

CREATING CLARITY



PPA opportunities and threats

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Who we are: Cornwall Insight



- Pre-eminent providers of market, regulatory, policy research, analysis, training and consulting in energy and water
- Independent experts across borders and international markets (including GB & Ireland, Europe and Australia)
- Trusted by customers for our unrivalled insight guiding them to success - we support clients from across investment, developers/ generators, suppliers/ retailers, governments and end users



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What does a "seller" want?



- A long-term route to market without access to subsidy for onshore wind and solar then alternatives are needed for subsidy free developments
- **Stable payments –** de-risking of volatile revenue streams and costs mainly wholesale power and imbalance
- **Regular payments –** project finance model requires derisking of revenues and stable/regular payments
- Creditworthiness of both the end-user and the supplier managing any deal

What the "buyers" can offer



- Long-term offtake potential to agree 10 year + PPAs with new assets or 3-5 year deals for existing assets
- A price hedge fixed price agreements on power provide the generator with a more certain investment case
- Access to suppliers potential to use existing established suppliers to "sleeve" a Corporate PPA or provide back-up for on-site generation
- Access to land if private wire/on-site then rooftop or land could be offered to build an asset
- Creditworthiness varies by end-user, but some blue-chip or state-owned entities are particularly strong



A buyer's checklist – PPA criteria

 Before entering into PPA negotiations, end users should set out their expectations on key variables and business models. All will vary with

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- Technology
- Size and output
- Risk profile
- Financing

How much are you willing to invest? – do you want to own/rent an asset or have a direct power contract?

Supplier – how will they be involved? Will they be different to the supply contract? Can they help optimise?

Duration – for the PPA, negotiation and project development. Can you meet 15+ year expectations of generators?

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Regulation and policy – What may change over the contract lifetime? How can this be mitigated in the contract (probability and impact)?

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Pricing assumptions - what price are you willing to accept vs a typical supply contract? Are you willing to pay more for green power?

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NORTHUMBRIAN WATER living water

2.7m customers

Water Production and Distribution Sewerage & Waste Water Treatment

ESSEX& SUFFOLK WATER living water

1.8m customers

Water Production and Distribution

Anthony Browne, Energy Development Manager

Northumbrian Water

Customer

•Water and sewage for 2.7 million people in the North East •Water to 1.8 million people in Essex & Suffolk

People

3,000 employees

- Water

57 water treatment works

- •344 water pumping stations
- •16,000miles of water mains

Sewerage

•418 sewage treatment works

- 765 sewage pumping stations
- •18,000miles of sewers

Energy

•360GWh electricity import
•8 hydro generators
•80GWh biomethane exported

the energyst event, May 2019

2019: The year of the PPA

Session Chair

Brendan Coyne – The Energyst

Speaker

James Brabben – Cornwall Insight

Chris Bowden – Squeaky Energy

Anthony Browne – Northumbrian Water