equitix

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20 March 2020

To Whom It May Concern,

Energy Strategy Call for Evidence 2019 - Equitix submission

Equitix is pleased to present its view via the Call for Evidence to help the Department for the Economy inform and shape its new Energy Strategy.

Equitix is a leading UK based investor, developer and long-term fund manager of core infrastructure and energy-efficiency assets in the UK and Europe. To date Equitix has raised and invested £5 billion of equity. Its investment strategy for its funds focuses on small to mid-cap infrastructure projects located in the UK and Europe across a wide range of sectors but with a focus on social infrastructure and all elements of energy such as generation, transmission and distribution. Equitix seeks to hold assets for the life of all its core funds matching its typical public sector pension fund investor's liabilities – which is 25 years.

Since its inception in 2007 Equitix has invested in over 280 core infrastructure projects establishing a strong reputation as a leading developer, trusted partner, operator and fiduciary fund manager.

Investment in Northern Ireland matches with Equitix's investment strategy and that is why we have become a significant and long-term investor here. Since 2014 Equitix has been investing in Northern Ireland with its first investment - Full Circle Generation the c£100m Energy from Waste plant in Belfast, Northern Ireland located adjacent to Bombardier's wing facility in the city's Harbour Estate.

Equitix wishes to continue to invest in Northern Ireland and would welcome further dialogue with the Department for the Economy on how we can work together to achieve the UK's Net Zero goal.

Yours faithfully

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Enc. Equitix Call for Evidence Submission

Equitix Submission

Energy Strategy – Call for Evidence

Background

1. Equitix is a leading investor, developer and long-term fund manager of core infrastructure and energy-efficiency assets in the UK and Europe. We manage £5 billion of equity with over 280 core infrastructure projects in the UK and Europe led by four senior investment professionals with more than 100 years of public-sector industry experience between them.

2. Our investment strategy for the funds focuses on small to mid-cap infrastructure projects located in the UK and Europe across a wide range of sectors but with a focus on social infrastructure and renewable energy. Equitix seeks to hold assets for the life of all its core funds – a 25 year investment horizon matching the liabilities of its typical public sector pension fund investors.

3. Investment in Northern Ireland (NI) matches with Equitix's investment strategy and that is why we have become a significant and long-term investor here. These investments include:

   - **Firmus Energy** – full ownership of the second largest gas distributor and supplier in NI with an expended network expansion plan as a result of our investment and support.
   - **Granville Eco Park (GECO)** – Majority ownership of the largest anaerobic digester (AD) plant in NI at the Granville site in Dungannon.
   - **Full Circle Generation (FCG)** – Majority ownership and original investor in NI's first Energy from Waste (EfW)/waste treatment plant to have been successfully delivered. It has provided a long-term solution for one of Northern Ireland's high-tech large employers a significant energy user.

4. All of these investments can contribute significantly to a new Energy Strategy, the climate change commitments of the *New Decade New Approach* agreement, broader environmental policy goals as well as contributing to the economic prosperity of NI. Each of these investments will be making their own submissions and these provide more detailed and sector specific evidence in support of the points raised in this submission.

Energy in Northern Ireland

5. The 30-year timeframe for the framework is appropriate. It allows energy strategy to share a common time-line with the UK's net zero target for 2050 as well as clear staging posts, action plans and delivery reviews and is a clear recognition of the long-term nature of the investments that will be required. The risks of political disruption to devolution can be reduced by the adoption and maintenance of such long-term policy frameworks.

6. The investment environment it creates is more important than the timeframe. The environment the energy strategy creates must be to maximise the private investment to fulfil these public policy goals. These should be:

   - Recognition of the intensity and long-term capital investment needed;

- A requirement for a stable energy strategy with limited short/medium term impact on existing facilities and to maintain the confidence of investors;
- Clear visibility on long term changes enabling the most appropriate and cost-effective investments to be ready;
- Delivery of a net zero carbon energy sector and/or other environmental policy goals; and
- Maximisation of the benefits to the NI economy

7. The Committee on Climate Change (CCC) 'Reducing emissions in Northern Ireland' and 'Net Zero: The UK's contribution to fighting climate change' are clear on the national challenge of Net Zero and the additional localised challenges NI faces. The energy strategy needs to recognise as NI has some of the hardest to decarbonise sectors. Therefore, it needs to maximise the decarbonisation gains from a sector like energy than can transform.

Energy transition

8. The unique features of the NI energy market are:

    - No direct access to nuclear power;
    - Its more limited options for renewables resulting in greater reliance on intermittent renewables; and
    - The scale of its off-gas grid area;
    - Approximately 68% of domestic properties use kerosene heating, OFGEM in 2015 estimated 4.2% of GB households used kerosene as their main space heating fuel; and
    - Interconnection, a standard tool in energy policy, has proven problematic for NI with problems with the Scottish grid and the Moyle interconnector and the new North South interconnector behind schedule, still not approved and facing strong and resourced opposition.

