-gritty.

Mr. Liam O'Sullivan: Our initial focus will be on informing fleet operators that if they change a truck to one purpose built for CNG, they will only incur the 10% cost, which I hope will decrease as we there is more volume in the business.

Deputy Michael Fitzmaurice: Going by what I heard earlier, I understand it will be possible to change over.

Mr. Liam O'Sullivan: I will pass over to Mr. Denis O'Sullivan.

Mr. Denis O'Sullivan: It varies, depending on the truck involved. We had a number of trucks converted for some of the earlier trials and it cost between €15,000 and €17,000 to convert them. It makes sense to do so in the case of trucks and buses which are clocking a high mileage or number of kilometres, but the real benefits, from the point of view of fuel cost savings and emissions, come from dedicated CNG vehicles. The differential in cost between a new

truck run on diesel and the same truck run on CNG is roughly 10% of the purchase price.

Deputy Michael Fitzmaurice: People who have a second-hand truck will not throw out €17,000 for conversion if they get the same mileage from diesel and gas, unless there is an incentive. Does Mr. O'Sullivan agree that a business will not do this unless there is some incentive?

Mr. Denis O'Sullivan: There would certainly have to be some incentive in converting older truck fleets, but our target market is the replacement market. We want to ensure when trucks are replaced at the end of their life cycle, a purpose built CNG vehicle will be the chosen option.

Deputy Michael Fitzmaurice: It was encouraging to hear Gas Networks Ireland was looking at an option for businesses in parts of the west and other parts of the country without a gas pipeline. I presume it is looking at the possibility of supplying them by truck.

Mr. Liam O'Sullivan: Yes.

Deputy Michael Fitzmaurice: Is it envisaging giving it to them at the same price as that paid by a business sitting on top of the pipe?

Mr. Denis O'Sullivan: We do not actually supply the gas, we only provide the infrastructure. Our role is to facilitate the offtake of CNG to trucks. As we are prohibited from supplying gas, we cannot set the price. That is a matter for the shippers and suppliers.

Deputy Michael Fitzmaurice: How was the price of 79 cent set?

Mr. Denis O'Sullivan: We took the current retail price for gas in the market and added a retailer margin. They are not our prices but those from the various suppliers. Factored in is a margin for the forecourt owner and the retailer of CNG.

Deputy Michael Fitzmaurice: Can something be done to facilitate those businesses which are not fortunate enough to have a gas pipeline beside them? Could something be done to ensure the price is approximately the same, whether one is next to the pipe or 20 or 50 miles away from it? Could a better deal be done to make sure this is facilitated? From what I understand, there is now a middleman to haul the gas supplies.

Mr. Denis O'Sullivan: The Deputy is correct about haulage. There is a connections policy in place which is approved by the CER and within which we have to operate. If a company is remote from the network or a distance from it, we have to carry out an assessment of the costs associated with connecting it. If there is a shortfall based on the potential offtake, how much gas is required and the cost of installing the infrastructure for it, it is required to make it up. The shortfall is not currently taken on board because it will simply result in increased gas prices for every other consumer. The principle of expanding the network is not unduly burdening existing gas users.

Mr. Liam O'Sullivan: Let me add that we are not the sole determiners. We do not act alone; there is a range of other stakeholders involved. It is our intention that it be to be the same price across the country because it would not be appropriate for it to be a different way. That is our intention.

Deputy Michael Fitzmaurice: That is not the case.

Mr. Liam O'Sullivan: To what is the Deputy referring?

Deputy Michael Fitzmaurice: I am aware of factories in towns where there are gas pipelines and in other towns where it has to be delivered by lorries. I am aware of one company with two factories in Ireland, one of which has it piped to it, while the other has to have it delivered. The difference in cost in running those two factories is €140,000. That is a disadvantage when one is trying to create jobs in areas that do not have these facilities.

Mr. Denis O'Sullivan: I do not think we are comparing like with like because if they are getting gas in by tanker at the moment, it is not natural gas.

Deputy Michael Fitzmaurice: I understand that.

Mr. Liam O'Sullivan: It is a different view, but it makes sense. We intend to have a situation where if one is running a CNG vehicle, one will pay the same price. That means, for example, that if one runs trucks from Cork to Dublin or from Cork to Limerick and they have to divert, gas will be available to buy somewhere else at a comfortable price. Our intention is to achieve that outcome.

