

## PNG Energy Transition Update – April 2022

I'm writing today to share our fourth Phoenix Natural Gas Energy Transition Update.

This ongoing series of Energy Transition Updates seeks to inform interested stakeholders we've engaged with over the past months and years about recent Energy Transition developments and the emerging research which is informing our approach to decarbonising the NI Gas Network.

Our last update emphasised the need to shift focus from developing policy to implementation. However, what we've seen in the past few months – mainly due to global events – is a significant acceleration of energy transition strategy.

Locally, the successful passage of an ambitious [NI Climate Change Bill](#) through the NI Assembly prior to the election has provided much needed legal certainty regarding regional decarbonisation targets.

The UK Government launched its [British Energy Security Strategy](#) which accelerated several existing renewable energy targets - 50GW of offshore wind by 2030, 24GW of new nuclear by 2050, and a doubling of the UK Hydrogen production target to 10GW by 2030.

The EU launched its [REPowerEU plan](#) to address the continent's dependence on Russian gas. Under the proposed plans biomethane production targets will rise from 17 billion m<sup>3</sup> to 35 billion m<sup>3</sup> per annum by 2030 while the EU hydrogen production/import target will increase from 5.6 million tonnes to 20 million tonnes by 2030.

It's been noticeable that industry is also accelerating its decarbonisation workstreams. Investment funds are joining governments and utilities in [ambitious plans](#) to invest in green hydrogen, Nel has [launched](#) the world's first fully automated electrolyser production facility, the HyDeal España [joint venture](#) aims to install 7.4GW of electrolysers by 2030 and E.ON and Fortescue have [struck a deal](#) which could see 5 million tonnes per year of hydrogen supplied to Germany from Australia.

The greater levels of ambition expressed by governments, utilities and industry must be welcomed. However, harkening back to the theme of our last update, increased ambition demands a correspondingly increased focus on implementation. As the Climate Change Committee points out in its [analysis](#) of the NI Climate Change Bill, the ambitious targets *"will quickly lose credibility if the policy focus does not shift quickly to implementation and success is seen in delivery of outcomes."*

The pace of implementation demanded by the energy transition will be a significant challenge for NI industry and policymakers. In particular, we must be careful to take into account the long lead-in times required to complete the critical infrastructure projects required to realise Northern Ireland's transition to net-zero. Barriers to progression must be removed as quickly as possible.

The Islandmagee gas caverns are a good example of the type of critical infrastructure project required to deliver decarbonisation solutions locally. This vitally important large-scale gas storage project will allow intermittent rates of renewable gas production to efficiently match variable seasonal demand and unlock significant decarbonisation opportunities for Power, Industry, Transport and Heat.

However, the project is also an example of the often complex and time consuming pathway such infrastructure project often travels. Whilst it goes without saying that rigorous planning and robust decisions making must continue to serve wider societal needs, there needs to be adequate efficiency to such processes that recognises the environmental, social and economic drivers for prompt delivery and in turn allow NI to achieve its strategic decarbonisation goals.

Setting ambitious targets is the easy part of the energy transition journey. Addressing the difficult part – implementation – will require all stakeholders to work together over the coming years to address the systemic barriers – particularly planning - to implementation and make sure that Northern Ireland meets, and even exceeds, its energy transition ambitions.

I hope you find the items below both helpful and informative.

Best wishes,

Iain Hoy

Energy Transition Manager  
Phoenix Natural Gas

### NI Climate Change Bill

The Northern Ireland [Climate Change Bill](#) passed its final legislative stage on Wednesday 9th March. Heavily amended in the chamber, it now awaits Royal Assent. The key takeaways from the Bill are:

- **Emissions targets** – Clause 1 imposes a duty on all Northern Ireland departments to ensure that net Northern Ireland emissions for the year 2050 are at least 100% lower than the baseline. Methane is the only exception - this duty does not require methane for the year 2050 to be more than 46% lower than the baseline.
- **Sectoral plans** – Clause 13 requires Northern Ireland departments to develop and publish sectoral plans setting out how different sectors will contribute to achieving the targets in the Bill (incl energy, infrastructure, industrial processes, transport etc.)
- **Renewable Electricity Consumption** – Clause 15 requires the Department for the Economy to ensure that at least 80% of electricity consumption is from renewable sources by 2030 (Energy Strategy target was 70%).
- **Carbon Budgets/Climate Action Plans** – Clause 23 requires DAERA to make regulations that set the maximum total amount of carbon emissions for each 5 year budgetary period and develop Climate Action Plans (Clause 29) setting out the policies and proposals for meeting the budget for that period.
- **Northern Ireland Climate Commissioner** – Clause 50 requires the Executive Office to establish an independent Northern Ireland Climate Commissioner to oversee and report on the operation of the Climate Change Act.
- **Just Transition** – Clause 37 requires DAERA to establish a Just Transition Commission to oversee the implementation of the just transition elements of the Act, and provide advice to Northern Ireland departments on how to ensure their proposals, strategies, plans and policies comply with just transition principles.

