

## Bristol City Council's wind turbines

Bristol City Council is the first local authority in the UK to develop and own wind turbines. The two 2.5MW N100 turbines are predicted to generate 14.4 gigawatthours (GWh) annually.

### Project

Both wind turbines are erected at a former Shell Tank site at Avonmouth and were commissioned in December 2013.

### Funding

[Insert up-to-date photo here]

The estimated set-up cost is £9.4 million. However, that is described as a generous estimate to cover all contingencies. The funding has come from prudential borrowing. It is estimated that the turbines will make £1 million each year from Feed-In Tariff (FITs), Levy Exemption Certificates and selling the electricity. This means it will recoup costs quicker than the normal 20 year borrowing period.

Levy Exemption Certificates (LECs) are evidence of electricity supply generated from qualifying renewable sources that is exempt from the Climate Change Levy. The LECs can be redeemed to suppliers, and then in turn to Ofgem, to demonstrate the amount of electricity supplied to non-domestic customers that is exempt from the Levy.

All the work leading up to the build has been funded by the council's own self-funded Energy Management Unit. The Unit procures energy for the council properties. The Unit then recharges their clients internally with a percentage to manage the procurement, bills and any supply issues. The client still gets a better deal on their energy costs as a result. The profits are then used to fund sustainable energy projects.

### Motivation

The council wants to meet national and local carbon reduction targets. It will also reduce its reliance on uncertain energy markets. Councillor Neil Harrison, Assistant Executive Member for Sustainability at Bristol City Council, added:

"The recent Government decision to permit local authorities to sell renewable electricity is a massive opportunity, both financial and environmental. It gives them the chance to build a strong and secure local production capacity that will help to protect the local authority and their taxpayers from future energy crises, as well as making a useful contribution to renewables on a national scale.

"However, it also makes good financial sense too, creating a lucrative new income stream that can be used to finance other energy or environment projects, support core services or keep council tax low."

### Barriers

When councils apply to their own planning committee for permission they cannot appeal the decision. Bristol City Council had to be extremely detailed in their research and preparation because

they could not tweak their proposal later if rejected. It took three years to get from the original impact assessment to submitting the planning application.

The biggest objection to the project was from Natural England. The council worked very closely with this statutory body to make sure all of their monitoring requirements were met. Bristol City Council employed specialists to study the potential effects of the turbines on bird populations.

The community is extremely supportive of the wind energy plans. In an online survey, 253 out of 255 respondents were in favour of the development. This was in part because a nearby private scheme had already been installed. Initially, there was opposition to the nearby turbines of Bristol Port Authority. But once they were installed, local people felt that their initial concerns about visual amenity were unfounded and in fact residents were proud to have green technology in their area. This meant that local people have faith that Bristol City Council's scheme will also be something to be proud of.

Community support was also bolstered by a dedicated council communications team.

#### Lessons learned

Cover every angle when submitting the planning application. Councils applying to their own planning committee for permission must be prepared for every kind of challenge because they cannot appeal the decision.

Evaluate the impact of retiring ROCs and when it may be necessary to do so. Under the current Carbon Reduction Commitment Energy Efficiency Scheme, organisations cannot claim the carbon credits for generating renewable electricity if ROCs or the feed-in tariffs are claimed. Bristol City Council decided to own the turbines and claim FITs as that worked out better financially.

#### Benefits

Bristol City Council is the first local authority to own wind turbines, and this has made the community proud to be involved in such a ground-breaking scheme. One resident described it as 'putting Bristol on the map' in terms of sustainable energy.

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