

Welsh Assembly
Government Planning
Division

TAN 8 Progress Update

Review of Wind Farm
Developer Interest in
Wales

FINAL

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Government Planning
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Developer Interest in
Wales

October 2007

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Job number 123041-00

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1 Introduction

1.1 Project Brief

Arup were commissioned by the Welsh Assembly Government Planning Division in April 2007 to compile onshore wind farm data both within and outside the Strategic Search Areas (SSAs) defined in Technical Advice Note (TAN) 8: *Planning for Renewable Energy* published in July 2005.

The purpose of this exercise is to provide evidence of developer interest, current wind farm planning applications and hence substantiation of progress towards the TAN 8 targets described in Section 1.2. This has been achieved through consultation with local planning authorities who are affected by TAN 8 defined Strategic Search Areas (SSAs); additional information on developments outside these areas has been obtained from the relevant planning internet sites where available. Large areas both within and outside the SSAs are subject to the Forestry Commission Wales (FCW) National Estate wind farm tender, for which the data is unavailable at this time. However, an estimate has been made based on preliminary information and the respective zone capacities of each site location.

The project brief specified that the information should be represented in the form of an updateable spreadsheet to allow for changes to the state of applications, additional applications and any other changes to information post-handover. Further to this, the data is presented spatially on an A3 plan.

1.2 Planning and Policy Background

TAN 8: *Planning for Renewable Energy* was published by the Welsh Assembly Government in July 2005 to replace TAN 8: *Renewable Energy* (1996) and in response to the UK Energy White Paper published in 2003. The Ministerial Interim Planning Policy Statement 01/2005 states that:

“The Assembly Government is committed to playing its part by delivering an energy programme which contributes to reducing carbon emissions. It has established specific renewable electricity production targets for Wales of 4TWh per annum by 2010 and 7TWh per annum by 2020. These targets should be seen in the context of the Assembly Government’s overall Energy Strategy and its commitment to energy efficiency¹. Planning policy at all levels should facilitate both.

In the short term, wind-power offers the greatest potential for an increase in the generation of electricity from renewable energy. The Assembly Government accepts that the introduction of new, often very large, structures into the open countryside needs careful consideration to minimise the impact on the environment and landscape. However, the need for wind turbines is established through a global environmental imperative and international treaty, and is a key part of meeting the Assembly Government’s targets for renewable electricity production. Therefore, the land use planning system should actively steer developments to the most appropriate locations. Development of a few large scale (over 25MW) wind farms in carefully located areas offers the best opportunity to meet the national renewable energy target.”

The UK Government’s draft Climate Change Bill, published for public consultation on 13 March 2007, sets out a framework for moving the UK to a low-carbon economy. The draft Bill includes a series of clear targets for reducing carbon dioxide emissions, which the Welsh Assembly Government propose to achieve in part by increased provision of renewable energy.

¹ Welsh Assembly Government Energy Statement, February 2003.

More recently the Welsh Assembly Government's "One Wales" agenda, published on 27 June 2007, contains the following commitment:

"We will following production of an Energy Route Map and an Assembly Government Energy Strategy, review TAN8, revising upwards the targets for energy from renewables, drawn from a range of sources".

Together, these documents provide a solid basis for, and endorsement of, the development of wind farms in Wales.

2 Consultation

The following local planning authorities were consulted to obtain information on levels of developer interest in onshore wind farms:

- Powys County Council
- Carmarthenshire County Council
- Neath Port Talbot County Borough Council
- Conwy County Council
- Denbighshire County Council
- Ceredigion County Council
- Rhondda Cynon Taf County Borough Council
- Bridgend County Borough Council
- Swansea City Council

The data requested included proposed site location / name, MW capacity and state of application, together with additional information on the proposed number of wind turbines and the agent / developer concerned.