## **British Energy Security Strategy**

The UK Government launched its [British Energy Security Strategy](#) on Thursday 7<sup>th</sup> April. This new strategy seeks to address Britain's vulnerability to international oil and gas prices by reducing dependence on imported oil and gas.

The foundation of this strategy is a significant increase in renewable electricity generation. This includes a new accelerated target of up to 50GW of offshore wind by 2030 – with 5GW of that target expected to be met by floating wind. The government also expects solar – either large-scale or roof-top domestic – to increase from 14GW today to circa 70GW by 2035. There is also a new focus on nuclear power generation with the government aiming to install 24GW of new nuclear by 2050.

This significant increase in renewable electricity generation opens up significant new opportunities for hydrogen production and this is recognised by a doubling the Hydrogen Strategy target of 5GW of hydrogen production by 2030 to 10GW. Crucially, at least half of the 10GW target will be Green Hydrogen in order to ensure that electricity system costs are kept to a minimum by using surplus renewable power to make hydrogen.

As this increased level of Hydrogen production needs a guaranteed source of demand to be viable, it makes it significantly more likely that following the [success of the Winlaton hydrogen blending trial](#) the Government will approve blending hydrogen into the gas network – the final decision expected next year.

To support this significantly increased Hydrogen target, the Government launched the [hydrogen investor roadmap](#) to detail the various policy workstreams underway and showcase the investment opportunities across the hydrogen value chain – from production, through transmission and storage to the range of potential end uses, including power, transport and heating. The Government has also published responses to the recent consultations on the [Net Zero Hydrogen Fund](#) and the [Low Carbon Hydrogen Business Model](#) and set out the next steps for both schemes.

## **Agenda NI – Experience in transition**

Phoenix Energy Holdings' Group Chairman, Peter Dixon, recently talked to agendaNi about building Northern Ireland's gas industry from scratch over the last 25 years and how the company is well placed to meet the challenges associated with decarbonising the energy sector over the next 25 years.

In the interview, Peter discusses the importance of attracting the necessary private external investment to realise the goal of an increasingly self-sufficient, sustainable net zero energy system in Northern Ireland. He goes on to discuss how consumers are likely to be impacted by the energy transition and the importance of establishing Northern Ireland based renewable gas demonstration and trial projects.

The full article can be accessed [here](#) (page 28)

## Launch of landmark Biomethane study

Over the past year, Queen's University Belfast researchers, supported by the Centre for Advanced Sustainable Energy Research and industry contributors (incl Phoenix Natural Gas, AFBI, Enerchem & Agri-AD), have undertaken a study of the environmental benefits which can be achieved by taking advantage of Northern Ireland's livestock manure and underutilised grassland to produce biomethane.

During the course of this study, a spatial mapping exercise of biomethane feedstock has revealed that Northern Ireland has significantly greater volumes of the renewable gas available than previously thought – over 6000GWh worth, or over 80% of NI's Gas Distribution Network demand. The research also found that feeding Northern Ireland's livestock waste into anaerobic digestors could lead to a significant Greenhouse Gas emissions reduction of c.845,000 tonnes of CO<sub>2</sub> equivalent and at the same time offers new opportunities for agricultural nutrient redistribution.

The full results from this landmark study will be presented on **Monday 09<sup>th</sup> May**. If you would like further information, or would like to attend the breakfast launch event, then please contact me via [iain.hoy@phoenixnaturalgas.com](mailto:iain.hoy@phoenixnaturalgas.com)

## More details

All feedback is very welcome, so if you have any comments, queries or are interested in discussing any of the issues raised in this update then please contact our Energy Transition Manager at [iain.hoy@phoenixnaturalgas.com](mailto:iain.hoy@phoenixnaturalgas.com)

All previous Energy Transition Updates can be found on the Phoenix Energy Transition [webpage](#) and our 'Phoenix Meets' series of Energy Transition videos can be found [here](#).

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