

Report of: Financial and Asset Business Manager

To: Executive Board

Date: 6th November 2006

Item No:

Title of Report : Wind Turbine Update Report



Summary and Recommendations



Purpose of report: To advise the Executive Board of the current position in respect of the search for a suitable site to locate a wind turbine within the City boundaries to seek guidance as to the next steps

Key decision: No

Portfolio Holder: Councillor Alan Armitage

Scrutiny Responsibility: Finance



Ward(s) affected: All

Report Approved by:

Portfolio Holder: Councillor Alan Armitage
Sarah Fogden – Financial and Asset Management
Garry Thomas – Legal and Democratic Services
Rachel Williams - Planning
Neil Robinson – Sustainable Energy Officer



Policy Framework:

Making Oxford a more environmentally sustainable City

Recommendation: Members to note the progress made to date and to guide Officers as to the next steps in

- Continuing to seek suitable sites inside/outside the City upon which to locate a wind turbine.
- Investigate the possibility of investment in third party wind farm schemes.
- Continue research into small scale building mounted wind turbines

Put the above on hold until the cost/benefits are more certain.



1. On 13th March 2006 the Executive Board considered a report on the possibility of locating a wind turbine within the City boundaries.
2. The Board agreed that Officers should
 - a. Continue to research wind turbine options together with third party suppliers
 - b. Switch the Council's energy to renewable resources suppliers
 - c. Put investment in third party wind farms on hold.
3. Following meetings with experts in supporting wind turbine schemes they have indicated that the best location for a turbine would be on one of the hills either East or West of the City. As both locations lie outside the City boundaries, thus adding to the complications by requiring planning consent from a neighbouring authority, a primary search has been undertaken within our administrative boundaries.
4. There are unfortunately a number of obstacles to identifying a suitable location, these being
 - a) The operators internal recommendations that any wind turbine be located at least 300m from the nearest habitable dwelling (some suggest 400m)
 - b) The large areas of the City covered by a height restriction generated by the City Centre view cones.
 - c) The green belt
 - d) Environmentally sensitive sites.
5. Having carefully considered all of these restrictions there are only very few sites within the City which lie outside these potential obstacles.
6. The sites identified as potential locations on the attached plan are
 - A. Horspath Road – However, this is the area being considered for the proposed Centre of Excellence, which would be negated by locating a turbine within the site.
 - B. Headington – However, as a safeguarded land a turbine would prevent a large proportion of proposed future development.
 - C. Wolvercote – Again safeguarded land.
7. No other sites have been identified within our boundaries. However there are a few farmland sites owned by the Council just outside the City in particular at South Hinksey, which being located just off the ring road might provide a suitable, subject to overcoming any planning objections from the Vale of White Horse District Council. The Board will note that the Westmill Farm development at Watchfield took 5 years to secure the original planning consent, which has substantial restrictions including specifying specific turbine models, which has resulted in additional delays to the project as turbine designs change or become obsolete.

8. The City also owns farmland on Shotover Hill, which although potentially a good site from a wind flow standpoint, may be difficult to secure planning consent from South Oxfordshire District Council as being possibly contrary to their policies on areas of high landscape values.
9. Given these constraints, whilst further investigations can be undertaken, the Board should note that securing planning consent on any site within or just outside the City owned by the Council is a long term and uncertain prospect.
10. In addition to the difficulties in securing planning consent there are a number of additional factors partly arising from the growing interest in seeking renewable energy opportunities worldwide namely;
 - a) The very long waiting lists to secure large turbines – currently [2-3] years. Also there would be a problem sourcing just 1 turbine with waiting lists slanted towards sites with a number of installations.
 - b) The potential reduction in the profitability of these developments, as the Government is reviewing and possibly reducing grants for onshore wind turbines in favour of offshore farms.
 - c) The low payment levels currently offered by Electricity Companies for power offered to them from renewable sources.
 - d) There is no current data on wind speeds prevalent in the area – data would need to be collected on the chosen site to ensure that the projected average wind speed over a 10 year period is sufficient to ensure a viable project.
 - e) An Environmental Impact Assessment may be required for any turbine in excess of 15 metres if there are potential environmental impacts on the surrounding area.
11. In these circumstances Officers are seeking guidance as to the next steps which could include
 - a) Continuing the investigations into sites for a major turbine development.
 - b) Investigate investment into other existing/proposed wind farms
 - c) Consider small scale building mounted turbines utilising the investigative work being carried out within Oxford City Homes
 - d) Put the project on hold until the cost/benefits are proven and the planning position relating to this type of development is more certain.
12. The Board will note that the Council has now contracted that electricity supplies on all of its occupied buildings are sourced from renewable resources.

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Background papers: None