Energy and Environment Innovation Case Studies

5. A Virtual Power Purchase Agreement: a public sector first



Situation

We are Northern Ireland's largest user of electricity. In recent years the costs at c.£30m p.a. are one of the company's most significant areas of operating expenditure. In the autumn of 2021/22 these have soared because of the dramatic increase in gas prices which are used as a market proxy to set electricity prices across the island of Ireland. Gas is the largest and the marginal fuel input to electricity generation in Ireland, the price of gas directly affects the price of electricity. The current projection is that our electricity costs may outturn and £57m in 2021/22.

The use of electricity is also significant in that it is the driver of 68% of our operational carbon emissions (69.9k tonnes).

Action

Before the recent increase in costs, we decided to scan the horizon for an innovative way to purchase the supply of green electricity that is resilient, provides greater cost certainty and realises value both in the cost of electricity and carbon.

Corporate Power Purchase Agreements (CPPAs) were identified as an opportunity. This way of contracting supply takes several forms but our interest is focussed on a subset which are known as Virtual Power Purchase Agreements (VPPAs). A VPPA is a contractual arrangement which would enable NI Water to benefit from an offsite renewable project and the associated carbon reduction, whilst using a financial mechanism to provide price certainty over a 10 to 20 year period. The financial mechanism is known as a Contract for Difference (CfD). These have been adopted in Great Britain but not as yet in Northern Ireland. Companies contracting in this way in mainland UK include Google and Amazon.



An Outline Business Case to test the market has been approved by the NI Water Board. Professional advisors have been appointed to support our market testing and to assess the commercial benefit, in particular the cost benefit that may accrue over the life span of a contract.

Results

The market engagement has confirmed that there is opportunity to contract in this way in Northern Ireland and has highlighted the potential following benefits:

- Power price certainty
- Progress to Net Zero Carbon
- Financial benefit
- Reduced exposure to Carbon price
- Secured Renewable Energy Guarantees Origin certificates (REGOs)
- Brand and Leadership

We are now seeking authority to progress to a final business case. In so doing the company recognises that it would not only be the first major organisation in Northern Ireland to do so but the first public sector in the UK.