Chairman: Following on from that, the delegates have mentioned that the first opportunities will be with fleets of trucks and buses. What engagement have delegates had with Bus Éireann, Dublin Bus, fleet owners around the country and the Irish Road Haulage Association? Do they want this measure to be introduced?

Mr. Denis O'Sullivan: We have been engaged with all of the representative bodies of companies running public vehicles and private fleets. There is a very high level of interest in this issue, but the principal concern for everybody is the roll-out of the infrastructure. They understand the benefits to be gained in transitioning in fuel costs and emissions, but they have two concerns. Their primary concern is the roll-out of infrastructure and its timing, but they are also concerned about the cost differential between a diesel truck and a CNG truck, which is an upfront cost. Smaller companies, in particular, are concerned about additional upfront costs involved in getting a vehicle on the road. The organisations and entities with which we are engaged are very much commercial entities. If it makes economic sense, they very much want to be a part of it and pursue it. That is exactly what we are seeing. Perhaps that is slightly different from the approach of consumers of electric vehicles, where there are other considerations.

Chairman: The Minister said yesterday that 100 new buses would be rolled out in 2016. Now that we have moved into a growth period, would it be appropriate and better from the delegates' point of view if the network was already in place? It would enable the choice to be made on this new fleet of buses that could run on compressed natural gas, CNG.

Mr. Liam O'Sullivan: It is one part of policy that we see as being very positive, as a policy decision should be made around saying that a new fleet of buses and such vehicles should go on CNG. We ran a trial-----

Chairman: It would not do so currently.

Mr. Liam O'Sullivan: It could happen very quickly as a dedicated unit could be put into a premises in a city, for example. The buses could then be fuelled and go out. We ran a very successful trial, for example, with Bus Éireann on bus routes in Cork. That was very positive and the company was convinced of the merits. We could put in a dedicated unit to such premises for vehicles to be converted.

Chairman: There has been adoption, even over a shorter term.

Mr. Liam O'Sullivan: Absolutely. There have been successful trials and individual fleet operators have told us they want this, with a filling station in their premises.

Chairman: I presume that has been put to the Department.

Mr. Liam O'Sullivan: Absolutely.

Deputy Michael Fitzmaurice: Have the witnesses spoken to people from the likes of Bus Éireann about the 100 new buses that are being bought? Have they been asked if 20 or 50 buses could be tried with CNG? If a haulier buys 16 trucks that use diesel instead of gas, what are the percentages? If the haulier has an extra truck going up and down the road because he stayed with diesel as opposed to using gas, unless there is an incentive that could leave a level playing field before the start, it is difficult to expect a private operator to jump into it. Does the witness agree with that?

Mr. Liam O'Sullivan: Absolutely. I agree completely and, to be fair, it is one comment we made. We are seeking incentives for operators to change. If we get a volume of buses, I hope the differential will reduce in time and quickly. As we currently stand, there is a very significant positive upside for the transport provider, which is the difference between the cost of natural gas and its excise treatment versus diesel. It is 79 cent per litre versus €1.19 per litre. There is a positive incentive anyway but the Deputy is right. There should be additional incentives. Similar to electric vehicles, there is an extra cost to buying the vehicle and if there is an incentive for electric vehicles, there should be an incentive for going to CNG.

Deputy Michael Fitzmaurice: If we want to get to a perfect world, it will cost us. It is the same with every other country.

Mr. Liam O'Sullivan: Absolutely. There is an initial cost, but based on information we have from trials and judged over 20 or 25 years, this will be very positive for the country in terms of economic benefits and reduced emissions. Somebody spoke earlier about particulates but they are effectively eliminated in the change from diesel to CNG. There is a contribution with regard to CO2, NOx, SOx, particles, etc. There are major benefits and, ultimately, there will be an economic benefit to the country because we will avoid fines and so on that would otherwise come our way.

Chairman: On behalf of the committee, I thank Mr. Liam O'Sullivan, Mr. Padraic O'Connell, Mr. Denis O'Sullivan and Ms Edwina Nyhan for outlining the company's growth plans and the potential for using natural gas as a transport fuel. The proposals seem to provide a realistic alternative for a cleaner and cheaper fuel. If we keep getting positive proposals like that, we will all be in a better place.

The number of members present was fewer than usual as there are a number of competing interests in the Dáil, including transport questions, and the energy policy was being outlined in the Mansion House. The presentation this morning was very helpful and informative. We are very much informed about where we must go and the advocacy of policies we heard this morning.

The joint committee adjourned at 11.15 a.m. until 9.30 a.m. on Wednesday, 20 January 2016.