3 Data Compilation

The data was compiled in the form of an updateable spreadsheet (**Appendix A**); and additionally represented on a map. **Figure 1** represents the relative state of planning applications and contribution to TAN 8 2010 target for each allocated stage of the planning process;

- pre-application scoping (under the Town and Country Planning Act, 1990)
- Department for Business, Enterprise and Regulatory Reform (BERR) pre-application (under the Electricity Act, 1989)
- pre-application ad-hoc (undetermined due to early stage of application)
- application lodged (under the Town and Country Planning Act, 1990, and the Electricity Act, 1989)
- consented
- operational
- refused - appeal lodged (under the Town and Country Planning Act, 1990)

Where applications have been refused permission and no appeal lodged, the capacity has not been included in the calculations.

Those developments with a capacity greater than 50MW are subject to consent under the Electricity Act².

Figure 1 demonstrates the potentially large contribution which may be made by large-scale wind farm developments, and additionally the encouraging number of applications in the system. However, 80% of the applications are currently in a very early stage of the planning process, and the large proposed developments on FCW 's estate (currently assumed to be a minimum of 765MW) make a significant contribution to this.

The table below, from TAN 8, shows the indicative capacity targets for each of the Strategic Search Areas A-G. This information was used to illustrate progress towards these targets (**Figure 2**).

| <i>Strategic Search Area</i> | <i>Capacity</i> |
|------------------------------|-----------------|
| A Clocaenog Forest | 140MW |
| B Carno North | 290MW |
| C Newtown South | 70MW |
| D Nant-y-Moch | 140MW |
| E Pontardawe | 100MW |
| F Coed Morgannwg | 290MW |
| G Brechfa Forest | 90MW |
| Total | 1120MW |

4 Deliverability and Timescales

The following stages are typically involved in the development of wind farm sites:

- 1) Pre-application EIA studies and ES preparation – 1-2 years
- 2) Planning consent determination period (planning / BERR) – could be 4-18 months depending on response of determining authority and completeness of application
- 3) Discharge of any conditions agreed (1-6 months)
- 4) Order and delivery of turbines/Construction of turbines and rest of wind farm infrastructure including grid connection (up to 12 months)

Stages 1-4 may take up to five years. Additionally;

- 5) In SSAs A, B, C and D, grid connectivity will require consent under Electricity Act Section 37 for new overhead lines. Some developments in other SSAs may also require such consents. Consent and construction could take over three years, and in some cases it may not be possible to commence this until permission is obtained for sufficient onshore wind generating farms.

Both planning applications and Section 36 / Section 37 applications could trigger public inquiries, which could also further delay the process.

These combined factors may mean that the target for energy production from renewable sources will not be met by 2010; however it is envisaged that these targets could be met by 2011/2012.

² Section 36 of the Electricity Act 1989 is the legislative provision under which the Secretary of State for the Department for Business, Enterprise and Regulatory Reform grants development consents for generating stations above 50 MW.

5 Summary

Although the Welsh Assembly Government has an established target set out in TAN 8 of 800MW of installed onshore capacity the SSAs may be capable of accommodating up to approximately 1120MW of additional capacity. This degree of flexibility is necessary to ensure that the proposals for a total of 800MW come forward by 2010. The amount of developer interest for wind farms within Wales is consequently high, as the need for this resource has already been recognised and is supported by legislation and policy framework from both the Welsh Assembly Government and the UK Government. This is demonstrated in the 'Current MW total in planning system' column (**Figure 2 & Appendix B**), which suggests that this target may be exceeded in due course.

The results of this study should be taken in a positive light in view of the fact that although the target is unlikely to be met by 2010, there is definite progress towards the target and this is likely to have a consequent positive impact on climate change and related issues.

FIGURES

Figure 1 - Graphical representation of the relative state of planning applications / interest and potential contribution to TAN 8 2010 target