9. Equitix would support the case for a whole system approach and the definition which is offered and the role for gas and electricity within it throughout the 2020-2050 period. Some references to gas would imply it is envisaged as having a short to medium term role and limited role overall. This would be a fundamental misjudgement when it has a 2050 role and after. Beyond the grid and customers, it will have a baseload role for electricity especially in a region with no nuclear generation.

10. As a significant and established investor in NI, Equitix stands ready to develop and deliver further projects. This is demonstrated by:

    - New investment plans by Firmus that will speed up extension of the gas distribution network;
    - Planning permission to enable FCG to expand from 120 kilotonne (kt) to 180kt of Refuse Derived Fuel (RDF). Presently operating at 140 kt; and
    - Identified opportunities for Anaerobic Digestion expansion.

11. The transition should seek to build now what will be the simplest for consumers to manage the change e.g. a modern gas grid and consumer equipment that will utilise liquid natural gas (LNG)/Biogas mix and in the longer-term hydrogen.

12. In terms of electricity generation, it must take account the expected electrification of a significant number of new areas such as transport and the implications that has for overall demand, patterns of demand and implications for the electricity transmission and distribution grid.

Energy consumers

13. The generally lower energy pricing in NI in comparison with many European countries is welcome. They are an example of a stable policy framework that has achieved the necessary long-term investment while controlling prices for consumers – a stable, secure, diverse and efficient system achieved. This must be maintained in the decades ahead with the right investment environment.

14. The benefits of gas to consumers on the gas grid needs to be built upon and one of the primary means of short-medium term decarbonisation gains in heat. For the off-gas grid opportunities for Distributed Energy Resources (DERs) with hybrid power models needs to be explored.

15. Consumers also desire security of supply which a gas network provides and non-intermittent renewables from AD at scale and EfW can contribute as well.

16. In transformation it needs to be remembered that technological change requiring the least 'cultural or habit change' of consumers is the most successful. The transition from oil to gas heating requires little change while delivering consumer and significant environmental benefits. It delivers immediate CO2 savings of 25% and additional savings when the gas is "greened" via blending with Biomethane and hydrogen. Whereas newer technologies such as geotherm for domestic properties do involve significant habit shift with a cost implication for the consumer if they fail to do so. This results in a new technology gaining a negative consumer impression that impairs further adoption.

Heat

17. A fundamental issue that must be addressed in the next decade is the current reliance on kerosene for so much domestic heating especially where the gas grid exists and to expand the grid as much as possible. This will need a policy environment that incentivises consumer connections and network growth such as:

    - Planning policy for new developments within the gas grid should support its adoption and prevent further expansion of oil;
    - For existing stock, energy efficiency and heat technology changes should be part of consent for major refurbishments;
    - Support for new oil domestic boilers in the gas grid area should cease;
    - The incentives government provides redesigned to match these goals. This will provide the maximum benefit from pre-existing investment; and
    - Public sector housing reform to enable retro-fitting and replacement of public housing stock.

18. In addition, a menu of solutions in the off-gas network needs to be developed with role of distributed energy networks part of it.

19. The ability of the NI gas network to deliver short, medium and long-term gains for decarbonisation through transition from kerosene, the injection of biogas into the system and ultimately the transition to hydrogen demonstrates its key role in a 2050 vision, milestones and action plans in the heat sector.

Power

20. The Call for Evidence rightly identifies energy supply as the major success story in reducing NI's carbon emissions. With significant and hard to transform sectors in NI, it will have to continue to be so.

21. Biogas, especially at scale, has the opportunity to contribute more to renewable energy. This can be built upon two opportunities on an all-island basis:

    i. Increasing the level of separate food waste collection by NI local authorities to grow feedstock for AD. This will require regulatory change and a culture of enforcement as in Scotland; and
    ii. The under-capacity of AD plants to address the available Republic of Ireland (RoI) feedstock. The energy market is single island therefore solutions on that basis should be considered.

22. The reduction in landfill will see a long-term decline in landfill gas and biogas should therefore be supported to replace it.

23. The future role of biomass needs to be assessed on the basis of the Committee on Climate Change assessment that there is greater decarbonisation benefit from wood use in construction rather than heat. On the off-gas grid area alternatives to biomass should be prioritised.

24. In terms of the future renewables target, why is the starting point at the 2020 target of 40% and not the 44.9% as detailed in the Call for Evidence? The level of other regions can be misleading, and the adoption of options is too arbitrary. A better question, is how much of an increase are others setting themselves for the next decade? Both Scotland and Wales 2030 targets aim for a 22% increase on their present levels by 2030. There are significant questions about whether the RoI target of 70% from renewables is achievable, credible and affordable. It failed to achieve its 2020 renewable energy target and the second worst in the EU last year for its ambition and progress towards fighting climate change

25. The comparable increase for Northern Ireland to Scotland and Wales would be 67% (two thirds), based on a base line of 44.9%. If there is concern that the 44.9% will be subject to some variation then by using it as the baseline that provides the 'stretch' function. The role of national government policy and its influence on energy policy in the devolved regions means they are the best comparators for NI.

