Northern Ireland's renewable ambitions face achievable challenges

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The region was fast out of the blocks in its shift towards the use of renewable energy. Early targets were met, with more now in place, as the country strives to meet its current goal of 80% renewable electricity by 2030 and a carbon free power system by 2035. Ambitious, certainly. Although it won't be an easy path to get there.

In the early 2000s, Northern Ireland's initial, enthusiastic embracing of targets to replace fossil fuel dependency with a new array of renewable electricity sources saw it led the UK and Ireland. Ambitions were bold and the economy minister at the time embarked on a strategy aimed at reaching an electricity generation level of 40% renewables by 2020.

Given new legislation, encouraging economic indicators and a confident investor community, onshore wind farms proliferated across Northern Ireland. Successful deployment of the first one in 1993 in Bessy Bell, County Tyrone, by Cork-based DP Energy had made the point.

By 2016, more than 400 MW of renewable electricity had been connected to the grid. The 2020 target was reached early, and new, even bolder, aims were now being tabled. The current goal is to reach 80% renewable electricity by 2030 and a carbon free power system by 2035.

RenewableNI, which collaborates with its British and Irish counterparts RenewableUK and Wind Energy Ireland, is the industry's representative body. With over 50 members it has quickly established itself as a powerful voice, with clear influence at policy level.

Engagement with its members is continuous and conducted through working groups and a rolling series of RenewableNI events, which ensures participation by the industry in government consultations and policy planning. These sessions are invariably sold out. Most recently, the RenewableNI Energy Strategy seminar was attended by 70 delegates including speakers from the Department for the Economy, a reflection of how seriously renewable electricity issues are now being viewed.

Northern Ireland, according to RenewableNI, has one of the greatest wind resources in the world and is well positioned to reach these targets.

Director Steven Agnew says the region already has a 1.7GW renewable capacity. 'The NI Climate Change Act set a target of 80% renewables by 2030,' he says. 'This will require more than double the current renewable electricity generation capacity to meet the growth in demand as we electrify heat and transport.'

RenewableNI's next initiative is the Smart Energy Conference, on 19th October in ICC Belfast. The conference, whose theme is Powering the Revolution, is being hosted in a larger venue this year, thanks to the success of last year's event.

'We feel that momentum has finally started to build,' enthused Steven Agnew. 'Despite our lack of functioning government, things are moving forward and awareness of issues is increasing.'

'With speakers confirmed from The Crown Estate, NI government departments, renewable electricity developers and business investors, this is a vital event for the renewable energy sector. This allows policy makers and industry to come together, to help achieve our target.'

While RenewableNI remains bullish, it is also realistic. It is proud of its headlines: 51% renewable electricity generation in NI in 2022; £494m worth of gas displaced by renewables in 2022; £3.1bn gross value added (GVA) achievable by onshore wind by 2030 and £2.4bn GVA from 1.5GW from offshore; and an additional 2,500 jobs on top of the current 2,000 estimated to be employed by the renewable sector.

Developers of utility-scale projects, onshore, offshore and solar in particular, are queueing up to look to see what happens next in Northern Ireland.

The appetite is there. Proposals for large scale offshore floating wind energy projects in the Irish Sea are already in the public domain with RenewableNI assessing the current pipeline of projects to be 3GW. In addition, there is 1.2 GW of onshore wind and growing interest in solar PV and battery storage.

Policy challenges, however, now risk derailing the '80 by 30' target and collective goodwill displayed by the sector.

Northern Ireland is the only part of these isles without a support scheme to provide a fixed price for the generator and the consumer.

'Never has the value of this been more apparent than during the recent fossil fuel crisis,' says Steven Agnew. 'In the absence of support, NI development of large-scale renewables has been severely curtailed, and the level of new development remains insufficient.'

'The creation of a Contract for Difference (CfD) type scheme could be a game changer for renewables here, but it must be fasttracked if we are to meet our 2030 target.