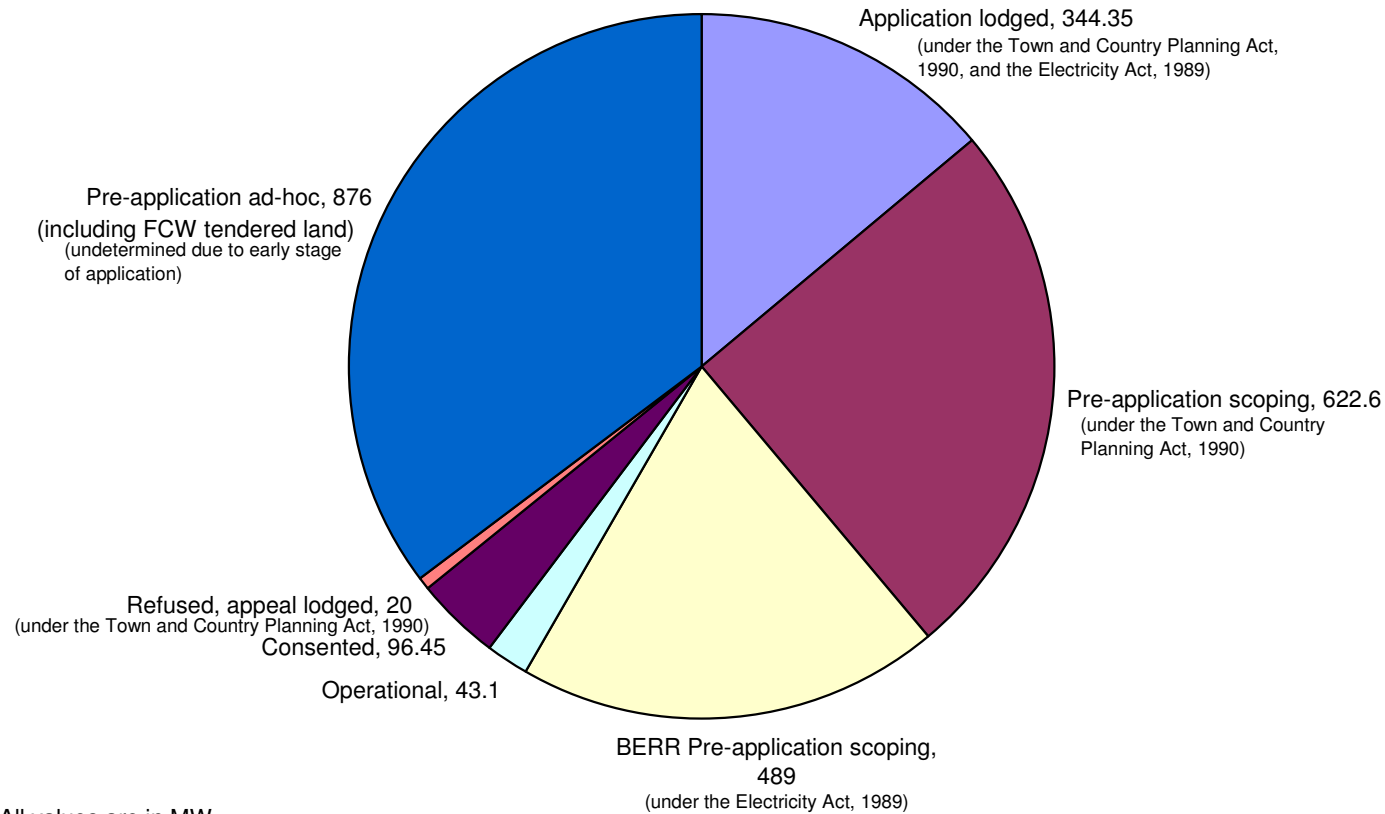
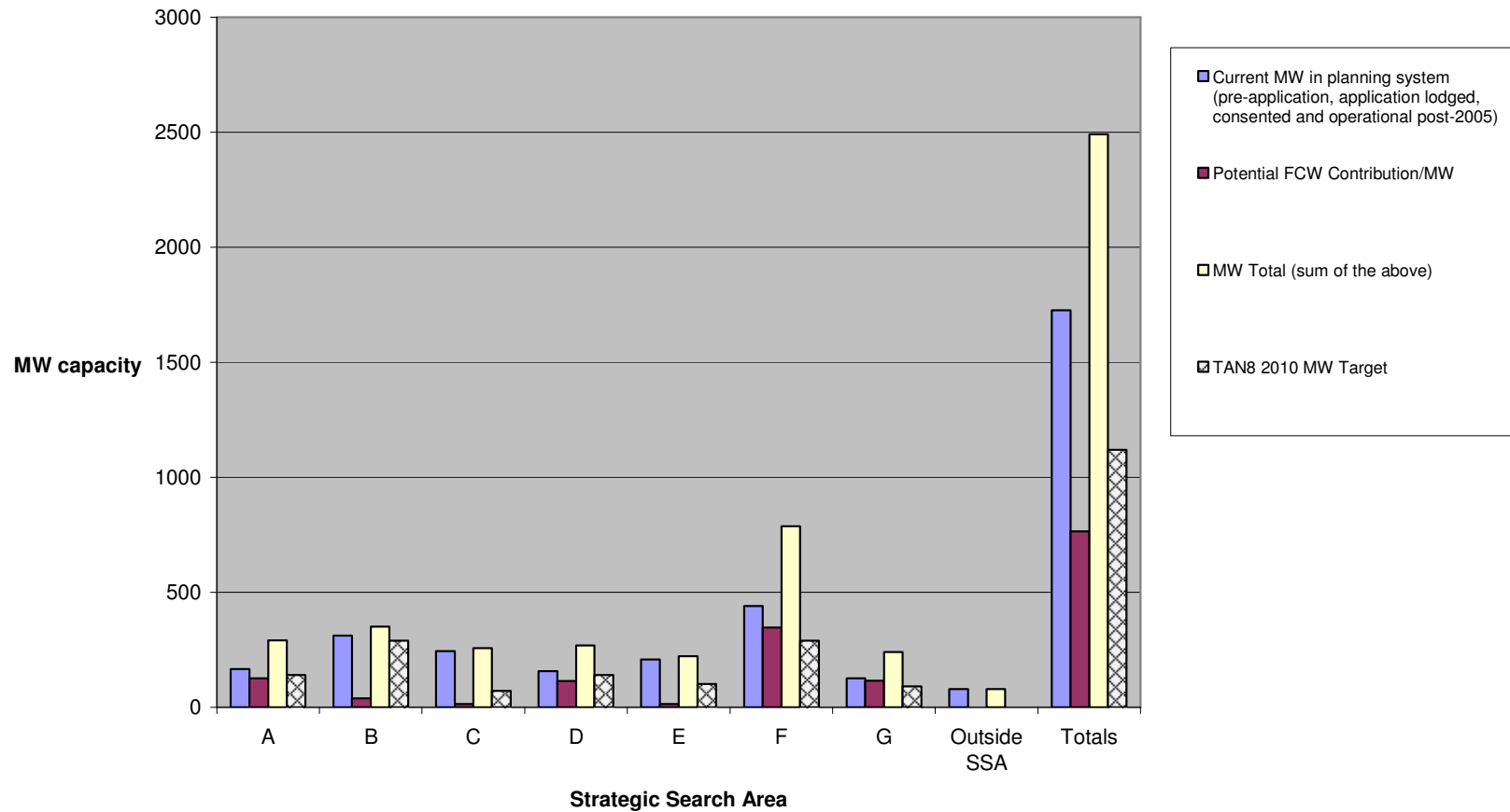


Figure 2 - Graphical representation of planning applications and potential contribution to TAN 8 2010 target (including potential FCW capacities) by SSA (including 'refused, appeal lodged')



Appendix A

**Welsh Assembly
Government Renewable
Energy Database -
Onshore Windfarms**

Appendix B

**Current MW total in
planning system**

| SSA | (i) Current MW in planning system (pre-application, application lodged, consented and operational post-2005) | (ii) Potential FCW Contribution/MW | MW Total (sum of columns i and ii) | TAN8 2010 MW Target |
|-----------------------------|--|------------------------------------|------------------------------------|---------------------|
| A | 165.85 | 125 | 290.85 | 140 |
| B | 311.6 | 38 | 349.6 | 290 |
| C | 243 | 14 | 257 | 70 |
| D | 156 | 113 | 269 | 140 |
| E | 207 | 14 | 221 | 100 |
| F | 439.4 | 347 | 786.4 | 290 |
| G | 125.7 | 114 | 239.7 | 90 |
| Sub-total (SSAs A-G) | 1648.55 | 765 | 2413.55 | 1120 |
| Outside SSA | 77.95 | 0 | 77.95 | 0 |
| TOTAL | 1726.5 | 765 | 2491.5 | 1120 |