26. The contribution of EfW of the FCG facility in Belfast can be built upon for large energy users and demonstrates clearly where a private led initiative can succeed when publicly led projects have so far failed. The levels of opposition and planning problems faced by the public projects shows its limitations as a broad energy tool in NI. Therefore, any future expansion should be large energy users focused rather than direct power to the grid.

Transport

27. Air pollution is very likely to be an area that gets greater policy focus in the short-medium term. The ability to act locally will be impaired without more ambitious programmes to support the transformation of transport from a national level to encourage adoption of better environmental alternatives e.g. purchase incentives and equipment subsidies.

28. Action on reducing reliance on diesel to improve air conditions puts at risk some decarbonisation gains from past promotion of diesel. Despite subsidies, Ultra Low Electrical Vehicles (ULEV) still have a price barrier to adoption as well as the 'hassle' factor of a home charging point. There is also a consumer 'confusion' issue that will likely see a significant proportion holding off on new purchases until the medium-term picture is clearer.

29. In terms of unique NI features it needs to be recognised that:

    a) The more disparate nature of NI population and present battery ranges of the lower entry price models are a local impediment to their adoption;
    b) Significantly higher diesel usage;
    c) Price barriers has a magnified effect in a poorer region like NI; and
    d) These combine to reduce the size of second hand car market in ULEZs locally.

30. It is clear that domestic travel will shift to a battery/electrification with the car industry universally heading in that direction. However, for larger vehicles there is not the same universality. This is driven by the ability of electric to match performance and at what cost they will be available e.g. a ULEV Council waste truck will exist but likely to be a double the present purchase price. The alternative for larger vehicle will be a number of gas solutions that will have a clear price advantage in the short-medium term.

31. Wrights retro-fitting of hydrogen engines to part of the Translink fleet is a local and practical example of how gas is seen as more of a large transport solution. However, it is notable that Translink had to create its own fuel supply chain – hydrogen created though energy from an offshore windfarm. It is a local specialism that should also be encouraged for broader economic benefit.

32. The lack of an LNG/Biogas/Hydrogen fuelling network needs to be addressed. It is notable that NI is behind Great Britain and the Republic of Ireland in developing such networks. Their absence provides no incentive for the private transport sector in NI to adopt new solutions. It is a further use for biogas and thus reinforces the need for increasing its local production.

33. What an NI Executive can do is lead by example through:

    - Promotion and development of public transport;
    - Change the public fleet to electric and gas solutions;
    - Charging point infrastructure in government car parking to encourage adoption; and
    - Planning requirements of charging points in new developments and pilot on street solutions.

Security of supply

34. In term of security of supply the following should be taken into account:

    - Diversity of the energy network contributes to security and why electric as the solution to everything should be avoided;
    - Gas grid and connection provides an alternative to the electric grid for the shifting of energy across borders and within countries;
    - Increasing local biogas production;
    - EfW as a non-intermittent renewable solution for large energy users.

35. We would be supportive of the proposals for digitalisation of the energy system provided there is an accompanying strategy for data analysis. In the past government has collected and/or collated information but failed to properly analyse it. 'Open Data' approaches to government often do not always deliver.

36. Carbon Capture, Use and Storage (CCUS) is central to the UK's net zero goal. The original CCC Net Zero proposals are based on an assumption of how quickly and effective this technology develops. This is a very big assumption considering the challenges it has faced thus far. The lack of an internationally agreed system of calculating its decarbonisation contribution a further impediment.

37. If no major opportunity has already been identified in NI then CCUS should be a vision feature with policy milestones and inclusion in action plans in this area coming later.

The Way Forward

38. The way forward for NI, energy and decarbonisation should be based upon:

    i. An energy strategy that creates a stable, predictable and consistent investment environment to maximise the private investment to fulfil these public policy goals;
    ii. The centrality of the energy strategy as the main means of decarbonisation in NI in short to medium term enabling NI to makes its maximum contribution while new solutions are sought for the hardest to transform sectors; and
    iii. Recognising the contribution LNG, biogas and EfW can have to transform energy, heat and transport and in the longer-term hydrogen on a cost-effective and sustainable basis.

39. Policy co-ordination with other departments to achieve decarbonisation goals required will be:

    - Energy efficiency in public housing stock, planning controls on new developments and refurbishments and redesigned incentive programme with a particular focus on ending NI's kerosene reliance;
    - Food waste regulations to encourage waste separation at source;
    - Public transport transformation and promotion;
    - Public charging point network for ULEZs; and
    - Ammonia Strategy and Anaerobic Digester expansion to encourage greening of the gas.