'In the last four years, only 70 MW of large-scale renewables has come on stream. Thanks to a combination of world events, NI political stasis and a wobbling investment environment, the early momentum has worryingly slowed down.'

The Crown Estate has not released any seabed areas in eastern Irish waters for almost ten years. Agreements for lease of seabed can only be reached when The Crown Estate makes them available through competitive bidding.





We understand that The Crown Estate is now accelerating its review of this situation and RenewableNI is pushing for a leasing round by 2025. In the meantime, those developers decide whether it is worth continuing their ongoing investment at risk.

But that's not the only impediment to overcome. Closer to home are three key obstacles. The lack of a Stormont Assembly, where Northern Ireland's devolved government sits. The sclerotic planning mechanisms typically require two to five years for any renewable planning application to reach its conclusion. The grid, which struggles to meet current demand for connections, requires a much-needed upgrade to allow for an additional 2.5 GW of renewable electricity.

The Stormont Assembly and the Executive of nine government ministers control energy policy, which is a devolved matter. Without a minister in place, little can be signed off. Permissions and consents for marine licenses to allow the installation of floating wind turbines, and subsequently planning approval for cabling to shore and connections to the grid, sit with the three government departments for Economy; for Agriculture, Environment and Rural Affairs; and for Infrastructure.

The Assembly has been offline for a year, and we can see the blockages now standing in the way of major investment plans, not only in the energy sector but across manufacturing, the agrifood industry and transport. Fortunately, not all work has stalled.

Thanks to the foresight of the Department for the Economy with engagement by RenewableNI and its members, the Energy Strategy, the Offshore Renewable Energy Action Plan and a variety of initiatives allowing for environmental assessments to be conducted, have been completed or are about to complete a series of industry consultations.

Some momentum is therefore still moving things forward. But if the Assembly does not return soon, we may lose any hope of reaching the 80% target by 2030.

Similarly, the planning processes imposed by the Department of Infrastructure are acting as an effective handbrake by bottle-necking planning applications for renewable electricity proposals. A simple improvement in resourcing of statutory consultees could make all the difference. For example, one consultee has one member of staff to assess every wind application in Northern Ireland.

What is supposed to take three weeks, is taking up to one year. It is therefore hardly any wonder that it can take five years or more to complete the whole process. This must change otherwise we have a second major barrier to our hopes and aspirations for 2030.

The grid in Northern Ireland is an additional challenge. Heavily weighted to the east coast where traditionally high energy users would have clustered, the grid is outdated and, in many ways, unbalanced. Onshore wind developers favour the west of Northern Ireland for its rural and consistently windy attributes.

Currently, the grid is barely able to carry the clean electricity generated there because of its thin presence. Similarly, north coast potential for new generation floating wind turbines, capable of more than 40 MW each, remains unrealized in part because of poor grid presence. This means a concentration of energy developments on the east coast close to the big grid connection assets around Ballylumford and Kilroot, home to two former fossil fuel power stations.

The US has now become a major competitor for renewable energy investment with the introduction of the Inflation Reduction Act. At a time when the UK government is implementing a windfall tax on renewable generators, the US is creating an ever more attractive policy environment. This risks drawing sizable international investment away from the complications of western European planning restrictions and expensive Crown Estate leases to new horizons in an economy which is willing to support a dramatic transition from oil and gas to renewables.

Optimism is nonetheless apparent. If the government of Northern Ireland is to reconvene in early autumn, as political commentators forecast, fresh impetus could accelerate progress in the offshore floating wind projects as well as the expansion of onshore wind and solar farm capacity.

Steven Agnew is an optimist. As former leader of the Northern Ireland Green Party and MLA he says he has seen progress during times in the past when many were more cynical.

'When I was an MLA, climate change wasn't on the Assembly's agenda,' he says. 'Last year, we had two climate bills competing to make it onto the statute book. While politicians still get distracted by short term issues, the climate emergency isn't going away. The good news is the solutions could save our economy as well as ourselves.'

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